aws

API Reference

# Amazon Route 53



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# Amazon Route 53: API Reference

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# Welcome

## Amazon Route 53

Amazon Route 53 is a highly available and scalable Domain Name System (DNS) web service. Route 53 performs four main functions:

- **Domain registration** – Route 53 lets you register domain names such as example.com.
- **Domain Name System (DNS) service** – Route 53 translates friendly domain names into IP addresses using a global network of authoritative DNS servers, and provides DNS resolution within your VPCs for private hosted zones.
- **Health checking** – Route 53 sends automated requests over the internet to your application to verify that it's reachable, available, and functional.
- **Resolver** – Route 53 Resolver lets you forward DNS queries from a VPC that you created using Amazon VPC to DNS resolvers in your network, and from your network to resolvers in your VPC.

You can use the API to create and manage the following resources:

Public and Private Hosted Zones

A *public hosted zone* is a container that holds information about how you want to route traffic on the internet for a domain, such as example.com, and its subdomains.

A *private hosted zone* is a container that holds information about how you want to route traffic for a domain and its subdomains within one or more VPCs that you created with the Amazon VPC service.

Reusable Delegation Sets

By default, each hosted zone that you create gets a different set of four name servers—a different delegation set. If you create a lot of hosted zones, maintaining different delegation sets can be difficult and time consuming. Route 53 lets you create a delegation set that you can reuse with multiple hosted zones.

Resource Record Sets

After you create a hosted zone for your domain, such as example.com, you create resource record sets to tell the Domain Name System (DNS) how to route traffic for that domain.

Traffic Policies and Traffic Policy Instances

You can create complex routing configurations, known as traffic policies, that use weighted, latency, failover, and geolocation resource record sets. You can then associate a traffic policy with a domain name or subdomain name, such as www.example.com, by creating a traffic policy instance. When users submit DNS queries for the domain or subdomain, Route 53 responds based on the traffic policy that you used to create the traffic policy instance.

Health Checks

Route 53 health checks monitor the health and performance of your web applications, web servers, and other resources. At regular intervals that you specify, Route 53 submits automated requests over the internet to your application, server, or other resource to verify that it's reachable, available, and functional.

Domain Registrations

When you want to get a new domain name, such as example.com, you can register it with Route 53. You can also transfer the registration for existing domains from other registrars to Route 53.

DNS–DNSSEC

You can protect your domain from DNS spoofing or a man-in-the-middle attack, by configuring Domain Name System Security Extensions (DNSSEC).

Query Logs

You can configure Route 53 to log information about the DNS queries that Route 53 receives, such as the domain or subdomain that was requested, the date and time of the request, and the DNS record type (such as A or AAAA).

You can also configure Route 53 Resolver to log information about the DNS queries that originate in Amazon VPCs.

Outbound and Inbound Endpoints, and Rules

You can configure Route 53 Resolver to forward DNS queries from your VPC to your network or vice versa. DNS queries pass through an outbound endpoint on their way from a VPC to your network, and they pass through an inbound endpoint on their way from your network to a VPC. For outbound queries, rules let you specify the domain names that you want to forward to your network and the IP addresses of the DNS resolvers in your network.

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and a value, both of which you define. You can use tags for a variety of purposes; one common use is to categorize and track your Route 53 costs.

Profiles

A *profile* is a named container that groups DNS configurations—such as private hosted zone associations, Resolver rules, and DNS Firewall rule groups—into a single reusable unit. You can associate a profile with multiple VPCs and share it across AWS accounts so that each VPC inherits the same DNS settings without requiring individual configuration.

DNS Firewall

A *DNS Firewall rule group* is an ordered collection of rules that each pair a domain list with an action—allow, block, or alert. You associate rule groups with your VPCs to filter outbound DNS queries made by VPC resources, preventing connections to known-malicious domains or restricting access to only approved domains.

You can also use the Route 53 API to get the current limit on Route 53 objects that you can create, such as hosted zones and health checks.

For information about Route 53 concepts and about how to use the Route 53 console, see the Amazon Route 53 Developer Guide.

## Amazon Route 53 domain registration

Amazon Route 53 API actions let you register domain names and perform related operations.

## Amazon Route 53 Global Resolver

Amazon Route 53 Global Resolver is a global, internet-accessible DNS resolver that enables customers to resolve and forward traffic for both public and private domains while ensuring security and authenticity of queries over the internet. Route 53 Global Resolver supports DNS-over-port 53 (Do53), DNS-over-TLS (DoT), and DNS-over-HTTPS (DoH) protocols through global anycast IP addresses.

**Important**

Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

# Route 53 Profiles

With Amazon Route 53 Profiles you can share Route 53 configurations with VPCs and AWS accounts

# Amazon Route 53 Resolver

When you create a VPC using Amazon VPC, you automatically get DNS resolution within the VPC from Route 53 Resolver. By default, Resolver answers DNS queries for VPC domain names such as domain names for EC2 instances or Elastic Load Balancing load balancers. Resolver performs recursive lookups against public name servers for all other domain names.

You can also configure DNS resolution between your VPC and your network over a Direct Connect or VPN connection:

**Forward DNS queries from resolvers on your network to Route 53 Resolver**

DNS resolvers on your network can forward DNS queries to Resolver in a specified VPC. This allows your DNS resolvers to easily resolve domain names for AWS resources such as EC2 instances or records in a Route 53 private hosted zone. For more information, see How DNS Resolvers on Your Network Forward DNS Queries to Route 53 Resolver in the *Amazon Route 53 Developer Guide*.

**Conditionally forward queries from a VPC to resolvers on your network**

You can configure Resolver to forward queries that it receives from EC2 instances in your VPCs to DNS resolvers on your network. To forward selected queries, you create Resolver rules that specify the domain names for the DNS queries that you want to forward (such as example.com), and the IP addresses of the DNS resolvers on your network that you want to forward the queries to. If a query matches multiple rules (example.com, acme.example.com), Resolver chooses the rule with the most specific match (acme.example.com) and forwards the query to the IP addresses that you specified

in that rule. For more information, see How Route 53 Resolver Forwards DNS Queries from Your VPCs to Your Network in the *Amazon Route 53 Developer Guide*.

Like Amazon VPC, Resolver is Regional. In each Region where you have VPCs, you can choose whether to forward queries from your VPCs to your network (outbound queries), from your network to your VPCs (inbound queries), or both.

# Actions

The following actions are supported by Amazon Route 53:

- ActivateKeySigningKey
- AssociateVPCWithHostedZone
- ChangeCidrCollection
- ChangeResourceRecordSets
- ChangeTagsForResource
- CreateCidrCollection
- CreateHealthCheck
- CreateHostedZone
- CreateKeySigningKey
- CreateQueryLoggingConfig
- CreateResourceRecordSetProtections
- CreateReusableDelegationSet
- CreateTrafficPolicy
- CreateTrafficPolicyInstance
- CreateTrafficPolicyVersion
- CreateVPCAssociationAuthorization
- DeactivateKeySigningKey
- DeleteCidrCollection
- DeleteHealthCheck
- DeleteHostedZone
- DeleteKeySigningKey
- DeleteQueryLoggingConfig
- DeleteResourceRecordSetProtections
- DeleteReusableDelegationSet
- DeleteTrafficPolicy
- DeleteTrafficPolicyInstance
- DeleteVPCAssociationAuthorization

- DisableHostedZoneDNSSEC
- DisassociateVPCFromHostedZone
- EnableHostedZoneDNSSEC
- GetAccountLimit
- GetChange
- GetCheckerIpRanges
- GetDNSSEC
- GetGeoLocation
- GetHealthCheck
- GetHealthCheckCount
- GetHealthCheckLastFailureReason
- GetHealthCheckStatus
- GetHostedZone
- GetHostedZoneCount
- GetHostedZoneLimit
- GetQueryLoggingConfig
- GetReusableDelegationSet
- GetReusableDelegationSetLimit
- GetTrafficPolicy
- GetTrafficPolicyInstance
- GetTrafficPolicyInstanceCount
- ListCidrBlocks
- ListCidrCollections
- ListCidrLocations
- ListGeoLocations
- ListHealthChecks
- ListHostedZones
- ListHostedZonesByName
- ListHostedZonesByVPC
- ListQueryLoggingConfigs

- ListResourceRecordSetProtections
- ListResourceRecordSets
- ListReusableDelegationSets
- ListTagsForResource
- ListTagsForResources
- ListTrafficPolicies
- ListTrafficPolicyInstances
- ListTrafficPolicyInstancesByHostedZone
- ListTrafficPolicyInstancesByPolicy
- ListTrafficPolicyVersions
- ListVPCAssociationAuthorizations
- TestDNSAnswer
- UpdateHealthCheck
- UpdateHostedZoneComment
- UpdateHostedZoneFeatures
- UpdateTrafficPolicyComment
- UpdateTrafficPolicyInstance

The following actions are supported by Amazon Route 53 domain registration:

- AcceptDomainTransferFromAnotherAwsAccount
- AssociateDelegationSignerToDomain
- CancelDomainTransferToAnotherAwsAccount
- CheckDomainAvailability
- CheckDomainTransferability
- DeleteDomain
- DeleteTagsForDomain
- DisableDomainAutoRenew
- DisableDomainTransferLock
- DisassociateDelegationSignerFromDomain
- EnableDomainAutoRenew

- EnableDomainTransferLock
- GetContactReachabilityStatus
- GetDomainDetail
- GetDomainPrices
- GetDomainSuggestions
- GetOperationDetail
- ListDomains
- ListOperations
- ListPrices
- ListTagsForDomain
- PushDomain
- RegisterDomain
- RejectDomainTransferFromAnotherAwsAccount
- RenewDomain
- ResendContactReachabilityEmail
- ResendOperationAuthorization
- RestoreDomain
- RetrieveDomainAuthCode
- TransferDomain
- TransferDomainToAnotherAwsAccount
- UpdateDomainContact
- UpdateDomainContactPrivacy
- UpdateDomainNameservers
- UpdateTagsForDomain
- ViewBilling

The following actions are supported by Amazon Route 53 Global Resolver:

- AssociateHostedZone
- BatchCreateFirewallRule
- BatchDeleteFirewallRule

- BatchUpdateFirewallRule
- CreateAccessSource
- CreateAccessToken
- CreateDNSView
- CreateFirewallDomainList
- CreateFirewallRule
- CreateGlobalResolver
- DeleteAccessSource
- DeleteAccessToken
- DeleteDNSView
- DeleteFirewallDomainList
- DeleteFirewallRule
- DeleteGlobalResolver
- DisableDNSView
- DisassociateHostedZone
- EnableDNSView
- GetAccessSource
- GetAccessToken
- GetDNSView
- GetFirewallDomainList
- GetFirewallRule
- GetGlobalResolver
- GetHostedZoneAssociation
- GetManagedFirewallDomainList
- ImportFirewallDomains
- ListAccessSources
- ListAccessTokens
- ListDNSViews
- ListFirewallDomainLists
- ListFirewallDomains

- ListFirewallRules
- ListGlobalResolvers
- ListHostedZoneAssociations
- ListManagedFirewallDomainLists
- ListTagsForResource
- TagResource
- UntagResource
- UpdateAccessSource
- UpdateAccessToken
- UpdateDNSView
- UpdateFirewallDomains
- UpdateFirewallRule
- UpdateGlobalResolver
- UpdateHostedZoneAssociation

The following actions are supported by Route 53 Profiles:

- AssociateProfile
- AssociateResourceToProfile
- CreateProfile
- DeleteProfile
- DisassociateProfile
- DisassociateResourceFromProfile
- GetProfile
- GetProfileAssociation
- GetProfileResourceAssociation
- ListProfileAssociations
- ListProfileResourceAssociations
- ListProfiles
- ListTagsForResource
- TagResource

- UntagResource
- UpdateProfileAssociation
- UpdateProfileResourceAssociation

The following actions are supported by Amazon Route 53 Resolver:

- AssociateFirewallRuleGroup
- AssociateResolverEndpointIpAddress
- AssociateResolverQueryLogConfig
- AssociateResolverRule
- BatchCreateFirewallRule
- BatchDeleteFirewallRule
- BatchUpdateFirewallRule
- CreateFirewallDomainList
- CreateFirewallRule
- CreateFirewallRuleGroup
- CreateOutpostResolver
- CreateResolverEndpoint
- CreateResolverQueryLogConfig
- CreateResolverRule
- DeleteFirewallDomainList
- DeleteFirewallRule
- DeleteFirewallRuleGroup
- DeleteOutpostResolver
- DeleteResolverEndpoint
- DeleteResolverQueryLogConfig
- DeleteResolverRule
- DisassociateFirewallRuleGroup
- DisassociateResolverEndpointIpAddress
- DisassociateResolverQueryLogConfig
- DisassociateResolverRule

- GetFirewallConfig
- GetFirewallDomainList
- GetFirewallRuleGroup
- GetFirewallRuleGroupAssociation
- GetFirewallRuleGroupPolicy
- GetOutpostResolver
- GetResolverConfig
- GetResolverDnssecConfig
- GetResolverEndpoint
- GetResolverQueryLogConfig
- GetResolverQueryLogConfigAssociation
- GetResolverQueryLogConfigPolicy
- GetResolverRule
- GetResolverRuleAssociation
- GetResolverRulePolicy
- ImportFirewallDomains
- ListFirewallConfigs
- ListFirewallDomainLists
- ListFirewallDomains
- ListFirewallRuleGroupAssociations
- ListFirewallRuleGroups
- ListFirewallRules
- ListFirewallRuleTypes
- ListOutpostResolvers
- ListResolverConfigs
- ListResolverDnssecConfigs
- ListResolverEndpointIpAddresses
- ListResolverEndpoints
- ListResolverQueryLogConfigAssociations
- ListResolverQueryLogConfigs

- ListResolverRuleAssociations
- ListResolverRules
- ListTagsForResource
- PutFirewallRuleGroupPolicy
- PutResolverQueryLogConfigPolicy
- PutResolverRulePolicy
- TagResource
- UntagResource
- UpdateFirewallConfig
- UpdateFirewallDomains
- UpdateFirewallRule
- UpdateFirewallRuleGroupAssociation
- UpdateOutpostResolver
- UpdateResolverConfig
- UpdateResolverDnssecConfig
- UpdateResolverEndpoint
- UpdateResolverRule

# Amazon Route 53

The following actions are supported by Amazon Route 53:

- ActivateKeySigningKey
- AssociateVPCWithHostedZone
- ChangeCidrCollection
- ChangeResourceRecordSets
- ChangeTagsForResource
- CreateCidrCollection
- CreateHealthCheck
- CreateHostedZone
- CreateKeySigningKey

- CreateQueryLoggingConfig
- CreateResourceRecordSetProtections
- CreateReusableDelegationSet
- CreateTrafficPolicy
- CreateTrafficPolicyInstance
- CreateTrafficPolicyVersion
- CreateVPCAssociationAuthorization
- DeactivateKeySigningKey
- DeleteCidrCollection
- DeleteHealthCheck
- DeleteHostedZone
- DeleteKeySigningKey
- DeleteQueryLoggingConfig
- DeleteResourceRecordSetProtections
- DeleteReusableDelegationSet
- DeleteTrafficPolicy
- DeleteTrafficPolicyInstance
- DeleteVPCAssociationAuthorization
- DisableHostedZoneDNSSEC
- DisassociateVPCFromHostedZone
- EnableHostedZoneDNSSEC
- GetAccountLimit
- GetChange
- GetCheckerIpRanges
- GetDNSSEC
- GetGeoLocation
- GetHealthCheck
- GetHealthCheckCount
- GetHealthCheckLastFailureReason
- GetHealthCheckStatus

- GetHostedZone
- GetHostedZoneCount
- GetHostedZoneLimit
- GetQueryLoggingConfig
- GetReusableDelegationSet
- GetReusableDelegationSetLimit
- GetTrafficPolicy
- GetTrafficPolicyInstance
- GetTrafficPolicyInstanceCount
- ListCidrBlocks
- ListCidrCollections
- ListCidrLocations
- ListGeoLocations
- ListHealthChecks
- ListHostedZones
- ListHostedZonesByName
- ListHostedZonesByVPC
- ListQueryLoggingConfigs
- ListResourceRecordSetProtections
- ListResourceRecordSets
- ListReusableDelegationSets
- ListTagsForResource
- ListTagsForResources
- ListTrafficPolicies
- ListTrafficPolicyInstances
- ListTrafficPolicyInstancesByHostedZone
- ListTrafficPolicyInstancesByPolicy
- ListTrafficPolicyVersions
- ListVPCAssociationAuthorizations
- TestDNSAnswer

- UpdateHealthCheck
- UpdateHostedZoneComment
- UpdateHostedZoneFeatures
- UpdateTrafficPolicyComment
- UpdateTrafficPolicyInstance

# ActivateKeySigningKey

Service: Amazon Route 53

Activates a key-signing key (KSK) so that it can be used for signing by DNSSEC. This operation changes the KSK status to `ACTIVE`.

## Request Syntax

```
POST /2013-04-01/keysigningkey/HostedZoneId/Name/activate HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### HostedZoneId

A unique string used to identify a hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

### Name

A string used to identify a key-signing key (KSK). `Name` can include numbers, letters, and underscores (_). `Name` must be unique for each key-signing key in the same hosted zone.

Length Constraints: Minimum length of 3. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ActivateKeySigningKeyResponse>
   <ChangeInfo>
```

```
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</ActivateKeySigningKeyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ActivateKeySigningKeyResponse

Root level tag for the ActivateKeySigningKeyResponse parameters.

Required: Yes

### ChangeInfo

A complex type that describes change information about changes made to your hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidKeySigningKeyStatus**

The key-signing key (KSK) status isn't valid or another KSK has the status `INTERNAL_FAILURE`.

HTTP Status Code: 400

**InvalidKMSArn**

The KeyManagementServiceArn that you specified isn't valid to use with DNSSEC signing.

HTTP Status Code: 400

**InvalidSigningStatus**

Your hosted zone status isn't valid for this operation. In the hosted zone, change the status to enable `DNSSEC` or disable `DNSSEC`.

HTTP Status Code: 400

**NoSuchKeySigningKey**

The specified key-signing key (KSK) doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# AssociateVPCWithHostedZone

Service: Amazon Route 53

Associates an Amazon VPC with a private hosted zone.

**Important**

To perform the association, the VPC and the private hosted zone must already exist. You can't convert a public hosted zone into a private hosted zone.

**Note**

If you want to associate a VPC that was created by using one AWS account with a private hosted zone that was created by using a different account, the AWS account that created the private hosted zone must first submit a `CreateVPCAssociationAuthorization` request. Then the account that created the VPC must submit an `AssociateVPCWithHostedZone` request.

**Note**

When granting access, the hosted zone and the Amazon VPC must belong to the same partition. A partition is a group of AWS Regions. Each AWS account is scoped to one partition.
The following are the supported partitions:

- `aws` - AWS Regions
- `aws-cn` - China Regions
- `aws-us-gov` - AWS GovCloud (US) Region

For more information, see Access Management in the *AWS General Reference*.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/associatevpc HTTP/1.1
```

```
<?xml version="1.0" encoding="UTF-8"?>
<AssociateVPCWithHostedZoneRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Comment>string</Comment>
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</AssociateVPCWithHostedZoneRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the private hosted zone that you want to associate an Amazon VPC with.

Note that you can't associate a VPC with a hosted zone that doesn't have an existing VPC association.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### AssociateVPCWithHostedZoneRequest

Root level tag for the AssociateVPCWithHostedZoneRequest parameters.

Required: Yes

### Comment

*Optional:* A comment about the association request.

Type: String

Required: No

### VPC

A complex type that contains information about the VPC that you want to associate with a private hosted zone.

Type: VPC object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<AssociateVPCWithHostedZoneResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</AssociateVPCWithHostedZoneResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### AssociateVPCWithHostedZoneResponse

Root level tag for the AssociateVPCWithHostedZoneResponse parameters.

Required: Yes

### ChangeInfo

A complex type that describes the changes made to your hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConflictingDomainExists**

The cause of this error depends on the operation that you're performing:

- **Create a public hosted zone:** Two hosted zones that have the same name or that have a parent/child relationship (example.com and test.example.com) can't have any common name servers. You tried to create a hosted zone that has the same name as an existing hosted zone or that's the parent or child of an existing hosted zone, and you specified a delegation set that shares one or more name servers with the existing hosted zone. For more information, see CreateReusableDelegationSet.
- **Create a private hosted zone:** A hosted zone with the specified name already exists and is already associated with the Amazon VPC that you specified.
- **Associate VPCs with a private hosted zone:** The VPC that you specified is already associated with another hosted zone that has the same name.

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidVPCId**

The VPC ID that you specified either isn't a valid ID or the current account is not authorized to access this VPC.

**message**

HTTP Status Code: 400

**LimitsExceeded**

This operation can't be completed because the current account has reached the limit on the resource you are trying to create. To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**NotAuthorizedException**

Associating the specified VPC with the specified hosted zone has not been authorized.

**message**

HTTP Status Code: 401

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

**PublicZoneVPCAssociation**

You're trying to associate a VPC with a public hosted zone. Amazon Route 53 doesn't support associating a VPC with a public hosted zone.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of AssociateVPCWithHostedZone.

```
POST /2013-04-01/hostedzone/Z1PA6795UKMFR9/associatevpc HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
```

```
<AssociateVPCWithHostedZoneRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <VPC>
      <VPCId>vpc-a1b2c3d4e5</VPCId>
      <VPCRegion>us-east-2</VPCRegion>
   <VPC>
</AssociateVPCWithHostedZoneRequest>
```

### Example Response

This example illustrates one usage of AssociateVPCWithHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<AssociateVPCWithHostedZoneResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <ChangeInfo>
      <Id>/change/a1b2c3d4</Id>
      <Status>INSYNC</Status>
      <SubmittedAt>2017-03-31T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</AssociateVPCWithHostedZoneResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ChangeCidrCollection

Service: Amazon Route 53

Creates, changes, or deletes CIDR blocks within a collection. Contains authoritative IP information mapping blocks to one or multiple locations.

A change request can update multiple locations in a collection at a time, which is helpful if you want to move one or more CIDR blocks from one location to another in one transaction, without downtime.

**Limits**

The max number of CIDR blocks included in the request is 1000. As a result, big updates require multiple API calls.

**PUT and DELETE_IF_EXISTS**

Use `ChangeCidrCollection` to perform the following actions:

- PUT: Create a CIDR block within the specified collection.
- `DELETE_IF_EXISTS`: Delete an existing CIDR block from the collection.

## Request Syntax

```
POST /2013-04-01/cidrcollection/CidrCollectionId HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeCidrCollectionRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Changes>
      <CidrCollectionChange>
         <Action>string</Action>
         <CidrList>
            <Cidr>string</Cidr>
         </CidrList>
         <LocationName>string</LocationName>
      </CidrCollectionChange>
   </Changes>
   <CollectionVersion>long</CollectionVersion>
</ChangeCidrCollectionRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### CidrCollectionId

The UUID of the CIDR collection to update.

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: Yes

## Request Body

The request accepts the following data in XML format.

### ChangeCidrCollectionRequest

Root level tag for the ChangeCidrCollectionRequest parameters.

Required: Yes

### Changes

Information about changes to a CIDR collection.

Type: Array of CidrCollectionChange objects

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Required: Yes

### CollectionVersion

A sequential counter that Amazon Route 53 sets to 1 when you create a collection and increments it by 1 each time you update the collection.

We recommend that you use `ListCidrCollection` to get the current value of `CollectionVersion` for the collection that you want to update, and then include that value with the change request. This prevents Route 53 from overwriting an intervening update:

- If the value in the request matches the value of `CollectionVersion` in the collection, Route 53 updates the collection.

- If the value of `CollectionVersion` in the collection is greater than the value in the request, the collection was changed after you got the version number. Route 53 does not update the collection, and it returns a `CidrCollectionVersionMismatch` error.

Type: Long

Valid Range: Minimum value of 1.

Required: No

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ChangeCidrCollectionResponse>
   <Id>string</Id>
</ChangeCidrCollectionResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ChangeCidrCollectionResponse

Root level tag for the ChangeCidrCollectionResponse parameters.

Required: Yes

### Id

The ID that is returned by `ChangeCidrCollection`. You can use it as input to `GetChange` to see if a CIDR collection change has propagated or not.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 6500.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**CidrBlockInUseException**

This CIDR block is already in use.

HTTP Status Code: 400

**CidrCollectionVersionMismatchException**

The CIDR collection version you provided, doesn't match the one in the `ListCidrCollections` operation.

HTTP Status Code: 409

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**LimitsExceeded**

This operation can't be completed because the current account has reached the limit on the resource you are trying to create. To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

**NoSuchCidrCollectionException**

The CIDR collection you specified, doesn't exist.

HTTP Status Code: 404

## Examples

### Example request

This example illustrates one usage of ChangeCidrCollection.

```
POST /2013-04-01/cidrcollection/c8c02a84-aaaa-bbbb-e0d2-d833a2f80106
<?xml version="1.0" encoding="UTF-8"?>
<ChangeCidrCollectionRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">

   <Changes>
     <CidrCollectionChange>
      <Action>PUT</Action>
       <CidrList>
        <Cidr>1.1.1.0/24</Cidr>
        <Cidr>1.1.2.0/24</Cidr>
       </CidrList>
       <LocationName>location-1</LocationName>
      </CidrCollectionChange>
      <CidrCollectionChange>
       <Action>DELETE_IF_EXISTS</Action>
        <CidrList>
         <Cidr>2.1.1.0/24</Cidr>
         <Cidr>2.1.2.0/24</Cidr>
        </CidrList>
      <LocationName>location-2</LocationName>
    </CidrCollectionChange>
   </Changes>
  <CollectionVersion>1</CollectionVersion>
</ChangeCidrCollectionRequest>
```

### Example response

This example illustrates one usage of ChangeCidrCollection.

```
HTTP/1.1 200
<?xml version="1.0"?>
<ChangeCidrCollectionResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">

   <Id>BAQICAHjlIdQ8CnglM29iyr9Fw_Dl6ubqnG8pAHlAe5xxLiDmTgGl7FQ54tpTXxv-
GsVbPT2BAAAAwzCBwAYJKoZIhvcNAQcGoIGyMIGvAgEAMIGpBgkqhkiG9w0BBwEwHgYJYIZIAWUDBAEuMBEEDHQyia4ugqV
Id>
</ChangeCidrCollectionResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ChangeResourceRecordSets

Service: Amazon Route 53

Creates, changes, or deletes a resource record set, which contains authoritative DNS information for a specified domain name or subdomain name. For example, you can use `ChangeResourceRecordSets` to create a resource record set that routes traffic for test.example.com to a web server that has an IP address of 192.0.2.44.

### Deleting Resource Record Sets

To delete a resource record set, you must specify all the same values that you specified when you created it.

### Change Batches and Transactional Changes

The request body must include a document with a `ChangeResourceRecordSetsRequest` element. The request body contains a list of change items, known as a change batch. Change batches are considered transactional changes. Route 53 validates the changes in the request and then either makes all or none of the changes in the change batch request. This ensures that DNS routing isn't adversely affected by partial changes to the resource record sets in a hosted zone.

For example, suppose a change batch request contains two changes: it deletes the `CNAME` resource record set for www.example.com and creates an alias resource record set for www.example.com. If validation for both records succeeds, Route 53 deletes the first resource record set and creates the second resource record set in a single operation. If validation for either the `DELETE` or the `CREATE` action fails, then the request is canceled, and the original `CNAME` record continues to exist.

> **Note**
>
> If you try to delete the same resource record set more than once in a single change batch, Route 53 returns an `InvalidChangeBatch` error.

### Protected Resource Record Sets

If a resource record set protection exists for a name and type, Route 53 rejects any change in the change batch that creates, updates, or deletes a resource record set with that name and type. Because change batches are transactional, Route 53 rejects the entire request and returns an `InvalidChangeBatch` error. Route 53 identifies each protected resource record set in the error

message and includes the protection's comment, if any. To make the change, first delete the protection by using `DeleteResourceRecordSetProtections`. To see which resource record sets are protected, use `ListResourceRecordSetProtections`.

**Traffic Flow**

To create resource record sets for complex routing configurations, use either the traffic flow visual editor in the Route 53 console or the API actions for traffic policies and traffic policy instances. Save the configuration as a traffic policy, then associate the traffic policy with one or more domain names (such as example.com) or subdomain names (such as www.example.com), in the same hosted zone or in multiple hosted zones. You can roll back the updates if the new configuration isn't performing as expected. For more information, see Using Traffic Flow to Route DNS Traffic in the *Amazon Route 53 Developer Guide*.

**Create, Delete, and Upsert**

Use `ChangeResourceRecordsSetsRequest` to perform the following actions:

- `CREATE`: Creates a resource record set that has the specified values.
- `DELETE`: Deletes an existing resource record set that has the specified values.
- `UPSERT`: If a resource set doesn't exist, Route 53 creates it. If a resource set exists Route 53 updates it with the values in the request.

**Syntaxes for Creating, Updating, and Deleting Resource Record Sets**

The syntax for a request depends on the type of resource record set that you want to create, delete, or update, such as weighted, alias, or failover. The XML elements in your request must appear in the order listed in the syntax.

For syntax examples that show the elements for each kind of resource record set, such as basic, weighted, and alias, see the Examples section of `ChangeResourceRecordSets`.

Don't refer to the syntax in the "Syntax" section, which includes all of the elements for every kind of resource record set that you can create, delete, or update by using `ChangeResourceRecordSets`.

**Change Propagation to Route 53 DNS Servers**

When you submit a `ChangeResourceRecordSets` request, Route 53 propagates your changes to all of the Route 53 authoritative DNS servers managing the hosted zone. While your changes are

propagating, GetChange returns a status of PENDING. When propagation is complete, GetChange returns a status of INSYNC. Changes generally propagate to all Route 53 name servers managing the hosted zone within 60 seconds. For more information, see GetChange.

### Limits on ChangeResourceRecordSets Requests

For information about the limits on a ChangeResourceRecordSets request, see Limits in the *Amazon Route 53 Developer Guide*.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/rrset/ HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ChangeBatch>
      <Changes>
         <Change>
            <Action>string</Action>
            <ResourceRecordSet>
               <AliasTarget>
                  <DNSName>string</DNSName>
                  <EvaluateTargetHealth>boolean</EvaluateTargetHealth>
                  <HostedZoneId>string</HostedZoneId>
               </AliasTarget>
               <CidrRoutingConfig>
                  <CollectionId>string</CollectionId>
                  <LocationName>string</LocationName>
               </CidrRoutingConfig>
               <Failover>string</Failover>
               <GeoLocation>
                  <ContinentCode>string</ContinentCode>
                  <CountryCode>string</CountryCode>
                  <SubdivisionCode>string</SubdivisionCode>
               </GeoLocation>
               <GeoProximityLocation>
                  <AWSRegion>string</AWSRegion>
                  <Bias>integer</Bias>
                  <Coordinates>
                     <Latitude>string</Latitude>
                     <Longitude>string</Longitude>
                  </Coordinates>
                  <LocalZoneGroup>string</LocalZoneGroup>
               </GeoProximityLocation>
```

```
               <HealthCheckId>string</HealthCheckId>
               <MultiValueAnswer>boolean</MultiValueAnswer>
               <Name>string</Name>
               <Region>string</Region>
               <ResourceRecords>
                  <ResourceRecord>
                     <Value>string</Value>
                  </ResourceRecord>
               </ResourceRecords>
               <SetIdentifier>string</SetIdentifier>
               <TrafficPolicyInstanceId>string</TrafficPolicyInstanceId>
               <TTL>long</TTL>
               <Type>string</Type>
               <Weight>long</Weight>
            </ResourceRecordSet>
         </Change>
      </Changes>
      <Comment>string</Comment>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone that contains the resource record sets that you want to change.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### ChangeResourceRecordSetsRequest

Root level tag for the ChangeResourceRecordSetsRequest parameters.

Required: Yes

### ChangeBatch

A complex type that contains an optional comment and the Changes element.

Type: ChangeBatch object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</ChangeResourceRecordSetsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ChangeResourceRecordSetsResponse

Root level tag for the ChangeResourceRecordSetsResponse parameters.

Required: Yes

### ChangeInfo

A complex type that contains information about changes made to your hosted zone.

This element contains an ID that you use when performing a GetChange action to get detailed information about the change.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidChangeBatch**

This exception contains a list of messages that might contain one or more error messages. Each error message indicates one error in the change batch.

Route 53 also returns this error when the change batch creates, updates, or deletes a resource record set whose name and type have a resource record set protection. To make the change, first delete the protection by using `DeleteResourceRecordSetProtections`.

**messages**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (Bad

request). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## Examples

### Basic Syntax

This example illustrates one usage of ChangeResourceRecordSets.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <TTL>time to live in seconds</TTL>
            <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Alias Resource Record Set Syntax

For information about alias resource record sets, see Choosing Between Alias and Non-Alias Resource Record Sets in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Failover Syntax

For information about configuring Route 53 failover, see the following topics in the *Amazon Route 53 Developer Guide*:

- Creating Route 53 Health Checks and Configuring DNS Failover
- Configuring Failover in a Private Hosted Zone

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
```

```
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <Failover>PRIMARY | SECONDARY</Failover>
            <TTL>time to live in seconds</TTL>
            <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Failover Alias Syntax

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- Creating Route 53 Health Checks and Configuring DNS Failover
- Configuring Failover in a Private Hosted Zone
- Choosing Between Alias and Non-Alias Resource Record Sets

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
```

```
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <Failover>PRIMARY | SECONDARY</Failover>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Geolocation Syntax

For more information, see Geolocation Routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <GeoLocation>
               <ContinentCode>two-letter continent code</ContinentCode>
               <CountryCode>two-letter country code</CountryCode>
               <SubdivisionCode>subdivision code</SubdivisionCode>
            </GeoLocation>
            <TTL>time to live in seconds</TTL>
            <ResourceRecords>
               <ResourceRecord>
```

```
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Geolocation Alias Syntax

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- Geolocation Routing
- Choosing Between Alias and Non-Alias Resource Record Sets

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <GeoLocation>
               <ContinentCode>two-letter continent code</ContinentCode>
               <CountryCode>two-letter country code</CountryCode>
               <SubdivisionCode>subdivision code</SubdivisionCode>
            </GeoLocation>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
```

```
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Geoproximity Syntax when using coordinates

For more information, see Geoproximity Routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
           <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <TTL>time to live in seconds</TTL>
           <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <GeoProximityLocation>
                <Coordinates>
                   <Latitude>decimal latitude</Latitude>
                   <Longitude>decimal longitude</Longitude>
                </Coordinates>
               <Bias>Integer bias</Bias>
             </GeoProximityLocation>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
```

```
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Geoproximity Alias Syntax when using coordinates

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- Geoproximity Routing
- Choosing Between Alias and Non-Alias Resource Record Sets

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <GeoProximityLocation>
                <Coordinates>
                   <Latitude>decimal latitude</Latitude>
                   <Longitude>decimal longitude</Longitude>
                </Coordinates>
                <Bias>Integer bias</Bias>
```

```
             </GeoProximityLocation>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

**Geoproximity Syntax when using an Region.**

For more information, see Geoproximity Routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
           <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <TTL>time to live in seconds</TTL>
           <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <GeoProximityLocation>
                <AWSRegion>Amazon EC2 region name</AWSRegion>
               <Bias>Integer bias</Bias>
             </GeoProximityLocation>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
```

```
</ChangeResourceRecordSetsRequest>
```

### Geoproximity Alias Syntax when using an Region

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- Geoproximity Routing
- Choosing Between Alias and Non-Alias Resource Record Sets

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <etIdentifier>unique description for this resource record set</
SetIdentifier>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <GeoProximityLocation>
                 <AWSRegion>Amazon EC2 region name</AWSRegion>
                <Bias>Integer bias</Bias>
             </GeoProximityLocation>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

**Geoproximity Syntax when using Local Zone Group.**

For more information, see Geoproximity Routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
           <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <TTL>time to live in seconds</TTL>
           <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <GeoProximityLocation>
                <LocalZoneGroup>Amazon EC2 local zone group name</LocalZoneGroup>
               <Bias>Integer bias</Bias>
             </GeoProximityLocation>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

**Geoproximity Alias Syntax when using a Local Zone Group**

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- Geoproximity Routing
- Choosing Between Alias and Non-Alias Resource Record Sets

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <etIdentifier>unique description for this resource record set</
SetIdentifier>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <GeoProximityLocation>
                <LocalZoneGroup>Amazon EC2 local zone group name</LocalZoneGroup>
                <Bias>Integer bias</Bias>
             </GeoProximityLocation>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### IP-based routing Syntax

For more information, see IP-based routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <TTL>time to live in seconds</TTL>
            <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <CidrRoutingConfig>
               <CollectionId>CIDR collection ID</CollectionId>
               <LocationName>CIDR collection location name</LocationName>
            </CidrRoutingConfig>
            <HealthCheckId>ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### IP-based Alias Syntax

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- IP-based routing
- Choosing Between Alias and Non-Alias Resource Record Sets

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
```

```
<ChangeBatch>
   <Comment>optional comment about the changes in this
      change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>

            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <CidrRoutingConfig>
               <CollectionId>CIDR collection ID</CollectionId>
               <LocationName>CIDR collection location name</LocationName>
            </CidrRoutingConfig>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Latency Resource Record Set Syntax

For information about latency resource record sets, see Latency-Based Routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
```

```
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <Region>Amazon EC2 region name</Region>
            <TTL>time to live in seconds</TTL>
            <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Latency Alias Resource Record Set Syntax

For information about latency resource record sets, see Latency-Based Routing in the *Amazon Route 53 Developer Guide*. For information about alias resource record sets, see Choosing Between Alias and Non-Alias Resource Record Sets in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <Region>Amazon EC2 region name</Region>
            <AliasTarget>
```

```
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Multivalue Answer Syntax

This example illustrates one usage of ChangeResourceRecordSets.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <TTL>time to live in seconds</TTL>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <MultiValueAnswer>true</MultiValueAnswer>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
```

```
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Weighted Resource Record Set Syntax

For information about weighted resource record sets, see Weighted Routing in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <Weight>value between 0 and 255</Weight>
            <TTL>time to live in seconds</TTL>
            <ResourceRecords>
               <ResourceRecord>
                  <Value>applicable value for the record type</Value>
               </ResourceRecord>
               ...
            </ResourceRecords>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

### Weighted Alias Resource Record Set Syntax

For information about weighted resource record sets, see Weighted Routing in the *Amazon Route 53 Developer Guide*. For information about alias resource record sets, see Choosing Between Alias and Non-Alias Resource Record Sets in the *Amazon Route 53 Developer Guide*.

```
POST /2013-04-01/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
<ChangeBatch>
   <Comment>optional comment about the changes in this change batch request</Comment>
   <Changes>
      <Change>
         <Action>CREATE | DELETE | UPSERT</Action>
         <ResourceRecordSet>
            <Name>fully qualified domain name</Name>
            <Type>DNS record type</Type>
            <SetIdentifier>unique description for this resource record set</
SetIdentifier>
            <Weight>value between 0 and 255</Weight>
            <AliasTarget>
               <HostedZoneId>hosted zone ID for your AWS resource or Route 53 hosted
 zone</HostedZoneId>
               <DNSName>DNS domain name for your AWS resource or another resource
 record set in this hosted zone</DNSName>
               <EvaluateTargetHealth>true | false</EvaluateTargetHealth>
            </AliasTarget>
            <HealthCheckId>optional ID of a Route 53 health check</HealthCheckId>
         </ResourceRecordSet>
      </Change>
      ...
   </Changes>
</ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ChangeTagsForResource

Service: Amazon Route 53

Adds, edits, or deletes tags for a health check or a hosted zone.

For information about using tags for cost allocation, see Using Cost Allocation Tags in the *AWS Billing and Cost Management User Guide*.

## Request Syntax

```
POST /2013-04-01/tags/ResourceType/ResourceId HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeTagsForResourceRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <AddTags>
      <Tag>
         <Key>string</Key>
         <Value>string</Value>
      </Tag>
   </AddTags>
   <RemoveTagKeys>
      <Key>string</Key>
   </RemoveTagKeys>
</ChangeTagsForResourceRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### ResourceId

The ID of the resource for which you want to add, change, or delete tags.

Length Constraints: Maximum length of 64.

Required: Yes

### ResourceType

The type of the resource.

- The resource type for health checks is `healthcheck`.
- The resource type for hosted zones is `hostedzone`.

Valid Values: `healthcheck | hostedzone`

Required: Yes

## Request Body

The request accepts the following data in XML format.

**ChangeTagsForResourceRequest**

Root level tag for the ChangeTagsForResourceRequest parameters.

Required: Yes

**AddTags**

A complex type that contains a list of the tags that you want to add to the specified health check or hosted zone and/or the tags that you want to edit `Value` for.

You can add a maximum of 10 tags to a health check or a hosted zone.

Type: Array of Tag objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

**RemoveTagKeys**

A complex type that contains a list of the tags that you want to delete from the specified health check or hosted zone. You can specify up to 10 keys.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Maximum length of 128.

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

**ThrottlingException**

The limit on the number of requests per second was exceeded.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ChangeTagsForResource.

```
POST /2013-04-01/tags/healthcheck/abcdef11-2222-3333-4444-555555fedcba HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeTagsForResourceRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <RemoveTagKeys>
      <Key>Owner</Key>
   </RemoveTagKeys>
   <AddTags>
      <Tag>
         <Key>Cost Center</Key>
         <Value>80432</Value>
      </Tag>
   </AddTags>
</ChangeTagsForResourceRequest>
```

### Example Response

This example illustrates one usage of ChangeTagsForResource.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ChangeTagsForResourceResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
</ChangeTagsForResourceResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateCidrCollection

Service: Amazon Route 53

Creates a CIDR collection in the current AWS account.

## Request Syntax

```
POST /2013-04-01/cidrcollection HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateCidrCollectionRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>string</CallerReference>
   <Name>string</Name>
</CreateCidrCollectionRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateCidrCollectionRequest

Root level tag for the CreateCidrCollectionRequest parameters.

Required: Yes

### CallerReference

A client-specific token that allows requests to be securely retried so that the intended outcome will only occur once, retries receive a similar response, and there are no additional edge cases to handle.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `\p{ASCII}+`

Required: Yes

### Name

A unique identifier for the account that can be used to reference the collection from other API calls.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[0-9A-Za-z_\-]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateCidrCollectionResponse>
   <Collection>
      <Arn>string</Arn>
      <Id>string</Id>
      <Name>string</Name>
      <Version>long</Version>
   </Collection>
</CreateCidrCollectionResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

### Location

A unique URL that represents the location for the CIDR collection.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

### CreateCidrCollectionResponse

Root level tag for the CreateCidrCollectionResponse parameters.

Required: Yes

### Collection

A complex type that contains information about the CIDR collection.

Type: CidrCollection object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**CidrCollectionAlreadyExistsException**

A CIDR collection with this name and a different caller reference already exists in this account.

HTTP Status Code: 400

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**LimitsExceeded**

This operation can't be completed because the current account has reached the limit on the resource you are trying to create. To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

## Examples

### Example request

This example illustrates one usage of CreateCidrCollection.

```
POST /2013-04-01/cidrcollection
<?xml version="1.0" encoding="UTF-8"?>
<CreateCidrCollectionRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">

   <Name>isp-city-cidrs</Name>
    <CallerReference>ref1</CallerReference>
</CreateCidrCollectionRequest>
```

### Example response

This example illustrates one usage of CreateCidrCollection.

```
HTTP/1.1 201 Created
<?xml version="1.0"?>
<CreateCidrCollectionResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">

 <Collection>
   <Arn>arn:aws:route53:::cidrcollection/c8c02a84-aaaa-bbbb-e0d2-d833a2f80106</Arn>
   <Id>c8c02a84-aaaa-bbbb-e0d2-d833a2f80106</Id>
   <Name>isp-city-cidrs</Name>
   <Version>1</Version>
  </Collection>
</CreateCidrCollectionResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateHealthCheck

Service: Amazon Route 53

Creates a new health check.

For information about adding health checks to resource record sets, see HealthCheckId in ChangeResourceRecordSets.

**ELB Load Balancers**

If you're registering EC2 instances with an Elastic Load Balancing (ELB) load balancer, do not create Amazon Route 53 health checks for the EC2 instances. When you register an EC2 instance with a load balancer, you configure settings for an ELB health check, which performs a similar function to a Route 53 health check.

**Private Hosted Zones**

You can associate health checks with failover resource record sets in a private hosted zone. Note the following:

- Route 53 health checkers are outside the VPC. To check the health of an endpoint within a VPC by IP address, you must assign a public IP address to the instance in the VPC.
- You can configure a health checker to check the health of an external resource that the instance relies on, such as a database server.
- You can create a CloudWatch metric, associate an alarm with the metric, and then create a health check that is based on the state of the alarm. For example, you might create a CloudWatch metric that checks the status of the Amazon EC2 `StatusCheckFailed` metric, add an alarm to the metric, and then create a health check that is based on the state of the alarm. For information about creating CloudWatch metrics and alarms by using the CloudWatch console, see the Amazon CloudWatch User Guide.

## Request Syntax

```
POST /2013-04-01/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>string</CallerReference>
   <HealthCheckConfig>
      <AlarmIdentifier>
         <Name>string</Name>
```

```
            <Region>string</Region>
         </AlarmIdentifier>
         <ChildHealthChecks>
            <ChildHealthCheck>string</ChildHealthCheck>
         </ChildHealthChecks>
         <Disabled>boolean</Disabled>
         <EnableSNI>boolean</EnableSNI>
         <FailureThreshold>integer</FailureThreshold>
         <FullyQualifiedDomainName>string</FullyQualifiedDomainName>
         <HealthThreshold>integer</HealthThreshold>
         <InsufficientDataHealthStatus>string</InsufficientDataHealthStatus>
         <Inverted>boolean</Inverted>
         <IPAddress>string</IPAddress>
         <MeasureLatency>boolean</MeasureLatency>
         <Port>integer</Port>
         <Regions>
            <Region>string</Region>
         </Regions>
         <RequestInterval>integer</RequestInterval>
         <ResourcePath>string</ResourcePath>
         <RoutingControlArn>string</RoutingControlArn>
         <SearchString>string</SearchString>
         <Type>string</Type>
      </HealthCheckConfig>
</CreateHealthCheckRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateHealthCheckRequest

Root level tag for the CreateHealthCheckRequest parameters.

Required: Yes

### CallerReference

A unique string that identifies the request and that allows you to retry a failed `CreateHealthCheck` request without the risk of creating two identical health checks:

- If you send a `CreateHealthCheck` request with the same `CallerReference` and settings as a previous request, and if the health check doesn't exist, Amazon Route 53 creates the health check. If the health check does exist, Route 53 returns the health check configuration in the response.
- If you send a `CreateHealthCheck` request with the same `CallerReference` as a deleted health check, regardless of the settings, Route 53 returns a `HealthCheckAlreadyExists` error.
- If you send a `CreateHealthCheck` request with the same `CallerReference` as an existing health check but with different settings, Route 53 returns a `HealthCheckAlreadyExists` error.
- If you send a `CreateHealthCheck` request with a unique `CallerReference` but settings identical to an existing health check, Route 53 creates the health check.

Route 53 does not store the `CallerReference` for a deleted health check indefinitely. The `CallerReference` for a deleted health check will be deleted after a number of days.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**HealthCheckConfig**

A complex type that contains settings for a new health check.

Type: HealthCheckConfig object

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckResponse>
   <HealthCheck>
      <CallerReference>string</CallerReference>
      <CloudWatchAlarmConfiguration>
         <ComparisonOperator>string</ComparisonOperator>
         <Dimensions>
```

```
            <Dimension>
               <Name>string</Name>
               <Value>string</Value>
            </Dimension>
         </Dimensions>
         <EvaluationPeriods>integer</EvaluationPeriods>
         <MetricName>string</MetricName>
         <Namespace>string</Namespace>
         <Period>integer</Period>
         <Statistic>string</Statistic>
         <Threshold>double</Threshold>
      </CloudWatchAlarmConfiguration>
      <HealthCheckConfig>
         <AlarmIdentifier>
            <Name>string</Name>
            <Region>string</Region>
         </AlarmIdentifier>
         <ChildHealthChecks>
            <ChildHealthCheck>string</ChildHealthCheck>
         </ChildHealthChecks>
         <Disabled>boolean</Disabled>
         <EnableSNI>boolean</EnableSNI>
         <FailureThreshold>integer</FailureThreshold>
         <FullyQualifiedDomainName>string</FullyQualifiedDomainName>
         <HealthThreshold>integer</HealthThreshold>
         <InsufficientDataHealthStatus>string</InsufficientDataHealthStatus>
         <Inverted>boolean</Inverted>
         <IPAddress>string</IPAddress>
         <MeasureLatency>boolean</MeasureLatency>
         <Port>integer</Port>
         <Regions>
            <Region>string</Region>
         </Regions>
         <RequestInterval>integer</RequestInterval>
         <ResourcePath>string</ResourcePath>
         <RoutingControlArn>string</RoutingControlArn>
         <SearchString>string</SearchString>
         <Type>string</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>long</HealthCheckVersion>
      <Id>string</Id>
      <LinkedService>
         <Description>string</Description>
         <ServicePrincipal>string</ServicePrincipal>
```

```
      </LinkedService>
   </HealthCheck>
</CreateHealthCheckResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

**Location**

The unique URL representing the new health check.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

**CreateHealthCheckResponse**

Root level tag for the CreateHealthCheckResponse parameters.

Required: Yes

**HealthCheck**

A complex type that contains identifying information about the health check.

Type: HealthCheck object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**HealthCheckAlreadyExists**

The health check you're attempting to create already exists. Amazon Route 53 returns this error when you submit a request that has the following values:

- The same value for `CallerReference` as an existing health check, and one or more values that differ from the existing health check that has the same caller reference.
- The same value for `CallerReference` as a health check that you created and later deleted, regardless of the other settings in the request.

**message**

HTTP Status Code: 409

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**TooManyHealthChecks**

This health check can't be created because the current account has reached the limit on the number of active health checks.

For information about default limits, see Limits in the *Amazon Route 53 Developer Guide*.

For information about how to get the current limit for an account, see GetAccountLimit. To request a higher limit, create a case with the AWS Support Center.

You have reached the maximum number of active health checks for an AWS account. To request a higher limit, create a case with the AWS Support Center.

HTTP Status Code: 400

## Examples

### Request Syntax for HTTP[S], HTTP[S]_STR_MATCH, and TCP Health Checks

This example illustrates one usage of CreateHealthCheck.

```
POST /2013-04-01/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>unique description</CallerReference>
   <HealthCheckConfig>
      <EnableSNI>true | false</EnableSNI>
      <FailureThreshold>number of health checks that must pass or fail to change the
 status of the health check</FailureThreshold>
```

```
      <FullyQualifiedDomainName>domain name of the endpoint to check</
FullyQualifiedDomainName>
      <Inverted>true | false</Inverted>
      <IPAddress>IP address of the endpoint to check</IPAddress>
      <MeasureLatency>true | false</MeasureLatency>
      <Port>port on the endpoint to check</Port>
      <Regions>
         <Region>us-west-1 | us-west-2 | us-east-1 | eu-west-1 | ap-southeast-1 | ap-
southeast-2 | ap-northeast-1 | sa-east-1</Region>
         ...
      </Regions>
      <RequestInterval>10 | 30</RequestInterval>
      <ResourcePath>path of the file that you want Route 53 to request</ResourcePath>
      <SearchString>if Type is HTTP_STR_MATCH or HTTPS_STR_MATCH, the string to search
 for in the response body from the specified resource</SearchString>
      <Type>HTTP | HTTPS | HTTP_STR_MATCH | HTTPS_STR_MATCH | TCP</Type>
   </HealthCheckConfig>
</CreateHealthCheckRequest>
```

### Response Syntax for HTTP[S], HTTP[S]_STR_MATCH, and TCP Health Checks

This example illustrates one usage of CreateHealthCheck.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>ID that Route 53 assigned to the new health check</Id>
      <CallerReference>unique description</CallerReference>
      <HealthCheckConfig>
         <EnableSNI>true | false</EnableSNI>
         <FailureThreshold>number of health checks that must pass or fail to change the
 status of the health check</FailureThreshold>
         <FullyQualifiedDomainName>domain name of the endpoint to check</
FullyQualifiedDomainName>
         <Inverted>true | false</Inverted>
         <IPAddress>IP address of the endpoint to check</IPAddress>
         <MeasureLatency>true | false</MeasureLatency>
         <Port>port on the endpoint to check</Port>
         <Regions>
            <Region>us-west-1 | us-west-2 | us-east-1 | eu-west-1 | ap-southeast-1 |
 ap-southeast-2 | ap-northeast-1 | sa-east-1</Region>
            ...
         </Regions>
```

```
         <RequestInterval>10 | 30</RequestInterval>
         <ResourcePath>path of the file that you want Route 53 to request</
ResourcePath>
         <SearchString>if Type is HTTP_STR_MATCH or HTTPS_STR_MATCH, the string to
 search for in the response body from the specified resource</SearchString>
         <Type>HTTP | HTTPS | HTTP_STR_MATCH | HTTPS_STR_MATCH | TCP</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>sequential counter</HealthCheckVersion>
   </HealthCheck>
</CreateHealthCheckResponse>
```

### Request Syntax for CLOUDWATCH_METRIC Health Checks

This example illustrates one usage of CreateHealthCheck.

```
POST /2013-04-01/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>unique description</CallerReference>
   <HealthCheckConfig>
      <AlarmIdentifier>
         <Name>name of CloudWatch alarm</Name>
         <Region>region that CloudWatch alarm was created in</Region>
      </AlarmIdentifier>
      <InsufficientDataHealthStatus>Healthy | Unhealthy | LastKnownStatus</
InsufficientDataHealthStatus>
      <Inverted>true | false</Inverted>
      <Type>CLOUDWATCH_METRIC</Type>
   </HealthCheckConfig>
</CreateHealthCheckRequest>
```

### Response Syntax for CLOUDWATCH_METRIC Health Checks

This example illustrates one usage of CreateHealthCheck.

```
POST /2013-04-01/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>ID that Route 53 assigned to the new health check</Id>
      <CallerReference>unique description</CallerReference>
      <HealthCheckConfig>
         <AlarmIdentifier>
```

```
            <Name>name of CloudWatch alarm</Name>
            <Region>region of CloudWatch alarm</Region>
         </AlarmIdentifier>
         <InsufficientDataHealthStatus>Healthy | Unhealthy | LastKnownStatus</
InsufficientDataHealthStatus>
         <Inverted>true | false</Inverted>
         <Type>CLOUDWATCH_METRIC</Type>
      </HealthCheckConfig>
      <CloudWatchAlarmConfiguration>
         <ComparisonOperator>GreaterThanOrEqualToThreshold | GreaterThanThreshold |
 LessThanThreshold | LessThanOrEqualToThreshold</ComparisonOperator>
         <Dimensions>
            <Dimension>
               <Name>name of a dimension for the metric</Name>
               <Value>value of a dimension for the metric</Value>
            </Dimension>
            ...
         </Dimensions>
         <EvaluationPeriods>number of periods that metric is compared to threshold</
EvaluationPeriods>
         <MetricName>name of the metric that's associated with the alarm</MetricName>
         <Namespace>namespace of the metric that the alarm is associated with</
Namespace>
         <Period>duration of a period in seconds</Period>
         <Statistic>statistic applied to the CloudWatch metric</Statistic>
         <Threshold>value the metric is compared with</Threshold>
      </CloudWatchAlarmConfiguration>
      <HealthCheckVersion>sequential counter</HealthCheckVersion>
   </HealthCheck>
</CreateHealthCheckResponse>
```

### Request Syntax for CALCULATED Health Checks

This example illustrates one usage of CreateHealthCheck.

```
POST /2013-04-01/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>unique description</CallerReference>
   <HealthCheckConfig>
      <ChildHealthChecks>
         <ChildHealthCheck>health check ID</ChildHealthCheck>
         ...
      </ChildHealthChecks>
```

```
      <HealthThreshold>number of the health checks that are associated with a
 CALCULATED health check that must be healthy</HealthThreshold>
      <Inverted>true | false</Inverted>
      <Type>CALCULATED</Type>
   </HealthCheckConfig>
</CreateHealthCheckRequest>
```

### Response Syntax for CALCULATED Health Checks

This example illustrates one usage of CreateHealthCheck.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UT2F-8"?>
<CreateHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>ID that Route 53 assigned to the new health check</Id>
      <CallerReference>unique description</CallerReference>
      <HealthCheckConfig>
         <ChildHealthChecks>
            <ChildHealthCheck>health check ID</ChildHealthCheck>
            ...
         </ChildHealthChecks>
         <HealthThreshold>number of health checks that are associated with a CALCULATED
 health check that must be healthy</HealthThreshold>
         <Inverted>true | false</Inverted>
         <Type>CALCULATED</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>sequential counter</HealthCheckVersion>
   </HealthCheck>
</CreateHealthCheckResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateHostedZone

Service: Amazon Route 53

Creates a new public or private hosted zone. You create records in a public hosted zone to define how you want to route traffic on the internet for a domain, such as example.com, and its subdomains (apex.example.com, acme.example.com). You create records in a private hosted zone to define how you want to route traffic for a domain and its subdomains within one or more Amazon Virtual Private Clouds (Amazon VPCs).

> **Important**
>
> You can't convert a public hosted zone to a private hosted zone or vice versa. Instead, you must create a new hosted zone with the same name and create new resource record sets.

For more information about charges for hosted zones, see Amazon Route 53 Pricing.

Note the following:

- You can't create a hosted zone for a top-level domain (TLD) such as .com.
- For public hosted zones, Route 53 automatically creates a default SOA record and four NS records for the zone. For more information about SOA and NS records, see NS and SOA Records that Route 53 Creates for a Hosted Zone in the *Amazon Route 53 Developer Guide*.

  If you want to use the same name servers for multiple public hosted zones, you can optionally associate a reusable delegation set with the hosted zone. See the `DelegationSetId` element.
- If your domain is registered with a registrar other than Route 53, you must update the name servers with your registrar to make Route 53 the DNS service for the domain. For more information, see Migrating DNS Service for an Existing Domain to Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

When you submit a `CreateHostedZone` request, the initial status of the hosted zone is `PENDING`. For public hosted zones, this means that the NS and SOA records are not yet available on all Route 53 DNS servers. When the NS and SOA records are available, the status of the zone changes to `INSYNC`.

The `CreateHostedZone` request requires the caller to have an `ec2:DescribeVpcs` permission.

**Note**

When creating private hosted zones, the Amazon VPC must belong to the same partition where the hosted zone is created. A partition is a group of AWS Regions. Each AWS account is scoped to one partition.
The following are the supported partitions:

- `aws` - AWS Regions
- `aws-cn` - China Regions
- `aws-us-gov` - AWS GovCloud (US) Region

For more information, see Access Management in the *AWS General Reference*.

## Request Syntax

```
POST /2013-04-01/hostedzone HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>string</CallerReference>
   <DelegationSetId>string</DelegationSetId>
   <HostedZoneConfig>
      <Comment>string</Comment>
      <PrivateZone>boolean</PrivateZone>
   </HostedZoneConfig>
   <Name>string</Name>
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</CreateHostedZoneRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateHostedZoneRequest

Root level tag for the CreateHostedZoneRequest parameters.

Required: Yes

### CallerReference

A unique string that identifies the request and that allows failed `CreateHostedZone` requests to be retried without the risk of executing the operation twice. You must use a unique `CallerReference` string every time you submit a `CreateHostedZone` request. `CallerReference` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

### DelegationSetId

If you want to associate a reusable delegation set with this hosted zone, the ID that Amazon Route 53 assigned to the reusable delegation set when you created it. For more information about reusable delegation sets, see CreateReusableDelegationSet.

If you are using a reusable delegation set to create a public hosted zone for a subdomain, make sure that the parent hosted zone doesn't use one or more of the same name servers. If you have overlapping nameservers, the operation will cause a `ConflictingDomainsExist` error.

Type: String

Length Constraints: Maximum length of 32.

Required: No

### HostedZoneConfig

(Optional) A complex type that contains the following optional values:

- For public and private hosted zones, an optional comment
- For private hosted zones, an optional `PrivateZone` element

If you don't specify a comment or the `PrivateZone` element, omit `HostedZoneConfig` and the other elements.

Type: HostedZoneConfig object

Required: No

### Name

The name of the domain. Specify a fully qualified domain name, for example, *www.example.com*. The trailing dot is optional; Amazon Route 53 assumes that the domain name is fully qualified. This means that Route 53 treats *www.example.com* (without a trailing dot) and *www.example.com.* (with a trailing dot) as identical.

If you're creating a public hosted zone, this is the name you have registered with your DNS registrar. If your domain name is registered with a registrar other than Route 53, change the name servers for your domain to the set of `NameServers` that `CreateHostedZone` returns in `DelegationSet`.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

### VPC

(Private hosted zones only) A complex type that contains information about the Amazon VPC that you're associating with this hosted zone.

You can specify only one Amazon VPC when you create a private hosted zone. If you are associating a VPC with a hosted zone with this request, the paramaters `VPCId` and `VPCRegion` are also required.

To associate additional Amazon VPCs with the hosted zone, use AssociateVPCWithHostedZone after you create a hosted zone.

Type: VPC object

Required: No

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneResponse>
```

```
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
   <DelegationSet>
      <CallerReference>string</CallerReference>
      <Id>string</Id>
      <NameServers>
         <NameServer>string</NameServer>
      </NameServers>
   </DelegationSet>
   <HostedZone>
      <CallerReference>string</CallerReference>
      <Config>
         <Comment>string</Comment>
         <PrivateZone>boolean</PrivateZone>
      </Config>
      <Features>
         <AcceleratedRecoveryStatus>string</AcceleratedRecoveryStatus>
         <FailureReasons>
            <AcceleratedRecovery>string</AcceleratedRecovery>
         </FailureReasons>
      </Features>
      <Id>string</Id>
      <LinkedService>
         <Description>string</Description>
         <ServicePrincipal>string</ServicePrincipal>
      </LinkedService>
      <Name>string</Name>
      <ResourceRecordSetCount>long</ResourceRecordSetCount>
   </HostedZone>
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</CreateHostedZoneResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

**Location**

The unique URL representing the new hosted zone.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

**CreateHostedZoneResponse**

Root level tag for the CreateHostedZoneResponse parameters.

Required: Yes

**ChangeInfo**

A complex type that contains information about the `CreateHostedZone` request.

Type: ChangeInfo object

**DelegationSet**

A complex type that describes the name servers for this hosted zone.

Type: DelegationSet object

**HostedZone**

A complex type that contains general information about the hosted zone.

Type: HostedZone object

**VPC**

A complex type that contains information about an Amazon VPC that you associated with this hosted zone.

Type: VPC object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConflictingDomainExists**

The cause of this error depends on the operation that you're performing:

- **Create a public hosted zone:** Two hosted zones that have the same name or that have a parent/child relationship (example.com and test.example.com) can't have any common name servers. You tried to create a hosted zone that has the same name as an existing hosted zone or that's the parent or child of an existing hosted zone, and you specified a delegation set that shares one or more name servers with the existing hosted zone. For more information, see CreateReusableDelegationSet.
- **Create a private hosted zone:** A hosted zone with the specified name already exists and is already associated with the Amazon VPC that you specified.
- **Associate VPCs with a private hosted zone:** The VPC that you specified is already associated with another hosted zone that has the same name.

HTTP Status Code: 400

**DelegationSetNotAvailable**

You can create a hosted zone that has the same name as an existing hosted zone (example.com is common), but there is a limit to the number of hosted zones that have the same name. If you get this error, Amazon Route 53 has reached that limit. If you own the domain name and Route 53 generates this error, contact Customer Support.

**message**

HTTP Status Code: 400

**DelegationSetNotReusable**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

**HostedZoneAlreadyExists**

The hosted zone you're trying to create already exists. Amazon Route 53 returns this error when a hosted zone has already been created with the specified `CallerReference`.

**message**

HTTP Status Code: 409

**InvalidDomainName**

The specified domain name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidVPCId**

The VPC ID that you specified either isn't a valid ID or the current account is not authorized to access this VPC.

**message**

HTTP Status Code: 400

**NoSuchDelegationSet**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

**TooManyHostedZones**

This operation can't be completed either because the current account has reached the limit on the number of hosted zones or because you've reached the limit on the number of hosted zones that can be associated with a reusable delegation set.

For information about default limits, see Limits in the *Amazon Route 53 Developer Guide*.

To get the current limit on hosted zones that can be created by an account, see GetAccountLimit.

To get the current limit on hosted zones that can be associated with a reusable delegation set, see GetReusableDelegationSetLimit.

To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

## Examples

### Example Request (Public Hosted Zone)

This example illustrates one usage of CreateHostedZone.

```
POST /2013-04-01/hostedzone HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Name>example.com</Name>
   <CallerReference>myUniqueIdentifier</CallerReference>
   <HostedZoneConfig>
      <Comment>This is my first hosted zone.</Comment>
   </HostedZoneConfig>
   <DelegationSetId>NZ8X2CISAMPLE</DelegationSetId>
</CreateHostedZoneRequest>
```

### Example Response (Public Hosted Zone)

This example illustrates one usage of CreateHostedZone.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZone>
      <Id>/hostedzone/Z1PA6795UKMFR9</Id>
      <Name>example.com.</Name>
      <CallerReference>myUniqueIdentifier</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
         <PrivateZone>false</PrivateZone>
      </Config>
      <ResourceRecordSetCount>2</ResourceRecordSetCount>
```

```
   </HostedZone>
   <ChangeInfo>
      <Id>/change/C1PA6795UKMFR9</Id>
      <Status>PENDING</Status>
      <SubmittedAt>2017-03-15T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
   <DelegationSet>
      <Id>NZ8X2CISAMPLE</Id>
      <CallerReference>2017-03-01T11:44:14.448Z</Id>
      <NameServers>
         <NameServer>ns-2048.awsdns-64.com</NameServer>
         <NameServer>ns-2049.awsdns-65.net</NameServer>
         <NameServer>ns-2050.awsdns-66.org</NameServer>
         <NameServer>ns-2051.awsdns-67.co.uk</NameServer>
      </NameServers>
   </DelegationSet>
</CreateHostedZoneResponse>
```

### Example Request (Private Hosted Zone)

This example illustrates one usage of CreateHostedZone.

```
POST /2013-04-01/hostedzone HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Name>example.com</Name>
   <VPC>
      <VPCId>vpc-1a2b3c4d</VPCId>
      <VPCRegion>us-east-2</VPCRegion>
   </VPC>
   <CallerReference>myUniqueIdentifier</CallerReference>
   <HostedZoneConfig>
      <Comment>This is my first hosted zone.</Comment>
   </HostedZoneConfig>
</CreateHostedZoneRequest>
```

### Example Response (Private Hosted Zone)

This example illustrates one usage of CreateHostedZone.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
```

```
   <HostedZone>
      <Id>/hostedzone/Z1D633PJN98FT9</Id>
      <Name>example.com.</Name>
      <VPC>
         <VPCId>vpc-1a2b3c4d</VPCId>
         <VPCRegion>us-east-2</VPCRegion>
      </VPC>
      <CallerReference>myUniqueIdentifier</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
         <PrivateZone>true</PrivateZone>
      </Config>
      <ResourceRecordSetCount>2</ResourceRecordSetCount>
   </HostedZone>
   <ChangeInfo>
      <Id>/change/C1PA6795UKMFR9</Id>
      <Status>PENDING</Status>
      <SubmittedAt>2017-03-15T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</CreateHostedZoneResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateKeySigningKey

Service: Amazon Route 53

Creates a new key-signing key (KSK) associated with a hosted zone. You can only have two KSKs per hosted zone.

## Request Syntax

```
POST /2013-04-01/keysigningkey HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateKeySigningKeyRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CallerReference>string</CallerReference>
   <HostedZoneId>string</HostedZoneId>
   <KeyManagementServiceArn>string</KeyManagementServiceArn>
   <Name>string</Name>
   <Status>string</Status>
</CreateKeySigningKeyRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateKeySigningKeyRequest

Root level tag for the CreateKeySigningKeyRequest parameters.

Required: Yes

### CallerReference

A unique string that identifies the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

### HostedZoneId

The unique string (ID) used to identify a hosted zone.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

### KeyManagementServiceArn

The Amazon resource name (ARN) for a customer managed key in AWS Key Management Service (AWS KMS). The `KeyManagementServiceArn` must be unique for each key-signing key (KSK) in a single hosted zone. To see an example of `KeyManagementServiceArn` that grants the correct permissions for DNSSEC, scroll down to **Example**.

You must configure the customer managed customer managed key as follows:

Status

Enabled

Key spec

ECC_NIST_P256

Key usage

Sign and verify

Key policy

The key policy must give permission for the following actions:

- DescribeKey
- GetPublicKey
- Sign

The key policy must also include the Amazon Route 53 service in the principal for your account. Specify the following:

- `"Service": "dnssec-route53.amazonaws.com"`

For more information about working with a customer managed key in AWS KMS, see AWS Key Management Service concepts.

Type: String

Required: Yes

**Name**

A string used to identify a key-signing key (KSK). Name can include numbers, letters, and underscores (_). Name must be unique for each key-signing key in the same hosted zone.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 128.

Required: Yes

**Status**

A string specifying the initial status of the key-signing key (KSK). You can set the value to ACTIVE or INACTIVE.

Type: String

Length Constraints: Minimum length of 5. Maximum length of 150.

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateKeySigningKeyResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
   <KeySigningKey>
      <CreatedDate>timestamp</CreatedDate>
      <DigestAlgorithmMnemonic>string</DigestAlgorithmMnemonic>
      <DigestAlgorithmType>integer</DigestAlgorithmType>
      <DigestValue>string</DigestValue>
```

```
      <DNSKEYRecord>string</DNSKEYRecord>
      <DSRecord>string</DSRecord>
      <Flag>integer</Flag>
      <KeyTag>integer</KeyTag>
      <KmsArn>string</KmsArn>
      <LastModifiedDate>timestamp</LastModifiedDate>
      <Name>string</Name>
      <PublicKey>string</PublicKey>
      <SigningAlgorithmMnemonic>string</SigningAlgorithmMnemonic>
      <SigningAlgorithmType>integer</SigningAlgorithmType>
      <Status>string</Status>
      <StatusMessage>string</StatusMessage>
   </KeySigningKey>
</CreateKeySigningKeyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

### Location

The unique URL representing the new key-signing key (KSK).

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

### CreateKeySigningKeyResponse

Root level tag for the CreateKeySigningKeyResponse parameters.

Required: Yes

### ChangeInfo

A complex type that describes change information about changes made to your hosted zone.

Type: ChangeInfo object

### KeySigningKey

The key-signing key (KSK) that the request creates.

Type: KeySigningKey object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidArgument**

Parameter name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidKeySigningKeyName**

The key-signing key (KSK) name that you specified isn't a valid name.

HTTP Status Code: 400

**InvalidKeySigningKeyStatus**

The key-signing key (KSK) status isn't valid or another KSK has the status `INTERNAL_FAILURE`.

HTTP Status Code: 400

**InvalidKMSArn**

The KeyManagementServiceArn that you specified isn't valid to use with DNSSEC signing.

HTTP Status Code: 400

**InvalidSigningStatus**

Your hosted zone status isn't valid for this operation. In the hosted zone, change the status to enable DNSSEC or disable DNSSEC.

HTTP Status Code: 400

**KeySigningKeyAlreadyExists**

You've already created a key-signing key (KSK) with this name or with the same customer managed key ARN.

HTTP Status Code: 409

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**TooManyKeySigningKeys**

You've reached the limit for the number of key-signing keys (KSKs). Remove at least one KSK, and then try again.

HTTP Status Code: 400

## Examples

### KMSArn key policy example

The following is an example of a `KeyManagementServiceArn` key policy that grants the correct permissions for DNSSEC.

```
{
    "Version": "2012-10-17",
    "Id": "key-consolepolicy-3",
    "Statement": [
        {
            "Sid": "Allow use of the customer managed key for DNSSEC",
```

```
            "Effect": "Allow",
            "Principal": {
                "Service": "dnssec-route53.amazonaws.com"
            },
            "Action": [
                "kms:DescribeKey",
                "kms:GetPublicKey",
                "kms:Sign",
                "kms:Verify"
            ],
            "Resource": "*"
        },
        {
            "Sid": "Allow full access for Key Administrators",
            "Effect": "Allow",
            "Principal": {
                "AWS": "arn:aws:iam::123456789012:role/admin"
            },
            "Action": "*",
            "Resource": "*"
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateQueryLoggingConfig

Service: Amazon Route 53

Creates a configuration for DNS query logging. After you create a query logging configuration, Amazon Route 53 begins to publish log data to an Amazon CloudWatch Logs log group.

DNS query logs contain information about the queries that Route 53 receives for a specified public hosted zone, such as the following:

- Route 53 edge location that responded to the DNS query
- Domain or subdomain that was requested
- DNS record type, such as A or AAAA
- DNS response code, such as `NoError` or `ServFail`

Log Group and Resource Policy

Before you create a query logging configuration, perform the following operations.

> **Note**
>
> If you create a query logging configuration using the Route 53 console, Route 53 performs these operations automatically.

1. Create a CloudWatch Logs log group, and make note of the ARN, which you specify when you create a query logging configuration. Note the following:
   - You must create the log group in the us-east-1 region.
   - You must use the same AWS account to create the log group and the hosted zone that you want to configure query logging for.
   - When you create log groups for query logging, we recommend that you use a consistent prefix, for example:

     `/aws/route53/`*`hosted zone name`*

     In the next step, you'll create a resource policy, which controls access to one or more log groups and the associated AWS resources, such as Route 53 hosted zones. There's a limit on the number of resource policies that you can create, so we recommend that you use a

consistent prefix so you can use the same resource policy for all the log groups that you create for query logging.

2. Create a CloudWatch Logs resource policy, and give it the permissions that Route 53 needs to create log streams and to send query logs to log streams. You must create the CloudWatch Logs resource policy in the us-east-1 region. For the value of `Resource`, specify the ARN for the log group that you created in the previous step. To use the same resource policy for all the CloudWatch Logs log groups that you created for query logging configurations, replace the hosted zone name with *, for example:

   ```
   arn:aws:logs:us-east-1:123412341234:log-group:/aws/route53/*
   ```

   To avoid the confused deputy problem, a security issue where an entity without a permission for an action can coerce a more-privileged entity to perform it, you can optionally limit the permissions that a service has to a resource in a resource-based policy by supplying the following values:

   - For `aws:SourceArn`, supply the hosted zone ARN used in creating the query logging configuration. For example, `aws:SourceArn: arn:aws:route53:::hostedzone/hosted zone ID`.
   - For `aws:SourceAccount`, supply the account ID for the account that creates the query logging configuration. For example, `aws:SourceAccount:111111111111`.

   For more information, see The confused deputy problem in the *AWS IAM User Guide*.

   > **Note**
   >
   > You can't use the CloudWatch console to create or edit a resource policy. You must use the CloudWatch API, one of the AWS SDKs, or the AWS CLI.

Log Streams and Edge Locations

When Route 53 finishes creating the configuration for DNS query logging, it does the following:

- Creates a log stream for an edge location the first time that the edge location responds to DNS queries for the specified hosted zone. That log stream is used to log all queries that Route 53 responds to for that edge location.
- Begins to send query logs to the applicable log stream.

The name of each log stream is in the following format:

*hosted zone ID/edge location code*

The edge location code is a three-letter code and an arbitrarily assigned number, for example, DFW3. The three-letter code typically corresponds with the International Air Transport Association airport code for an airport near the edge location. (These abbreviations might change in the future.) For a list of edge locations, see "The Route 53 Global Network" on the Route 53 Product Details page.

Queries That Are Logged

Query logs contain only the queries that DNS resolvers forward to Route 53. If a DNS resolver has already cached the response to a query (such as the IP address for a load balancer for example.com), the resolver will continue to return the cached response. It doesn't forward another query to Route 53 until the TTL for the corresponding resource record set expires. Depending on how many DNS queries are submitted for a resource record set, and depending on the TTL for that resource record set, query logs might contain information about only one query out of every several thousand queries that are submitted to DNS. For more information about how DNS works, see Routing Internet Traffic to Your Website or Web Application in the *Amazon Route 53 Developer Guide*.

Log File Format

For a list of the values in each query log and the format of each value, see Logging DNS Queries in the *Amazon Route 53 Developer Guide*.

Pricing

For information about charges for query logs, see Amazon CloudWatch Pricing.

How to Stop Logging

If you want Route 53 to stop sending query logs to CloudWatch Logs, delete the query logging configuration. For more information, see DeleteQueryLoggingConfig.

## Request Syntax

```
POST /2013-04-01/queryloggingconfig HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateQueryLoggingConfigRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CloudWatchLogsLogGroupArn>string</CloudWatchLogsLogGroupArn>
   <HostedZoneId>string</HostedZoneId>
</CreateQueryLoggingConfigRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

**CreateQueryLoggingConfigRequest**

Root level tag for the CreateQueryLoggingConfigRequest parameters.

Required: Yes

**CloudWatchLogsLogGroupArn**

The Amazon Resource Name (ARN) for the log group that you want to Amazon Route 53 to send query logs to. This is the format of the ARN:

arn:aws:logs:*region*:*account-id*:log-group:*log_group_name*

To get the ARN for a log group, you can use the CloudWatch console, the DescribeLogGroups API action, the describe-log-groups command, or the applicable command in one of the AWS SDKs.

Type: String

Required: Yes

**HostedZoneId**

The ID of the hosted zone that you want to log queries for. You can log queries only for public hosted zones.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

## Response Syntax

```
HTTP/1.1 201
```

```
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateQueryLoggingConfigResponse>
   <QueryLoggingConfig>
      <CloudWatchLogsLogGroupArn>string</CloudWatchLogsLogGroupArn>
      <HostedZoneId>string</HostedZoneId>
      <Id>string</Id>
   </QueryLoggingConfig>
</CreateQueryLoggingConfigResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

### Location

The unique URL representing the new query logging configuration.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

### CreateQueryLoggingConfigResponse

Root level tag for the CreateQueryLoggingConfigResponse parameters.

Required: Yes

### QueryLoggingConfig

A complex type that contains the ID for a query logging configuration, the ID of the hosted zone that you want to log queries for, and the ARN for the log group that you want Amazon Route 53 to send query logs to.

Type: QueryLoggingConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InsufficientCloudWatchLogsResourcePolicy**

Amazon Route 53 doesn't have the permissions required to create log streams and send query logs to log streams. Possible causes include the following:

- There is no resource policy that specifies the log group ARN in the value for `Resource`.
- The resource policy that includes the log group ARN in the value for `Resource` doesn't have the necessary permissions.
- The resource policy hasn't finished propagating yet.
- The Key management service (KMS) key you specified doesn’t exist or it can’t be used with the log group associated with query log. Update or provide a resource policy to grant permissions for the KMS key.
- The Key management service (KMS) key you specified is marked as disabled for the log group associated with query log. Update or provide a resource policy to grant permissions for the KMS key.

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchCloudWatchLogsLogGroup**

There is no CloudWatch Logs log group with the specified ARN.

HTTP Status Code: 404

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**QueryLoggingConfigAlreadyExists**

You can create only one query logging configuration for a hosted zone, and a query logging configuration already exists for this hosted zone.

HTTP Status Code: 409

## Examples

### Example Request

The following request creates a configuration for the hosted zone `Z1D633PJN98FT9`. DNS query logs are sent to the log group with the ARN `arn:aws:logs:us-east-1:111111111111:log-group:/aws/route53/example.com`.

```
POST /2013-04-01/queryloggingconfig HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateQueryLoggingConfigRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <CloudWatchLogsLogGroupArn>arn:aws:logs:us-east-1:111111111111:log-group:/aws/
route53/example.com</CloudWatchLogsLogGroupArn>
   <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
</CreateQueryLoggingConfigRequest>
```

### Example Response

This example illustrates one usage of CreateQueryLoggingConfig.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<CreateQueryLoggingConfigResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <QueryLoggingConfig>
      <CloudWatchLogsLogGroupArn>arn:aws:logs:us-east-1:111111111111:log-group:/aws/
route53/example.com</CloudWatchLogsLogGroupArn>
      <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
      <Id>87654321-dcba-1234-abcd-1a2b3c4d5e6f</Id>
   </QueryLoggingConfig>
```

```
</CreateQueryLoggingConfigResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateResourceRecordSetProtections

Service: Amazon Route 53

Creates one or more resource record set protections in a hosted zone. A protection applies to every resource record set in the hosted zone that has the specified name and type. While a protection exists, Route 53 rejects any `ChangeResourceRecordSets` request that creates, updates, or deletes a resource record set with that name and type, and returns an `InvalidChangeBatch` error. To change a protected resource record set, first delete its protection by using `DeleteResourceRecordSetProtections`.

You can create a protection for a name and type that doesn't have a resource record set yet. In that case, Route 53 also rejects requests to create that resource record set.

You can't delete a hosted zone that has protections. To delete the hosted zone, first delete all of its protections by using `DeleteResourceRecordSetProtections`.

The request is atomic. Route 53 either creates all of the protections in the request or none of them. If one or more entries fail, the response is an error that lists the failing entries and the reason that each one failed. Route 53 checks for invalid entries before it checks for existing protections, so if any entry is invalid, the error lists only the invalid entries.

The error that Route 53 returns depends on the failures:

- If every entry already has a protection, Route 53 returns a `ProtectionAlreadyExists` error.
- For any other combination of failures, Route 53 returns an `InvalidResourceRecordSetProtectionBatch` error.

You can specify up to 100 protections in one request. The number of protections that you can have in a hosted zone is limited by a quota. If the request would exceed that quota, Route 53 returns a `LimitsExceeded` error.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/rrsetprotection HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateResourceRecordSetProtectionsRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Protections>
      <ResourceRecordSetProtectionConfig>
         <Comment>string</Comment>
```

```
            <RecordName>string</RecordName>
            <RecordType>string</RecordType>
         </ResourceRecordSetProtectionConfig>
      </Protections>
</CreateResourceRecordSetProtectionsRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone that contains the resource record sets that you want to protect.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### CreateResourceRecordSetProtectionsRequest

Root level tag for the CreateResourceRecordSetProtectionsRequest parameters.

Required: Yes

### Protections

The protections to create. Each entry specifies a resource record set name and type, and an optional comment. The list must contain at least one entry and can contain up to 100 entries. Each name and type can appear only once in the list.

Type: Array of ResourceRecordSetProtectionConfig objects

Array Members: Minimum number of 1 item.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidResourceRecordSetProtectionBatch**

One or more entries in the request couldn't be processed, so Route 53 didn't create or delete any of the protections in the request. The `Errors` element lists the failing entries and the reason that each one failed.

**Errors**

The entries that failed, with the reason that each one failed.

**Message**

A message that explains why Route 53 couldn't process the `CreateResourceRecordSetProtections` or `DeleteResourceRecordSetProtections` request.

HTTP Status Code: 400

**LimitsExceeded**

This operation can't be completed because the current account has reached the limit on the resource you are trying to create. To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

**ProtectionAlreadyExists**

A protection already exists for every name and type in the request, so Route 53 didn't create any protections. The `Errors` element lists each entry.

**Errors**

The entries that already have a protection.

**Message**

A message that explains that a protection already exists for every name and type in the `CreateResourceRecordSetProtections` request.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateReusableDelegationSet

Service: Amazon Route 53

Creates a delegation set (a group of four name servers) that can be reused by multiple hosted zones that were created by the same AWS account.

You can also create a reusable delegation set that uses the four name servers that are associated with an existing hosted zone. Specify the hosted zone ID in the `CreateReusableDelegationSet` request.

> **Note**
>
> You can't associate a reusable delegation set with a private hosted zone.

For information about using a reusable delegation set to configure white label name servers, see Configuring White Label Name Servers.

The process for migrating existing hosted zones to use a reusable delegation set is comparable to the process for configuring white label name servers. You need to perform the following steps:

1. Create a reusable delegation set.
2. Recreate hosted zones, and reduce the TTL to 60 seconds or less.
3. Recreate resource record sets in the new hosted zones.
4. Change the registrar's name servers to use the name servers for the new hosted zones.
5. Monitor traffic for the website or application.
6. Change TTLs back to their original values.

If you want to migrate existing hosted zones to use a reusable delegation set, the existing hosted zones can't use any of the name servers that are assigned to the reusable delegation set. If one or more hosted zones do use one or more name servers that are assigned to the reusable delegation set, you can do one of the following:

- For small numbers of hosted zones—up to a few hundred—it's relatively easy to create reusable delegation sets until you get one that has four name servers that don't overlap with any of the name servers in your hosted zones.

- For larger numbers of hosted zones, the easiest solution is to use more than one reusable delegation set.
- For larger numbers of hosted zones, you can also migrate hosted zones that have overlapping name servers to hosted zones that don't have overlapping name servers, then migrate the hosted zones again to use the reusable delegation set.

## Request Syntax

```
POST /2013-04-01/delegationset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateReusableDelegationSetRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <CallerReference>string</CallerReference>
   <HostedZoneId>string</HostedZoneId>
</CreateReusableDelegationSetRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateReusableDelegationSetRequest

Root level tag for the CreateReusableDelegationSetRequest parameters.

Required: Yes

### CallerReference

A unique string that identifies the request, and that allows you to retry failed `CreateReusableDelegationSet` requests without the risk of executing the operation twice. You must use a unique `CallerReference` string every time you submit a `CreateReusableDelegationSet` request. `CallerReference` can be any unique string, for example a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

### HostedZoneId

If you want to mark the delegation set for an existing hosted zone as reusable, the ID for that hosted zone.

Type: String

Length Constraints: Maximum length of 32.

Required: No

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateReusableDelegationSetResponse>
   <DelegationSet>
      <CallerReference>string</CallerReference>
      <Id>string</Id>
      <NameServers>
         <NameServer>string</NameServer>
      </NameServers>
   </DelegationSet>
</CreateReusableDelegationSetResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

### Location

The unique URL representing the new reusable delegation set.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

**CreateReusableDelegationSetResponse**

Root level tag for the CreateReusableDelegationSetResponse parameters.

Required: Yes

**DelegationSet**

A complex type that contains name server information.

Type: DelegationSet object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DelegationSetAlreadyCreated**

A delegation set with the same owner and caller reference combination has already been created.

**message**

HTTP Status Code: 400

**DelegationSetAlreadyReusable**

The specified delegation set has already been marked as reusable.

**message**

HTTP Status Code: 400

**DelegationSetNotAvailable**

You can create a hosted zone that has the same name as an existing hosted zone (example.com is common), but there is a limit to the number of hosted zones that have the same name. If you get this error, Amazon Route 53 has reached that limit. If you own the domain name and Route 53 generates this error, contact Customer Support.

**message**

HTTP Status Code: 400

**HostedZoneNotFound**

The specified HostedZone can't be found.

**message**

HTTP Status Code: 400

**InvalidArgument**

Parameter name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**LimitsExceeded**

This operation can't be completed because the current account has reached the limit on the resource you are trying to create. To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of CreateReusableDelegationSet.

```
POST /2013-04-01/delegationset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
```

```
<CreateReusableDelegationSetRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <CallerReference>2017-03-15T01:36:41.958Z</CallerReference>
   <HostedZoneId>Z1D633PEXAMPLE</HostedZoneId>
</CreateReusableDelegationSetRequest>
```

### Example Response

This example illustrates one usage of CreateReusableDelegationSet.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<CreateReusableDelegationSetResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <DelegationSet>
      <Id>/delegationset/N1PA6795SAMPLE</Id>
      <CallerReference>2017-03-15T01:36:41.958Z</CallerReference>
      <NameServers>
         <NameServer>ns-2048.awsdns-64.com</NameServer>
         <NameServer>ns-2049.awsdns-65.net</NameServer>
         <NameServer>ns-2050.awsdns-66.org</NameServer>
         <NameServer>ns-2051.awsdns-67.co.uk</NameServer>
      </NameServers>
   </DelegationSet>
</CreateReusableDelegationSetResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateTrafficPolicy

Service: Amazon Route 53

Creates a traffic policy, which you use to create multiple DNS resource record sets for one domain name (such as example.com) or one subdomain name (such as www.example.com).

## Request Syntax

```
POST /2013-04-01/trafficpolicy HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Comment>string</Comment>
   <Document>string</Document>
   <Name>string</Name>
</CreateTrafficPolicyRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateTrafficPolicyRequest

Root level tag for the CreateTrafficPolicyRequest parameters.

Required: Yes

### Comment

(Optional) Any comments that you want to include about the traffic policy.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

### Document

The definition of this traffic policy in JSON format. For more information, see Traffic Policy Document Format.

Type: String

Length Constraints: Maximum length of 102400.

Required: Yes

### Name

The name of the traffic policy.

Type: String

Length Constraints: Maximum length of 512.

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyResponse>
   <TrafficPolicy>
      <Comment>string</Comment>
      <Document>string</Document>
      <Id>string</Id>
      <Name>string</Name>
      <Type>string</Type>
      <Version>integer</Version>
   </TrafficPolicy>
</CreateTrafficPolicyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

### Location

A unique URL that represents a new traffic policy.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

**CreateTrafficPolicyResponse**

Root level tag for the CreateTrafficPolicyResponse parameters.

Required: Yes

**TrafficPolicy**

A complex type that contains settings for the new traffic policy.

Type: TrafficPolicy object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidTrafficPolicyDocument**

The format of the traffic policy document that you specified in the `Document` element is not valid.

**message**

HTTP Status Code: 400

**TooManyTrafficPolicies**

This traffic policy can't be created because the current account has reached the limit on the number of traffic policies.

For information about default limits, see Limits in the *Amazon Route 53 Developer Guide*.

To get the current limit for an account, see GetAccountLimit.

To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

**TrafficPolicyAlreadyExists**

A traffic policy that has the same value for Name already exists.

**message**

HTTP Status Code: 409

## Examples

### Example Request

This example illustrates one usage of CreateTrafficPolicy.

```
POST /2013-04-01/trafficpolicy HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Name>MyTrafficPolicy</Name>
   <Document>traffic policy definition in JSON format</Document>
   <Comment>First traffic policy</Comment>
</CreateTrafficPolicyRequest>
```

### Example Response

This example illustrates one usage of CreateTrafficPolicy.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <TrafficPolicy>
      <Id>12345</Id>
      <Version>1</Version>
      <Name>MyTrafficPolicy</Name>
      <Type>A</Type>
      <Document>traffic policy definition in JSON format</Document>
      <Comment>First traffic policy</Comment>
```

```
   </TrafficPolicy>
</CreateTrafficPolicyResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateTrafficPolicyInstance

Service: Amazon Route 53

Creates resource record sets in a specified hosted zone based on the settings in a specified traffic policy version. In addition, `CreateTrafficPolicyInstance` associates the resource record sets with a specified domain name (such as example.com) or subdomain name (such as www.example.com). Amazon Route 53 responds to DNS queries for the domain or subdomain name by using the resource record sets that `CreateTrafficPolicyInstance` created.

> **Note**
>
> After you submit an `CreateTrafficPolicyInstance` request, there's a brief delay while Amazon Route 53 creates the resource record sets that are specified in the traffic policy definition. Use `GetTrafficPolicyInstance` with the `id` of new traffic policy instance to confirm that the `CreateTrafficPolicyInstance` request completed successfully. For more information, see the `State` response element.

## Request Syntax

```
POST /2013-04-01/trafficpolicyinstance HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyInstanceRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <HostedZoneId>string</HostedZoneId>
   <Name>string</Name>
   <TrafficPolicyId>string</TrafficPolicyId>
   <TrafficPolicyVersion>integer</TrafficPolicyVersion>
   <TTL>long</TTL>
</CreateTrafficPolicyInstanceRequest>
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in XML format.

### CreateTrafficPolicyInstanceRequest

Root level tag for the CreateTrafficPolicyInstanceRequest parameters.

Required: Yes

### HostedZoneId

The ID of the hosted zone that you want Amazon Route 53 to create resource record sets in by using the configuration in a traffic policy.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

### Name

The domain name (such as example.com) or subdomain name (such as www.example.com) for which Amazon Route 53 responds to DNS queries by using the resource record sets that Route 53 creates for this traffic policy instance.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

### TrafficPolicyId

The ID of the traffic policy that you want to use to create resource record sets in the specified hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

### TrafficPolicyVersion

The version of the traffic policy that you want to use to create resource record sets in the specified hosted zone.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**TTL**

(Optional) The TTL that you want Amazon Route 53 to assign to all of the resource record sets that it creates in the specified hosted zone.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 2147483647.

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyInstanceResponse>
   <TrafficPolicyInstance>
      <HostedZoneId>string</HostedZoneId>
      <Id>string</Id>
      <Message>string</Message>
      <Name>string</Name>
      <State>string</State>
      <TrafficPolicyId>string</TrafficPolicyId>
      <TrafficPolicyType>string</TrafficPolicyType>
      <TrafficPolicyVersion>integer</TrafficPolicyVersion>
      <TTL>long</TTL>
   </TrafficPolicyInstance>
</CreateTrafficPolicyInstanceResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

**Location**

A unique URL that represents a new traffic policy instance.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

**CreateTrafficPolicyInstanceResponse**

Root level tag for the CreateTrafficPolicyInstanceResponse parameters.

Required: Yes

**TrafficPolicyInstance**

A complex type that contains settings for the new traffic policy instance.

Type: TrafficPolicyInstance object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

**TooManyTrafficPolicyInstances**

This traffic policy instance can't be created because the current account has reached the limit on the number of traffic policy instances.

For information about default limits, see Limits in the *Amazon Route 53 Developer Guide*.

For information about how to get the current limit for an account, see GetAccountLimit.

To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

**TrafficPolicyInstanceAlreadyExists**

There is already a traffic policy instance with the specified ID.

**message**

HTTP Status Code: 409

## Examples

### Example Request

This example illustrates one usage of CreateTrafficPolicyInstance.

```
POST /2013-04-01/trafficpolicyinstance HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyInstanceRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
   <Name>www.example.com</Name>
   <TTL>300</TTL>
   <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
   <TrafficPolicyVersion>3</TrafficPolicyVersion>
</CreateTrafficPolicyInstanceRequest>
```

### Example Response

This example illustrates one usage of CreateTrafficPolicyInstance.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyInstanceResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstance>
      <Id>12131415-abac-5432-caba-6f5e4d3c2b1a</Id>
      <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
      <Name>www.example.com</Name>
      <TTL>300</TTL>
      <State>Applied</State>
      <Message/>
      <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
      <TrafficPolicyVersion>3</TrafficPolicyVersion>
      <TrafficPolicyType>A</TrafficPolicyType>
   </TrafficPolicyInstance>
</CreateTrafficPolicyInstanceResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateTrafficPolicyVersion

Service: Amazon Route 53

Creates a new version of an existing traffic policy. When you create a new version of a traffic policy, you specify the ID of the traffic policy that you want to update and a JSON-formatted document that describes the new version. You use traffic policies to create multiple DNS resource record sets for one domain name (such as example.com) or one subdomain name (such as www.example.com). You can create a maximum of 1000 versions of a traffic policy. If you reach the limit and need to create another version, you'll need to start a new traffic policy.

## Request Syntax

```
POST /2013-04-01/trafficpolicy/Id HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyVersionRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Comment>string</Comment>
   <Document>string</Document>
</CreateTrafficPolicyVersionRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the traffic policy for which you want to create a new version.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### CreateTrafficPolicyVersionRequest

Root level tag for the CreateTrafficPolicyVersionRequest parameters.

Required: Yes

### Comment

The comment that you specified in the `CreateTrafficPolicyVersion` request, if any.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

### Document

The definition of this version of the traffic policy, in JSON format. You specified the JSON in the `CreateTrafficPolicyVersion` request. For more information about the JSON format, see CreateTrafficPolicy.

Type: String

Length Constraints: Maximum length of 102400.

Required: Yes

## Response Syntax

```
HTTP/1.1 201
Location: Location
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyVersionResponse>
   <TrafficPolicy>
      <Comment>string</Comment>
      <Document>string</Document>
      <Id>string</Id>
      <Name>string</Name>
      <Type>string</Type>
      <Version>integer</Version>
   </TrafficPolicy>
</CreateTrafficPolicyVersionResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The response returns the following HTTP headers.

**Location**

A unique URL that represents a new traffic policy version.

Length Constraints: Maximum length of 1024.

The following data is returned in XML format by the service.

**CreateTrafficPolicyVersionResponse**

Root level tag for the CreateTrafficPolicyVersionResponse parameters.

Required: Yes

**TrafficPolicy**

A complex type that contains settings for the new version of the traffic policy.

Type: TrafficPolicy object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidTrafficPolicyDocument**

The format of the traffic policy document that you specified in the `Document` element is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

**TooManyTrafficPolicyVersionsForCurrentPolicy**

This traffic policy version can't be created because you've reached the limit of 1000 on the number of versions that you can create for the current traffic policy.

To create more traffic policy versions, you can use GetTrafficPolicy to get the traffic policy document for a specified traffic policy version, and then use CreateTrafficPolicy to create a new traffic policy using the traffic policy document.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of CreateTrafficPolicyVersion.

```
POST /2013-04-01/trafficpolicy/traffic policy ID HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyVersionRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Document>updated traffic policy definition in JSON format</Document>
   <Comment>Added us-east-2 region to traffic policy</Comment>
```

```
</CreateTrafficPolicyVersionRequest>
```

### Example Response

This example illustrates one usage of CreateTrafficPolicyVersion.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<CreateTrafficPolicyVersionResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicy>
      <Id>12345678-abcd-9876-fedc-1a2b3c4de5f6</Id>
      <Version>2</Version>
      <Name>MyTrafficPolicy</Name>
      <Type>A</Type>
      <Document>updated traffic policy definition in JSON format</Document>
      <Comment>Added us-east-2 region to traffic policy</Comment>
   </TrafficPolicy>
</CreateTrafficPolicyVersionResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateVPCAssociationAuthorization

Service: Amazon Route 53

Authorizes the AWS account that created a specified VPC to submit an `AssociateVPCWithHostedZone` request to associate the VPC with a specified hosted zone that was created by a different account. To submit a `CreateVPCAssociationAuthorization` request, you must use the account that created the hosted zone. After you authorize the association, use the account that created the VPC to submit an `AssociateVPCWithHostedZone` request.

> **Note**
>
> If you want to associate multiple VPCs that you created by using one account with a hosted zone that you created by using a different account, you must submit one authorization request for each VPC.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/authorizevpcassociation HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateVPCAssociationAuthorizationRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</CreateVPCAssociationAuthorizationRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the private hosted zone that you want to authorize associating a VPC with.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

**CreateVPCAssociationAuthorizationRequest**

Root level tag for the CreateVPCAssociationAuthorizationRequest parameters.

Required: Yes

**VPC**

A complex type that contains the VPC ID and region for the VPC that you want to authorize associating with your hosted zone.

Type: VPC object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<CreateVPCAssociationAuthorizationResponse>
   <HostedZoneId>string</HostedZoneId>
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</CreateVPCAssociationAuthorizationResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**CreateVPCAssociationAuthorizationResponse**

Root level tag for the CreateVPCAssociationAuthorizationResponse parameters.

Required: Yes

**HostedZoneId**

The ID of the hosted zone that you authorized associating a VPC with.

Type: String

Length Constraints: Maximum length of 32.

**VPC**

The VPC that you authorized associating with a hosted zone.

Type: VPC object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidVPCId**

The VPC ID that you specified either isn't a valid ID or the current account is not authorized to access this VPC.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**TooManyVPCAssociationAuthorizations**

You've created the maximum number of authorizations that can be created for the specified hosted zone. To authorize another VPC to be associated with the hosted zone, submit a `DeleteVPCAssociationAuthorization` request to remove an existing authorization. To get a list of existing authorizations, submit a `ListVPCAssociationAuthorizations` request.

**message**

HTTP Status Code: 400

## Examples

### Example request

This example illustrates one usage of CreateVPCAssociationAuthorization.

```
POST /2013-04-01/hostedzone/Z1PA6795UKMFR9/authorizevpcassociation HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateVPCAssociationAuthorizationRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <VPC>
      <VPCId>vpc-a1b2c3d4e5</VPCId>
      <VPCRegion>us-east-2</VPCRegion>
   </VPC>
</CreateVPCAssociationAuthorizationRequest>
```

### Example Response

This example illustrates one usage of CreateVPCAssociationAuthorization.

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<CreateVPCAssociationAuthorizationResponse>
```

```
   <HostedZoneId>Z1PA6795UKMFR9</HostedZoneId>
   <VPC>
      <VPCId>vpc-a1b2c3d4e5</VPCId>
      <VPCRegion>us-east-2</VPCRegion>
   </VPC>
</CreateVPCAssociationAuthorizationResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeactivateKeySigningKey

Service: Amazon Route 53

Deactivates a key-signing key (KSK) so that it will not be used for signing by DNSSEC. This operation changes the KSK status to `INACTIVE`.

## Request Syntax

```
POST /2013-04-01/keysigningkey/HostedZoneId/Name/deactivate HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### HostedZoneId

A unique string used to identify a hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

### Name

A string used to identify a key-signing key (KSK).

Length Constraints: Minimum length of 3. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DeactivateKeySigningKeyResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
```

```
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</DeactivateKeySigningKeyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### DeactivateKeySigningKeyResponse

Root level tag for the DeactivateKeySigningKeyResponse parameters.

Required: Yes

### ChangeInfo

A complex type that describes change information about changes made to your hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidKeySigningKeyStatus**

The key-signing key (KSK) status isn't valid or another KSK has the status `INTERNAL_FAILURE`.

HTTP Status Code: 400

**InvalidSigningStatus**

Your hosted zone status isn't valid for this operation. In the hosted zone, change the status to enable `DNSSEC` or disable `DNSSEC`.

HTTP Status Code: 400

**KeySigningKeyInParentDSRecord**

The key-signing key (KSK) is specified in a parent DS record.

HTTP Status Code: 400

**KeySigningKeyInUse**

The key-signing key (KSK) that you specified can't be deactivated because it's the only KSK for a currently-enabled DNSSEC. Disable DNSSEC signing, or add or enable another KSK.

HTTP Status Code: 400

**NoSuchKeySigningKey**

The specified key-signing key (KSK) doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteCidrCollection

Service: Amazon Route 53

Deletes a CIDR collection in the current AWS account. The collection must be empty before it can be deleted.

## Request Syntax

```
DELETE /2013-04-01/cidrcollection/CidrCollectionId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### CidrCollectionId

The UUID of the collection to delete.

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### CidrCollectionInUseException

This CIDR collection is in use, and isn't empty.

HTTP Status Code: 400

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchCidrCollectionException**

The CIDR collection you specified, doesn't exist.

HTTP Status Code: 404

## Examples

### Example request

This example illustrates one usage of DeleteCidrCollection.

```
DELETE /2013-04-01/cidrcollection/c8c02a84-aaaa-bbbb-e0d2-d833a2f80106
```

### Example response

This example illustrates one usage of DeleteCidrCollection.

```
HTTP/1.1 200 OK
<?xml version="1.0"?>
<DeleteCidrCollectionResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/"/>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteHealthCheck

Service: Amazon Route 53

Deletes a health check.

> **Important**
>
> Amazon Route 53 does not prevent you from deleting a health check even if the health check is associated with one or more resource record sets. If you delete a health check and you don't update the associated resource record sets, the future status of the health check can't be predicted and may change. This will affect the routing of DNS queries for your DNS failover configuration. For more information, see Replacing and Deleting Health Checks in the *Amazon Route 53 Developer Guide*.

If you're using AWS Cloud Map and you configured Cloud Map to create a Route 53 health check when you register an instance, you can't use the Route 53 `DeleteHealthCheck` command to delete the health check. The health check is deleted automatically when you deregister the instance; there can be a delay of several hours before the health check is deleted from Route 53.

## Request Syntax

```
DELETE /2013-04-01/healthcheck/HealthCheckId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**HealthCheckId**

The ID of the health check that you want to delete.

Length Constraints: Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**HealthCheckInUse**

*This error has been deprecated.*

This error code is not in use.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of DeleteHealthCheck.

```
DELETE /2013-04-01/healthcheck/abcdef11-2222-3333-4444-555555fedcba
```

### Example Response

This example illustrates one usage of DeleteHealthCheck.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DeleteHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
</DeleteHealthCheckResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteHostedZone

Service: Amazon Route 53

Deletes a hosted zone.

If the hosted zone was created by another service, such as AWS Cloud Map, see Deleting Public Hosted Zones That Were Created by Another Service in the *Amazon Route 53 Developer Guide* for information about how to delete it. (The process is the same for public and private hosted zones that were created by another service.)

If you want to keep your domain registration but you want to stop routing internet traffic to your website or web application, we recommend that you delete resource record sets in the hosted zone instead of deleting the hosted zone.

> **Important**
>
> If you delete a hosted zone, you can't undelete it. You must create a new hosted zone and update the name servers for your domain registration, which can require up to 48 hours to take effect. (If you delegated responsibility for a subdomain to a hosted zone and you delete the child hosted zone, you must update the name servers in the parent hosted zone.) In addition, if you delete a hosted zone, someone could hijack the domain and route traffic to their own resources using your domain name.

If you want to avoid the monthly charge for the hosted zone, you can transfer DNS service for the domain to a free DNS service. When you transfer DNS service, you have to update the name servers for the domain registration. If the domain is registered with Route 53, see UpdateDomainNameservers for information about how to replace Route 53 name servers with name servers for the new DNS service. If the domain is registered with another registrar, use the method provided by the registrar to update name servers for the domain registration. For more information, perform an internet search on "free DNS service."

You can delete a hosted zone only if it contains only the default SOA and NS records and has DNSSEC signing disabled. If the hosted zone contains other records or has DNSSEC enabled, you must delete the records and disable DNSSEC before deletion. Attempting to delete a hosted zone with additional records or DNSSEC enabled returns a `HostedZoneNotEmpty` error. For information about deleting records, see ChangeResourceRecordSets.

You also can't delete a hosted zone that has resource record set protections. To see the protections in a hosted zone, use `ListResourceRecordSetProtections`. To delete them, use `DeleteResourceRecordSetProtections`.

To verify that the hosted zone has been deleted, do one of the following:

- Use the `GetHostedZone` action to request information about the hosted zone.
- Use the `ListHostedZones` action to get a list of the hosted zones associated with the current AWS account.

## Request Syntax

```
DELETE /2013-04-01/hostedzone/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**Id**

The ID of the hosted zone you want to delete.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DeleteHostedZoneResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
```

```
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</DeleteHostedZoneResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### DeleteHostedZoneResponse

Root level tag for the DeleteHostedZoneResponse parameters.

Required: Yes

### ChangeInfo

A complex type that contains the ID, the status, and the date and time of a request to delete a hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**HostedZoneNotEmpty**

The hosted zone contains resource records that are not SOA or NS records.

**message**

HTTP Status Code: 400

**InvalidDomainName**

The specified domain name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of DeleteHostedZone.

```
DELETE /2013-04-01/hostedzone/Z1PA6795UKMFR9
```

### Example Response

This example illustrates one usage of DeleteHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DeleteHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ChangeInfo>
      <Id>/change/C1PA6795UKMFR9</Id>
```

```
      <Status>PENDING</Status>
      <SubmittedAt>2017-03-10T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</DeleteHostedZoneResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteKeySigningKey

Service: Amazon Route 53

Deletes a key-signing key (KSK). Before you can delete a KSK, you must deactivate it. The KSK must be deactivated before you can delete it regardless of whether the hosted zone is enabled for DNSSEC signing.

You can use DeactivateKeySigningKey to deactivate the key before you delete it.

Use GetDNSSEC to verify that the KSK is in an `INACTIVE` status.

## Request Syntax

```
DELETE /2013-04-01/keysigningkey/HostedZoneId/Name HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**HostedZoneId**

A unique string used to identify a hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

**Name**

A string used to identify a key-signing key (KSK).

Length Constraints: Minimum length of 3. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteKeySigningKeyResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</DeleteKeySigningKeyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### DeleteKeySigningKeyResponse

Root level tag for the DeleteKeySigningKeyResponse parameters.

Required: Yes

### ChangeInfo

A complex type that describes change information about changes made to your hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidKeySigningKeyStatus**

The key-signing key (KSK) status isn't valid or another KSK has the status `INTERNAL_FAILURE`.

HTTP Status Code: 400

**InvalidKMSArn**

The KeyManagementServiceArn that you specified isn't valid to use with DNSSEC signing.

HTTP Status Code: 400

**InvalidSigningStatus**

Your hosted zone status isn't valid for this operation. In the hosted zone, change the status to enable `DNSSEC` or disable `DNSSEC`.

HTTP Status Code: 400

**NoSuchKeySigningKey**

The specified key-signing key (KSK) doesn't exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteQueryLoggingConfig

Service: Amazon Route 53

Deletes a configuration for DNS query logging. If you delete a configuration, Amazon Route 53 stops sending query logs to CloudWatch Logs. Route 53 doesn't delete any logs that are already in CloudWatch Logs.

For more information about DNS query logs, see CreateQueryLoggingConfig.

## Request Syntax

```
DELETE /2013-04-01/queryloggingconfig/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the configuration that you want to delete.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchQueryLoggingConfig**

There is no DNS query logging configuration with the specified ID.

HTTP Status Code: 404

## Examples

### Example Request

The following request deletes the configuration with the ID `87654321-dcba-1234-abcd-1a2b3c4d5e6f`.

```
DELETE /2013-04-01/queryloggingconfig HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<DeleteQueryLoggingConfigRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Id>87654321-dcba-1234-abcd-1a2b3c4d5e6f</Id>
</DeleteQueryLoggingConfigRequest>
```

### Example Response

This example illustrates one usage of DeleteQueryLoggingConfig.

```
HTTP/1.1 200 OK
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteResourceRecordSetProtections

Service: Amazon Route 53

Deletes one or more resource record set protections from a hosted zone. After a protection is deleted, you can change the resource record sets that have that name and type by using `ChangeResourceRecordSets`.

The request is atomic. Route 53 either deletes all of the protections in the request or none of them. If one or more entries fail, for example because no protection exists for the specified name and type, Route 53 returns an `InvalidResourceRecordSetProtectionBatch` error that lists the failing entries and the reason that each one failed.

You can specify up to 100 protections in one request.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/rrsetprotection/delete HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<DeleteResourceRecordSetProtectionsRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Protections>
      <ResourceRecordSetProtectionKey>
         <RecordName>string</RecordName>
         <RecordType>string</RecordType>
      </ResourceRecordSetProtectionKey>
   </Protections>
</DeleteResourceRecordSetProtectionsRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone that contains the protections that you want to delete.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

**DeleteResourceRecordSetProtectionsRequest**

Root level tag for the DeleteResourceRecordSetProtectionsRequest parameters.

Required: Yes

**Protections**

The name and type of each protection to delete. The list must contain at least one entry and can contain up to 100 entries. Each name and type can appear only once in the list.

Type: Array of ResourceRecordSetProtectionKey objects

Array Members: Minimum number of 1 item.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidResourceRecordSetProtectionBatch**

One or more entries in the request couldn't be processed, so Route 53 didn't create or delete any of the protections in the request. The `Errors` element lists the failing entries and the reason that each one failed.

**Errors**

The entries that failed, with the reason that each one failed.

**Message**

A message that explains why Route 53 couldn't process the `CreateResourceRecordSetProtections` or `DeleteResourceRecordSetProtections` request.

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteReusableDelegationSet

Service: Amazon Route 53

Deletes a reusable delegation set.

> **Important**
>
> You can delete a reusable delegation set only if it isn't associated with any hosted zones.

To verify that the reusable delegation set is not associated with any hosted zones, submit a GetReusableDelegationSet request and specify the ID of the reusable delegation set that you want to delete.

## Request Syntax

```
DELETE /2013-04-01/delegationset/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the reusable delegation set that you want to delete.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DelegationSetInUse**

The specified delegation contains associated hosted zones which must be deleted before the reusable delegation set can be deleted.

**message**

HTTP Status Code: 400

**DelegationSetNotReusable**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchDelegationSet**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of DeleteReusableDelegationSet.

```
DELETE /2013-04-01/delegationset/N1PA6795SAMPLE
```

### Example Response

This example illustrates one usage of DeleteReusableDelegationSet.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DeleteReusableDelegationSetResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/"/>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteTrafficPolicy

Service: Amazon Route 53

Deletes a traffic policy.

When you delete a traffic policy, Route 53 sets a flag on the policy to indicate that it has been deleted. However, Route 53 never fully deletes the traffic policy. Note the following:

- Deleted traffic policies aren't listed if you run ListTrafficPolicies.
- There's no way to get a list of deleted policies.
- If you retain the ID of the policy, you can get information about the policy, including the traffic policy document, by running GetTrafficPolicy.

## Request Syntax

```
DELETE /2013-04-01/trafficpolicy/Id/Version HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the traffic policy that you want to delete.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

### Version

The version number of the traffic policy that you want to delete.

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

**TrafficPolicyInUse**

One or more traffic policy instances were created by using the specified traffic policy.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of DeleteTrafficPolicy.

```
DELETE /2013-04-01/trafficpolicy/12345678-abcd-9876-fedc-1a2b3c4de5f6/2
```

### Example Response

This example illustrates one usage of DeleteTrafficPolicy.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DeleteTrafficPolicyResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
</DeleteTrafficPolicyResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteTrafficPolicyInstance

Service: Amazon Route 53

Deletes a traffic policy instance and all of the resource record sets that Amazon Route 53 created when you created the instance.

> **Note**
>
> In the Route 53 console, traffic policy instances are known as policy records.

## Request Syntax

```
DELETE /2013-04-01/trafficpolicyinstance/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the traffic policy instance that you want to delete.

> **Important**
>
> When you delete a traffic policy instance, Amazon Route 53 also deletes all of the resource record sets that were created when you created the traffic policy instance.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicyInstance**

No traffic policy instance exists with the specified ID.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of DeleteTrafficPolicyInstance.

```
DELETE /2013-04-01/trafficpolicyinstance/12131415-abac-5432-caba-6f5e4d3c2b1a
```

### Example Response

This example illustrates one usage of DeleteTrafficPolicyInstance.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DeleteTrafficPolicyInstanceResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
</DeleteTrafficPolicyInstanceResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteVPCAssociationAuthorization

Service: Amazon Route 53

Removes authorization to submit an `AssociateVPCWithHostedZone` request to associate a specified VPC with a hosted zone that was created by a different account. You must use the account that created the hosted zone to submit a `DeleteVPCAssociationAuthorization` request.

> **Important**
>
> Sending this request only prevents the AWS account that created the VPC from associating the VPC with the Amazon Route 53 hosted zone in the future. If the VPC is already associated with the hosted zone, `DeleteVPCAssociationAuthorization` won't disassociate the VPC from the hosted zone. If you want to delete an existing association, use `DisassociateVPCFromHostedZone`.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/deauthorizevpcassociation HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<DeleteVPCAssociationAuthorizationRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</DeleteVPCAssociationAuthorizationRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

When removing authorization to associate a VPC that was created by one AWS account with a hosted zone that was created with a different AWS account, the ID of the hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

**DeleteVPCAssociationAuthorizationRequest**

Root level tag for the DeleteVPCAssociationAuthorizationRequest parameters.

Required: Yes

**VPC**

When removing authorization to associate a VPC that was created by one AWS account with a hosted zone that was created with a different AWS account, a complex type that includes the ID and region of the VPC.

Type: VPC object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidVPCId**

The VPC ID that you specified either isn't a valid ID or the current account is not authorized to access this VPC.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**VPCAssociationAuthorizationNotFound**

The VPC that you specified is not authorized to be associated with the hosted zone.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of DeleteVPCAssociationAuthorization.

```
POST /2013-04-01/hostedzone/Z1PA6795UKMFR9/deauthorizevpcassociation HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
```

```
<DeleteVPCAssociationAuthorizationRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <VPC>
      <VPCId>vpc-a1b2c3d4e5</VPCId>
      <VPCRegion>us-east-2</VPCRegion>
   </VPC>
</DeleteVPCAssociationAuthorizationRequest>
```

### Example Response

This example illustrates one usage of DeleteVPCAssociationAuthorization.

```
HTTP/1.1 200
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisableHostedZoneDNSSEC

Service: Amazon Route 53

Disables DNSSEC signing in a specific hosted zone. This action does not deactivate any key-signing keys (KSKs) that are active in the hosted zone.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/disable-dnssec HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

A unique string used to identify a hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DisableHostedZoneDNSSECResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</DisableHostedZoneDNSSECResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**DisableHostedZoneDNSSECResponse**

Root level tag for the DisableHostedZoneDNSSECResponse parameters.

Required: Yes

**ChangeInfo**

A complex type that describes change information about changes made to your hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**DNSSECNotFound**

The hosted zone doesn't have any DNSSEC resources.

HTTP Status Code: 400

**InvalidArgument**

Parameter name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidKeySigningKeyStatus**

The key-signing key (KSK) status isn't valid or another KSK has the status `INTERNAL_FAILURE`.

HTTP Status Code: 400

**InvalidKMSArn**

The KeyManagementServiceArn that you specified isn't valid to use with DNSSEC signing.

HTTP Status Code: 400

**KeySigningKeyInParentDSRecord**

The key-signing key (KSK) is specified in a parent DS record.

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateVPCFromHostedZone

Service: Amazon Route 53

Disassociates an Amazon Virtual Private Cloud (Amazon VPC) from an Amazon Route 53 private hosted zone. Note the following:

- You can't disassociate the last Amazon VPC from a private hosted zone.
- You can't convert a private hosted zone into a public hosted zone.
- You can submit a `DisassociateVPCFromHostedZone` request using either the account that created the hosted zone or the account that created the Amazon VPC.
- Some services, such as AWS Cloud Map and Amazon Elastic File System (Amazon EFS) automatically create hosted zones and associate VPCs with the hosted zones. A service can create a hosted zone using your account or using its own account. You can disassociate a VPC from a hosted zone only if the service created the hosted zone using your account.

  When you run DisassociateVPCFromHostedZone, if the hosted zone has a value for `OwningAccount`, you can use `DisassociateVPCFromHostedZone`. If the hosted zone has a value for `OwningService`, you can't use `DisassociateVPCFromHostedZone`.

> **Note**
>
> When revoking access, the hosted zone and the Amazon VPC must belong to the same partition. A partition is a group of AWS Regions. Each AWS account is scoped to one partition.
> The following are the supported partitions:
>
> - `aws` - AWS Regions
> - `aws-cn` - China Regions
> - `aws-us-gov` - AWS GovCloud (US) Region
>
> For more information, see Access Management in the *AWS General Reference*.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/disassociatevpc HTTP/1.1
```

```
<?xml version="1.0" encoding="UTF-8"?>
<DisassociateVPCFromHostedZoneRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Comment>string</Comment>
   <VPC>
      <VPCId>string</VPCId>
      <VPCRegion>string</VPCRegion>
   </VPC>
</DisassociateVPCFromHostedZoneRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the private hosted zone that you want to disassociate a VPC from.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### DisassociateVPCFromHostedZoneRequest

Root level tag for the DisassociateVPCFromHostedZoneRequest parameters.

Required: Yes

### Comment

*Optional:* A comment about the disassociation request.

Type: String

Required: No

### VPC

A complex type that contains information about the VPC that you're disassociating from the specified hosted zone.

Type: VPC object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<DisassociateVPCFromHostedZoneResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</DisassociateVPCFromHostedZoneResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### DisassociateVPCFromHostedZoneResponse

Root level tag for the DisassociateVPCFromHostedZoneResponse parameters.

Required: Yes

### ChangeInfo

A complex type that describes the changes made to the specified private hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidVPCId**

The VPC ID that you specified either isn't a valid ID or the current account is not authorized to access this VPC.

**message**

HTTP Status Code: 400

**LastVPCAssociation**

The VPC that you're trying to disassociate from the private hosted zone is the last VPC that is associated with the hosted zone. Amazon Route 53 doesn't support disassociating the last VPC from a hosted zone.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**VPCAssociationNotFound**

The specified VPC and hosted zone are not currently associated.

**message**

The specified VPC or hosted zone weren't found.

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of DisassociateVPCFromHostedZone.

```
POST /2013-04-01/hostedzone/Z1PA6795UKMFR9/disassociatevpc HTTP/1.1
<?xml version="1.0"?>
   <VPC>
      <VPCId>vpc-a1b2c3d4e5</VPCId>
      <VPCRegion>us-east-2</VPCRegion>
   </VPC>
</DisassociateVPCFromHostedZoneRequest>
```

### Example Response

This example illustrates one usage of DisassociateVPCFromHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DisassociateVPCFromHostedZoneResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <ChangeInfo>
      <Id>/change/a1b2c3d4</Id>
      <Status>INSYNC</Status>
      <SubmittedAt>2017-03-31T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</DisassociateVPCFromHostedZoneResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# EnableHostedZoneDNSSEC

Service: Amazon Route 53

Enables DNSSEC signing in a specific hosted zone.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/enable-dnssec HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

A unique string used to identify a hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<EnableHostedZoneDNSSECResponse>
   <ChangeInfo>
      <Comment>string</Comment>
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</EnableHostedZoneDNSSECResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**EnableHostedZoneDNSSECResponse**

Root level tag for the EnableHostedZoneDNSSECResponse parameters.

Required: Yes

**ChangeInfo**

A complex type that describes change information about changes made to your hosted zone.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**DNSSECNotFound**

The hosted zone doesn't have any DNSSEC resources.

HTTP Status Code: 400

**HostedZonePartiallyDelegated**

The hosted zone nameservers don't match the parent nameservers. The hosted zone and parent must have the same nameservers.

HTTP Status Code: 400

**InvalidArgument**

Parameter name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidKeySigningKeyStatus**

The key-signing key (KSK) status isn't valid or another KSK has the status `INTERNAL_FAILURE`.

HTTP Status Code: 400

**InvalidKMSArn**

The KeyManagementServiceArn that you specified isn't valid to use with DNSSEC signing.

HTTP Status Code: 400

**KeySigningKeyWithActiveStatusNotFound**

A key-signing key (KSK) with `ACTIVE` status wasn't found.

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetAccountLimit

Service: Amazon Route 53

Gets the specified limit for the current account, for example, the maximum number of health checks that you can create using the account.

For the default limit, see Limits in the *Amazon Route 53 Developer Guide*. To request a higher limit, open a case.

> **Note**
>
> You can also view account limits in AWS Trusted Advisor. Sign in to the AWS Management Console and open the Trusted Advisor console at https://console.aws.amazon.com/trustedadvisor/. Then choose **Service limits** in the navigation pane.

## Request Syntax

```
GET /2013-04-01/accountlimit/Type HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Type

The limit that you want to get. Valid values include the following:

- **MAX_HEALTH_CHECKS_BY_OWNER**: The maximum number of health checks that you can create using the current account.
- **MAX_HOSTED_ZONES_BY_OWNER**: The maximum number of hosted zones that you can create using the current account.
- **MAX_REUSABLE_DELEGATION_SETS_BY_OWNER**: The maximum number of reusable delegation sets that you can create using the current account.
- **MAX_TRAFFIC_POLICIES_BY_OWNER**: The maximum number of traffic policies that you can create using the current account.
- **MAX_TRAFFIC_POLICY_INSTANCES_BY_OWNER**: The maximum number of traffic policy instances that you can create using the current account. (Traffic policy instances are referred to as traffic flow policy records in the Amazon Route 53 console.)

Valid Values: `MAX_HEALTH_CHECKS_BY_OWNER | MAX_HOSTED_ZONES_BY_OWNER | MAX_TRAFFIC_POLICY_INSTANCES_BY_OWNER | MAX_REUSABLE_DELEGATION_SETS_BY_OWNER | MAX_TRAFFIC_POLICIES_BY_OWNER`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetAccountLimitResponse>
   <Count>long</Count>
   <Limit>
      <Type>string</Type>
      <Value>long</Value>
   </Limit>
</GetAccountLimitResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetAccountLimitResponse

Root level tag for the GetAccountLimitResponse parameters.

Required: Yes

### Count

The current number of entities that you have created of the specified type. For example, if you specified `MAX_HEALTH_CHECKS_BY_OWNER` for the value of `Type` in the request, the value of `Count` is the current number of health checks that you have created using the current account.

Type: Long

Valid Range: Minimum value of 0.

**Limit**

The current setting for the specified limit. For example, if you specified `MAX_HEALTH_CHECKS_BY_OWNER` for the value of `Type` in the request, the value of `Limit` is the maximum number of health checks that you can create using the current account.

Type: AccountLimit object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetChange

Service: Amazon Route 53

Returns the current status of a change batch request. The status is one of the following values:

- PENDING indicates that the changes in this request have not propagated to all Amazon Route 53 DNS servers managing the hosted zone. This is the initial status of all change batch requests.
- INSYNC indicates that the changes have propagated to all Route 53 DNS servers managing the hosted zone.

## Request Syntax

```
GET /2013-04-01/change/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the change batch request. The value that you specify here is the value that ChangeResourceRecordSets returned in the Id element when you submitted the request.

Length Constraints: Minimum length of 1. Maximum length of 6500.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetChangeResponse>
   <ChangeInfo>
      <Comment>string</Comment>
```

```
      <Id>string</Id>
      <Status>string</Status>
      <SubmittedAt>timestamp</SubmittedAt>
   </ChangeInfo>
</GetChangeResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetChangeResponse

Root level tag for the GetChangeResponse parameters.

Required: Yes

### ChangeInfo

A complex type that contains information about the specified change batch.

Type: ChangeInfo object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchChange**

A change with the specified change ID does not exist.

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetChange.

```
GET /2013-04-01/change/C2682N5HXP0BZ4
```

### Example Response

This example illustrates one usage of GetChange.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetChangeResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ChangeInfo>
      <Id>C2682N5HXP0BZ4</Id>
      <Status>INSYNC</Status>
      <SubmittedAt>2017-03-10T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</GetChangeResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetCheckerIpRanges

Service: Amazon Route 53

Route 53 does not perform authorization for this API because it retrieves information that is already available to the public.

> **Important**
>
> `GetCheckerIpRanges` still works, but we recommend that you download ip-ranges.json, which includes IP address ranges for all AWS services. For more information, see IP Address Ranges of Amazon Route 53 Servers in the *Amazon Route 53 Developer Guide*.

## Request Syntax

```
GET /2013-04-01/checkeripranges HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetCheckerIpRangesResponse>
   <CheckerIpRanges>
      <member>string</member>
   </CheckerIpRanges>
</GetCheckerIpRangesResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetCheckerIpRangesResponse**

Root level tag for the GetCheckerIpRangesResponse parameters.

Required: Yes

**CheckerIpRanges**

A complex type that contains sorted list of IP ranges in CIDR format for Amazon Route 53 health checkers.

Type: Array of strings

## Errors

For information about the errors that are common to all actions, see Common Error Types.

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetDNSSEC

Service: Amazon Route 53

Returns information about DNSSEC for a specific hosted zone, including the key-signing keys (KSKs) in the hosted zone.

## Request Syntax

```
GET /2013-04-01/hostedzone/Id/dnssec HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

A unique string used to identify a hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetDNSSECResponse>
   <KeySigningKeys>
      <KeySigningKey>
         <CreatedDate>timestamp</CreatedDate>
         <DigestAlgorithmMnemonic>string</DigestAlgorithmMnemonic>
         <DigestAlgorithmType>integer</DigestAlgorithmType>
         <DigestValue>string</DigestValue>
         <DNSKEYRecord>string</DNSKEYRecord>
         <DSRecord>string</DSRecord>
         <Flag>integer</Flag>
         <KeyTag>integer</KeyTag>
```

```
            <KmsArn>string</KmsArn>
            <LastModifiedDate>timestamp</LastModifiedDate>
            <Name>string</Name>
            <PublicKey>string</PublicKey>
            <SigningAlgorithmMnemonic>string</SigningAlgorithmMnemonic>
            <SigningAlgorithmType>integer</SigningAlgorithmType>
            <Status>string</Status>
            <StatusMessage>string</StatusMessage>
         </KeySigningKey>
      </KeySigningKeys>
      <Status>
         <ServeSignature>string</ServeSignature>
         <StatusMessage>string</StatusMessage>
      </Status>
   </GetDNSSECResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetDNSSECResponse

Root level tag for the GetDNSSECResponse parameters.

Required: Yes

### KeySigningKeys

The key-signing keys (KSKs) in your account.

Type: Array of KeySigningKey objects

### Status

A string representing the status of DNSSEC.

Type: DNSSECStatus object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidArgument**

Parameter name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetGeoLocation

Service: Amazon Route 53

Gets information about whether a specified geographic location is supported for Amazon Route 53 geolocation resource record sets.

Route 53 does not perform authorization for this API because it retrieves information that is already available to the public.

Use the following syntax to determine whether a continent is supported for geolocation:

`GET /2013-04-01/geolocation?continentcode=two-letter abbreviation for a continent`

Use the following syntax to determine whether a country is supported for geolocation:

`GET /2013-04-01/geolocation?countrycode=two-character country code`

Use the following syntax to determine whether a subdivision of a country is supported for geolocation:

`GET /2013-04-01/geolocation?countrycode=two-character country code&subdivisioncode=subdivision code`

## Request Syntax

```
GET /2013-04-01/geolocation?
continentcode=ContinentCode&countrycode=CountryCode&subdivisioncode=SubdivisionCode
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### continentcode

For geolocation resource record sets, a two-letter abbreviation that identifies a continent. Amazon Route 53 supports the following continent codes:

- **AF**: Africa
- **AN**: Antarctica

- **AS**: Asia
- **EU**: Europe
- **OC**: Oceania
- **NA**: North America
- **SA**: South America

Length Constraints: Fixed length of 2.

**countrycode**

Amazon Route 53 uses the two-letter country codes that are specified in ISO standard 3166-1 alpha-2.

Route 53 also supports the country code **UA** for Ukraine.

Length Constraints: Minimum length of 1. Maximum length of 2.

**subdivisioncode**

The code for the subdivision, such as a particular state within the United States. For a list of US state abbreviations, see Appendix B: Two–Letter State and Possession Abbreviations on the United States Postal Service website. For a list of all supported subdivision codes, use the ListGeoLocations API.

Length Constraints: Minimum length of 1. Maximum length of 3.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetGeoLocationResponse>
   <GeoLocationDetails>
      <ContinentCode>string</ContinentCode>
      <ContinentName>string</ContinentName>
      <CountryCode>string</CountryCode>
      <CountryName>string</CountryName>
      <SubdivisionCode>string</SubdivisionCode>
```

```
      <SubdivisionName>string</SubdivisionName>
   </GeoLocationDetails>
</GetGeoLocationResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetGeoLocationResponse**

Root level tag for the GetGeoLocationResponse parameters.

Required: Yes

**GeoLocationDetails**

A complex type that contains the codes and full continent, country, and subdivision names for the specified geolocation code.

Type: GeoLocationDetails object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchGeoLocation**

Amazon Route 53 doesn't support the specified geographic location. For a list of supported geolocation codes, see the GeoLocation data type.

**message**

HTTP Status Code: 404

## Examples

### Example Request

To determine whether France (FR) is supported for Route 53 geolocation, submit the following request.

```
GET /2013-04-01/geolocation?countrycode=FR
```

### Example Response

The following response shows that France is supported for geolocation. If France were not supported, Route 53 would return `NoSuchGeoLocation`.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetGeoLocationResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <GetGeoLocationDetails>
      <CountryCode>FR</CountryCode>
      <CountryName>France</CountryName>
   </GeoLocationDetails>
</GetGeoLocationResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHealthCheck

Service: Amazon Route 53

Gets information about a specified health check.

## Request Syntax

```
GET /2013-04-01/healthcheck/HealthCheckId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### HealthCheckId

The identifier that Amazon Route 53 assigned to the health check when you created it. When you add or update a resource record set, you use this value to specify which health check to use. The value can be up to 64 characters long.

Length Constraints: Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckResponse>
   <HealthCheck>
      <CallerReference>string</CallerReference>
      <CloudWatchAlarmConfiguration>
         <ComparisonOperator>string</ComparisonOperator>
         <Dimensions>
            <Dimension>
               <Name>string</Name>
               <Value>string</Value>
            </Dimension>
         </Dimensions>
```

```
         <EvaluationPeriods>integer</EvaluationPeriods>
         <MetricName>string</MetricName>
         <Namespace>string</Namespace>
         <Period>integer</Period>
         <Statistic>string</Statistic>
         <Threshold>double</Threshold>
      </CloudWatchAlarmConfiguration>
      <HealthCheckConfig>
         <AlarmIdentifier>
            <Name>string</Name>
            <Region>string</Region>
         </AlarmIdentifier>
         <ChildHealthChecks>
            <ChildHealthCheck>string</ChildHealthCheck>
         </ChildHealthChecks>
         <Disabled>boolean</Disabled>
         <EnableSNI>boolean</EnableSNI>
         <FailureThreshold>integer</FailureThreshold>
         <FullyQualifiedDomainName>string</FullyQualifiedDomainName>
         <HealthThreshold>integer</HealthThreshold>
         <InsufficientDataHealthStatus>string</InsufficientDataHealthStatus>
         <Inverted>boolean</Inverted>
         <IPAddress>string</IPAddress>
         <MeasureLatency>boolean</MeasureLatency>
         <Port>integer</Port>
         <Regions>
            <Region>string</Region>
         </Regions>
         <RequestInterval>integer</RequestInterval>
         <ResourcePath>string</ResourcePath>
         <RoutingControlArn>string</RoutingControlArn>
         <SearchString>string</SearchString>
         <Type>string</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>long</HealthCheckVersion>
      <Id>string</Id>
      <LinkedService>
         <Description>string</Description>
         <ServicePrincipal>string</ServicePrincipal>
      </LinkedService>
   </HealthCheck>
</GetHealthCheckResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetHealthCheckResponse**

Root level tag for the GetHealthCheckResponse parameters.

Required: Yes

**HealthCheck**

A complex type that contains information about one health check that is associated with the current AWS account.

Type: HealthCheck object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**IncompatibleVersion**

The resource you're trying to access is unsupported on this Amazon Route 53 endpoint.

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetHealthCheck.

```
GET /2013-04-01/healthcheck/018927304987
```

### Example Response

This example illustrates one usage of GetHealthCheck.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>abcdef11-2222-3333-4444-555555fedcba</Id>
      <CallerReference>example.com 192.0.2.17</CallerReference>
      <HealthCheckConfig>
         <IPAddress>192.0.2.17</IPAddress>
         <Port>80</Port>
         <Type>HTTP</Type>
         <ResourcePath>/docs/route-53-health-check.html</ResourcePath>
         <FullyQualifiedDomainName>example.com</FullyQualifiedDomainName>
         <RequestInterval>30</RequestInterval>
         <FailureThreshold>3</FailureThreshold>
         <MeasureLatency>true</MeasureLatency>
         <EnableSNI>true</EnableSNI>
         <Regions>
            <Region>ap-southeast-1</Region>
            <Region>ap-southeast-2</Region>
            <Region>ap-northeast-1</Region>
         </Regions>
         <Inverted>false</Inverted>
      </HealthCheckConfig>
      <HealthCheckVersion>2<HealthCheckVersion>
   </HealthCheck>
</GetHealthCheckResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHealthCheckCount

Service: Amazon Route 53

Retrieves the number of health checks that are associated with the current AWS account.

## Request Syntax

```
GET /2013-04-01/healthcheckcount HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckCountResponse>
   <HealthCheckCount>long</HealthCheckCount>
</GetHealthCheckCountResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetHealthCheckCountResponse**

Root level tag for the GetHealthCheckCountResponse parameters.

Required: Yes

**HealthCheckCount**

The number of health checks associated with the current AWS account.

Type: Long

## Errors

For information about the errors that are common to all actions, see Common Error Types.

## Examples

### Example Request

This example illustrates one usage of GetHealthCheckCount.

```
GET /2013-04-01/healthcheckcount
```

### Example Response

This example illustrates one usage of GetHealthCheckCount.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckCountResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheckCount>42</HealthCheckCount>
</GetHealthCheckCountResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHealthCheckLastFailureReason

Service: Amazon Route 53

Gets the reason that a specified health check failed most recently.

## Request Syntax

```
GET /2013-04-01/healthcheck/HealthCheckId/lastfailurereason HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### HealthCheckId

The ID for the health check for which you want the last failure reason. When you created the health check, `CreateHealthCheck` returned the ID in the response, in the `HealthCheckId` element.

> **Note**
>
> If you want to get the last failure reason for a calculated health check, you must use the Amazon Route 53 console or the CloudWatch console. You can't use `GetHealthCheckLastFailureReason` for a calculated health check.

Length Constraints: Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckLastFailureReasonResponse>
```

```
   <HealthCheckObservations>
      <HealthCheckObservation>
         <IPAddress>string</IPAddress>
         <Region>string</Region>
         <StatusReport>
            <CheckedTime>timestamp</CheckedTime>
            <Status>string</Status>
         </StatusReport>
      </HealthCheckObservation>
   </HealthCheckObservations>
</GetHealthCheckLastFailureReasonResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetHealthCheckLastFailureReasonResponse

Root level tag for the GetHealthCheckLastFailureReasonResponse parameters.

Required: Yes

### HealthCheckObservations

A list that contains one `Observation` element for each Amazon Route 53 health checker that is reporting a last failure reason.

Type: Array of HealthCheckObservation objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetHealthCheckLastFailureReason.

```
GET /2013-04-01/healthcheck/018927304987/lastfailurereason
```

### Example Response

This example illustrates one usage of GetHealthCheckLastFailureReason.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckLastFailureReasonResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <HealthCheckObservations>
      <HealthCheckObservation>
         <IPAddress>192.0.2.197</IPAddress>
         <StatusReport>
            <Status>Failure: The health checker could not establish a connection within
 the timeout limit.</Status>
            <CheckedTime>2014-10-25T23:51:20.603Z</CheckedTime>
         </StatusReport>
      </HealthCheckObservation>
      <HealthCheckObservation>
         <IPAddress>192.0.2.226</IPAddress>
         <StatusReport>
            <Status>The health check endpoint has not failed since the Route 53 health
 checker for this endpoint restarted at 2014-10-24T02:55:12.106+00:00</Status>
            <CheckedTime>2014-10-24T03:02:48.809Z</CheckedTime>
         </StatusReport>
      </HealthCheckObservation>
      ...
```

```
   </HealthCheckObservations>
<GetHealthCheckLastFailureReasonResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHealthCheckStatus

Service: Amazon Route 53

Gets status of a specified health check.

> **Important**
>
> This API is intended for use during development to diagnose behavior. It doesn't support production use-cases with high query rates that require immediate and actionable responses.

## Request Syntax

```
GET /2013-04-01/healthcheck/HealthCheckId/status HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### HealthCheckId

The ID for the health check that you want the current status for. When you created the health check, `CreateHealthCheck` returned the ID in the response, in the `HealthCheckId` element.

> **Note**
>
> If you want to check the status of a calculated health check, you must use the Amazon Route 53 console or the CloudWatch console. You can't use `GetHealthCheckStatus` to get the status of a calculated health check.

Length Constraints: Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckStatusResponse>
   <HealthCheckObservations>
      <HealthCheckObservation>
         <IPAddress>string</IPAddress>
         <Region>string</Region>
         <StatusReport>
            <CheckedTime>timestamp</CheckedTime>
            <Status>string</Status>
         </StatusReport>
      </HealthCheckObservation>
   </HealthCheckObservations>
</GetHealthCheckStatusResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetHealthCheckStatusResponse

Root level tag for the GetHealthCheckStatusResponse parameters.

Required: Yes

### HealthCheckObservations

A list that contains one `HealthCheckObservation` element for each Amazon Route 53 health checker that is reporting a status about the health check endpoint.

Type: Array of HealthCheckObservation objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetHealthCheckStatus.

```
GET /2013-04-01/healthcheck/018927304987/status
```

### Example Response

This example illustrates one usage of GetHealthCheckStatus.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHealthCheckStatusResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheckObservations>
      <HealthCheckObservation>
         <IPAddress>192.0.2.226</IPAddress>
         <Region>us-east-2</Region>
         <StatusReport>
            <Status>Success: HTTP Status Code: 200. Resolved IP: 192.0.2.2. OK</Status>
            <CheckedTime>2014-10-27T17:48:25.038Z</CheckedTime>
         </StatusReport>
      </HealthCheckObservation>
      <HealthCheckObservation>
         <IPAddress>192.0.2.56</IPAddress>
         <Region>us-west-1</Region>
         <StatusReport>
            <Status>Success: HTTP Status Code: 200. Resolved IP: 192.0.2.14. OK</
Status>
```

```
            <CheckedTime>2014-10-27T17:48:16.751Z</CheckedTime>
         </StatusReport>
      </HealthCheckObservation>
      ...
   </HealthCheckObservations>
</GetHealthCheckStatusResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHostedZone

Service: Amazon Route 53

Gets information about a specified hosted zone including the four name servers assigned to the hosted zone.

returns the VPCs associated with the specified hosted zone and does not reflect the VPC associations by Route 53 Profiles. To get the associations to a Profile, call the ListProfileAssociations API.

## Request Syntax

```
GET /2013-04-01/hostedzone/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone that you want to get information about.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneResponse>
   <DelegationSet>
      <CallerReference>string</CallerReference>
      <Id>string</Id>
      <NameServers>
         <NameServer>string</NameServer>
      </NameServers>
```

```
    </DelegationSet>
    <HostedZone>
       <CallerReference>string</CallerReference>
       <Config>
          <Comment>string</Comment>
          <PrivateZone>boolean</PrivateZone>
       </Config>
       <Features>
          <AcceleratedRecoveryStatus>string</AcceleratedRecoveryStatus>
          <FailureReasons>
             <AcceleratedRecovery>string</AcceleratedRecovery>
          </FailureReasons>
       </Features>
       <Id>string</Id>
       <LinkedService>
          <Description>string</Description>
          <ServicePrincipal>string</ServicePrincipal>
       </LinkedService>
       <Name>string</Name>
       <ResourceRecordSetCount>long</ResourceRecordSetCount>
    </HostedZone>
    <VPCs>
       <VPC>
          <VPCId>string</VPCId>
          <VPCRegion>string</VPCRegion>
       </VPC>
    </VPCs>
</GetHostedZoneResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetHostedZoneResponse

Root level tag for the GetHostedZoneResponse parameters.

Required: Yes

### DelegationSet

A complex type that lists the Amazon Route 53 name servers for the specified hosted zone.

Type: DelegationSet object

**HostedZone**

A complex type that contains general information about the specified hosted zone.

Type: HostedZone object

**VPCs**

A complex type that contains information about the VPCs that are associated with the specified hosted zone.

Type: Array of VPC objects

Array Members: Minimum number of 1 item.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetHostedZone.

```
GET /2013-04-01/hostedzone/Z1PA6795UKMFR9
```

### Example Response (Public Hosted Zone, Default Delegation Set Assigned by Route 53)

This example illustrates one usage of GetHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZone>
      <Id>/hostedzone/Z1PA6795UKMFR9</Id>
      <Name>example.com.</Name>
      <CallerReference>2017-03-01T11:22:14Z</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
         <PrivateZone>false</PrivateZone>
      </Config>
      <ResourceRecordSetCount>17</ResourceRecordSetCount>
   </HostedZone>
   <DelegationSet>
      <NameServers>
         <NameServer>ns-2048.awsdns-64.com</NameServer>
         <NameServer>ns-2049.awsdns-65.net</NameServer>
         <NameServer>ns-2050.awsdns-66.org</NameServer>
         <NameServer>ns-2051.awsdns-67.co.uk</NameServer>
      </NameServers>
   </DelegationSet>
</GetHostedZoneResponse>
```

### Example Response (Public Hosted Zone, Reusable Delegation Set)

This example illustrates one usage of GetHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZone>
      <Id>/hostedzone/Z1PA6795UKMFR9</Id>
      <Name>example.com.</Name>
      <CallerReference>2017-03-02T10:44:04Z</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
         <PrivateZone>false</PrivateZone>
      </Config>
      <ResourceRecordSetCount>17</ResourceRecordSetCount>
```

```
   </HostedZone>
   <DelegationSet>
      <Id>NU241VPSAMPLE</Id>
      <CallerReference>2017-03-01T11:22:14Z</CallerReference>
      <NameServers>
         <NameServer>ns-2048.awsdns-64.com</NameServer>
         <NameServer>ns-2049.awsdns-65.net</NameServer>
         <NameServer>ns-2050.awsdns-66.org</NameServer>
         <NameServer>ns-2051.awsdns-67.co.uk</NameServer>
      </NameServers>
   </DelegationSet>
</GetHostedZoneResponse>
```

### Example Response (Private Hosted Zone)

This example illustrates one usage of GetHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZone>
      <Id>/hostedzone/Z1PA6795UKMFR9</Id>
      <Name>example.com.</Name>
      <CallerReference>myUniqueIdentifier</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
         <PrivateZone>true</PrivateZone>
      </Config>
      <ResourceRecordSetCount>17</ResourceRecordSetCount>
   </HostedZone>
   <VPCs>
      <VPC>
         <VPCRegion>us-east-2</VPCRegion>
         <VPCId>vpc-1a2b3c4d</VPCId>
      </VPC>
   </VPCs>
</GetHostedZoneResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHostedZoneCount

Service: Amazon Route 53

Retrieves the number of hosted zones that are associated with the current AWS account.

## Request Syntax

```
GET /2013-04-01/hostedzonecount HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneCountResponse>
   <HostedZoneCount>long</HostedZoneCount>
</GetHostedZoneCountResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetHostedZoneCountResponse**

Root level tag for the GetHostedZoneCountResponse parameters.

Required: Yes

**HostedZoneCount**

The total number of public and private hosted zones that are associated with the current AWS account.

Type: Long

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of GetHostedZoneCount.

```
GET /2013-04-01/hostedzonecount
```

### Example Response

This example illustrates one usage of GetHostedZoneCount.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneCountResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZoneCount>42</HostedZoneCount>
</GetHostedZoneCountResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHostedZoneLimit

Service: Amazon Route 53

Gets the specified limit for a specified hosted zone, for example, the maximum number of records that you can create in the hosted zone.

For the default limit, see Limits in the *Amazon Route 53 Developer Guide*. To request a higher limit, open a case.

## Request Syntax

```
GET /2013-04-01/hostedzonelimit/Id/Type HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone that you want to get a limit for.

Length Constraints: Maximum length of 32.

Required: Yes

### Type

The limit that you want to get. Valid values include the following:

- **MAX_RRSETS_BY_ZONE**: The maximum number of records that you can create in the specified hosted zone.
- **MAX_VPCS_ASSOCIATED_BY_ZONE**: The maximum number of Amazon VPCs that you can associate with the specified private hosted zone.

Valid Values: `MAX_RRSETS_BY_ZONE | MAX_VPCS_ASSOCIATED_BY_ZONE`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneLimitResponse>
   <Count>long</Count>
   <Limit>
      <Type>string</Type>
      <Value>long</Value>
   </Limit>
</GetHostedZoneLimitResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetHostedZoneLimitResponse

Root level tag for the GetHostedZoneLimitResponse parameters.

Required: Yes

### Count

The current number of entities that you have created of the specified type. For example, if you specified `MAX_RRSETS_BY_ZONE` for the value of `Type` in the request, the value of `Count` is the current number of records that you have created in the specified hosted zone.

Type: Long

Valid Range: Minimum value of 0.

### Limit

The current setting for the specified limit. For example, if you specified `MAX_RRSETS_BY_ZONE` for the value of `Type` in the request, the value of `Limit` is the maximum number of records that you can create in the specified hosted zone.

Type: HostedZoneLimit object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**HostedZoneNotPrivate**

The specified hosted zone is a public hosted zone, not a private hosted zone.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetQueryLoggingConfig

Service: Amazon Route 53

Gets information about a specified configuration for DNS query logging.

For more information about DNS query logs, see CreateQueryLoggingConfig and Logging DNS Queries.

## Request Syntax

```
GET /2013-04-01/queryloggingconfig/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the configuration for DNS query logging that you want to get information about.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetQueryLoggingConfigResponse>
   <QueryLoggingConfig>
      <CloudWatchLogsLogGroupArn>string</CloudWatchLogsLogGroupArn>
      <HostedZoneId>string</HostedZoneId>
      <Id>string</Id>
   </QueryLoggingConfig>
</GetQueryLoggingConfigResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetQueryLoggingConfigResponse**

Root level tag for the GetQueryLoggingConfigResponse parameters.

Required: Yes

**QueryLoggingConfig**

A complex type that contains information about the query logging configuration that you specified in a GetQueryLoggingConfig request.

Type: QueryLoggingConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchQueryLoggingConfig**

There is no DNS query logging configuration with the specified ID.

HTTP Status Code: 404

## Examples

### Example Request

The following request gets information about the configuration with the ID `87654321-dcba-1234-abcd-1a2b3c4d5e6f`.

```
GET /2013-04-01/queryloggingconfig HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<GetQueryLoggingConfigRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Id>87654321-dcba-1234-abcd-1a2b3c4d5e6f</Id>
</GetQueryLoggingConfigRequest>
```

### Example Response

This example illustrates one usage of GetQueryLoggingConfig.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetQueryLoggingConfigResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <QueryLoggingConfig>
      <Id>87654321-dcba-1234-abcd-1a2b3c4d5e6f</Id>
      <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
      <CloudWatchLogsLogGroupArn>arn:aws:logs:us-east-1:111111111111:log-
group:example.com:*</CloudWatchLogsLogGroupArn>
   </QueryLoggingConfig>
</GetQueryLoggingConfigResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetReusableDelegationSet

Service: Amazon Route 53

Retrieves information about a specified reusable delegation set, including the four name servers that are assigned to the delegation set.

## Request Syntax

```
GET /2013-04-01/delegationset/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the reusable delegation set that you want to get a list of name servers for.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetReusableDelegationSetResponse>
   <DelegationSet>
      <CallerReference>string</CallerReference>
      <Id>string</Id>
      <NameServers>
         <NameServer>string</NameServer>
      </NameServers>
   </DelegationSet>
</GetReusableDelegationSetResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetReusableDelegationSetResponse**

Root level tag for the GetReusableDelegationSetResponse parameters.

Required: Yes

**DelegationSet**

A complex type that contains information about the reusable delegation set.

Type: DelegationSet object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DelegationSetNotReusable**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchDelegationSet**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of GetReusableDelegationSet.

```
GET /2013-04-01/delegationset/N1PA6795SAMPLE
```

### Example Response

This example illustrates one usage of GetReusableDelegationSet.

```
<?xml version="1.0" encoding="UTF-8"?>
<GetReusableDelegationSetResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <DelegationSet>
      <Id>/delegationset/N1PA6795SAMPLE</Id>
      <CallerReference>2014-10-13T16:30:01Z</CallerReference>
      <NameServers>
         <NameServer>ns-2048.awsdns-64.com</NameServer>
         <NameServer>ns-2049.awsdns-65.net</NameServer>
         <NameServer>ns-2050.awsdns-66.org</NameServer>
         <NameServer>ns-2051.awsdns-67.co.uk</NameServer>
      </NameServers>
   </DelegationSet>
</GetReusableDelegationSetResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetReusableDelegationSetLimit

Service: Amazon Route 53

Gets the maximum number of hosted zones that you can associate with the specified reusable delegation set.

For the default limit, see Limits in the *Amazon Route 53 Developer Guide*. To request a higher limit, open a case.

## Request Syntax

```
GET /2013-04-01/reusabledelegationsetlimit/Id/Type HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the delegation set that you want to get the limit for.

Length Constraints: Maximum length of 32.

Required: Yes

### Type

Specify `MAX_ZONES_BY_REUSABLE_DELEGATION_SET` to get the maximum number of hosted zones that you can associate with the specified reusable delegation set.

Valid Values: `MAX_ZONES_BY_REUSABLE_DELEGATION_SET`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
<?xml version="1.0" encoding="UTF-8"?>
<GetReusableDelegationSetLimitResponse>
   <Count>long</Count>
   <Limit>
      <Type>string</Type>
      <Value>long</Value>
   </Limit>
</GetReusableDelegationSetLimitResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetReusableDelegationSetLimitResponse

Root level tag for the GetReusableDelegationSetLimitResponse parameters.

Required: Yes

### Count

The current number of hosted zones that you can associate with the specified reusable delegation set.

Type: Long

Valid Range: Minimum value of 0.

### Limit

The current setting for the limit on hosted zones that you can associate with the specified reusable delegation set.

Type: ReusableDelegationSetLimit object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchDelegationSet**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetTrafficPolicy

Service: Amazon Route 53

Gets information about a specific traffic policy version.

For information about how of deleting a traffic policy affects the response from `GetTrafficPolicy`, see DeleteTrafficPolicy.

## Request Syntax

```
GET /2013-04-01/trafficpolicy/Id/Version HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the traffic policy that you want to get information about.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

### Version

The version number of the traffic policy that you want to get information about.

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetTrafficPolicyResponse>
```

```
   <TrafficPolicy>
      <Comment>string</Comment>
      <Document>string</Document>
      <Id>string</Id>
      <Name>string</Name>
      <Type>string</Type>
      <Version>integer</Version>
   </TrafficPolicy>
</GetTrafficPolicyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetTrafficPolicyResponse

Root level tag for the GetTrafficPolicyResponse parameters.

Required: Yes

### TrafficPolicy

A complex type that contains settings for the specified traffic policy.

Type: TrafficPolicy object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetTrafficPolicy.

```
GET /2013-04-01/trafficpolicy/12345678-abcd-9876-fedc-1a2b3c4de5f6/2
```

### Example Response

This example illustrates one usage of GetTrafficPolicy.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetTrafficPolicyResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <TrafficPolicy>
      <Id>12345678-abcd-9876-fedc-1a2b3c4de5f6</Id>
      <Version>2</Version>
      <Name>MyTrafficPolicy</Name>
      <Type>A</Type>
      <Document>traffic policy definition in JSON format</Document>
      <Comment>New traffic policy version</Comment>
   </TrafficPolicy>
</GetTrafficPolicyResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetTrafficPolicyInstance

Service: Amazon Route 53

Gets information about a specified traffic policy instance.

> **Note**
>
> Use `GetTrafficPolicyInstance` with the `id` of new traffic policy instance to confirm that the `CreateTrafficPolicyInstance` or an `UpdateTrafficPolicyInstance` request completed successfully. For more information, see the `State` response element.

> **Note**
>
> In the Route 53 console, traffic policy instances are known as policy records.

## Request Syntax

```
GET /2013-04-01/trafficpolicyinstance/Id HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the traffic policy instance that you want to get information about.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
<?xml version="1.0" encoding="UTF-8"?>
<GetTrafficPolicyInstanceResponse>
   <TrafficPolicyInstance>
      <HostedZoneId>string</HostedZoneId>
      <Id>string</Id>
      <Message>string</Message>
      <Name>string</Name>
      <State>string</State>
      <TrafficPolicyId>string</TrafficPolicyId>
      <TrafficPolicyType>string</TrafficPolicyType>
      <TrafficPolicyVersion>integer</TrafficPolicyVersion>
      <TTL>long</TTL>
   </TrafficPolicyInstance>
</GetTrafficPolicyInstanceResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### GetTrafficPolicyInstanceResponse

Root level tag for the GetTrafficPolicyInstanceResponse parameters.

Required: Yes

### TrafficPolicyInstance

A complex type that contains settings for the traffic policy instance.

Type: TrafficPolicyInstance object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicyInstance**

No traffic policy instance exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of GetTrafficPolicyInstance.

```
GET /2013-04-01/trafficpolicyinstance/12131415-abac-5432-caba-6f5e4d3c2b1a
```

### Example Response

This example illustrates one usage of GetTrafficPolicyInstance.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetTrafficPolicyInstanceResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstance>
      <Id>12131415-abac-5432-caba-6f5e4d3c2b1a</Id>
      <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
      <Name>www.example.com</Name>
      <TTL>300</TTL>
      <State>Applied</State>
      <Message/>
      <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
      <TrafficPolicyVersion>7</TrafficPolicyVersion>
      <TrafficPolicyType>A</TrafficPolicyType>
   </TrafficPolicyInstance>
</GetTrafficPolicyInstanceResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetTrafficPolicyInstanceCount

Service: Amazon Route 53

Gets the number of traffic policy instances that are associated with the current AWS account.

## Request Syntax

```
GET /2013-04-01/trafficpolicyinstancecount HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<GetTrafficPolicyInstanceCountResponse>
   <TrafficPolicyInstanceCount>integer</TrafficPolicyInstanceCount>
</GetTrafficPolicyInstanceCountResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**GetTrafficPolicyInstanceCountResponse**

Root level tag for the GetTrafficPolicyInstanceCountResponse parameters.

Required: Yes

**TrafficPolicyInstanceCount**

The number of traffic policy instances that are associated with the current AWS account.

Type: Integer

## Errors

For information about the errors that are common to all actions, see Common Error Types.

## Examples

### Example Request

This example illustrates one usage of GetTrafficPolicyInstanceCount.

```
GET /2013-04-01/trafficpolicyinstancecount/
```

### Example Response

This example illustrates one usage of GetTrafficPolicyInstanceCount.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetTrafficPolicyInstanceCountResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstanceCount>42</TrafficPolicyInstanceCount>
</GetTrafficPolicyInstanceCountResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListCidrBlocks

Service: Amazon Route 53

Returns a paginated list of location objects and their CIDR blocks.

## Request Syntax

```
GET /2013-04-01/cidrcollection/CidrCollectionId/cidrblocks?
location=LocationName&maxresults=MaxResults&nexttoken=NextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**CidrCollectionId**

The UUID of the CIDR collection.

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: Yes

**location**

The name of the CIDR collection location.

Length Constraints: Minimum length of 1. Maximum length of 16.

Pattern: `[0-9A-Za-z_\-]+`

**maxresults**

Maximum number of results you want returned.

**nexttoken**

An opaque pagination token to indicate where the service is to begin enumerating results.

Length Constraints: Maximum length of 1024.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListCidrBlocksResponse>
   <CidrBlocks>
      <CidrBlockSummary>
         <CidrBlock>string</CidrBlock>
         <LocationName>string</LocationName>
      </CidrBlockSummary>
   </CidrBlocks>
   <NextToken>string</NextToken>
</ListCidrBlocksResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListCidrBlocksResponse**

Root level tag for the ListCidrBlocksResponse parameters.

Required: Yes

**CidrBlocks**

A complex type that contains information about the CIDR blocks.

Type: Array of CidrBlockSummary objects

**NextToken**

An opaque pagination token to indicate where the service is to begin enumerating results.

If no value is provided, the listing of results starts from the beginning.

Type: String

Length Constraints: Maximum length of 1024.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchCidrCollectionException**

The CIDR collection you specified, doesn't exist.

HTTP Status Code: 404

**NoSuchCidrLocationException**

The CIDR collection location doesn't match any locations in your account.

HTTP Status Code: 404

## Examples

### Example request

This example illustrates one usage of ListCidrBlocks.

```
GET /2013-04-01/cidrcollection/c8c02a84-aaec-7a26-e0d2-d833a2f80106/cidrblocks?
location=location-1&maxresults=1
```

### Example response

This example illustrates one usage of ListCidrBlocks.

```
HTTP/1.1 200
<?xml version="1.0"?>
<ListCidrBlocksResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">

 <NextToken>eyJjb2xsZWN0aW9uSWQiOiIwNGJmZjEyZS04NTdjLTFiNmEtNTc2OS0wMTQwMzg4NmE1NzkiLCJsb2NhdGl
NextToken>
    <CidrBlocks>
      <member>
        <CidrBlock>1.1.1.0/24</CidrBlock>
```

```
        <LocationName>location-1</LocationName>
      </member>
   </CidrBlocks>
</ListCidrBlocksResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListCidrCollections

Service: Amazon Route 53

Returns a paginated list of CIDR collections in the AWS account (metadata only).

## Request Syntax

```
GET /2013-04-01/cidrcollection?maxresults=MaxResults&nexttoken=NextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxresults**

The maximum number of CIDR collections to return in the response.

**nexttoken**

An opaque pagination token to indicate where the service is to begin enumerating results.

If no value is provided, the listing of results starts from the beginning.

Length Constraints: Maximum length of 1024.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListCidrCollectionsResponse>
   <CidrCollections>
      <CollectionSummary>
         <Arn>string</Arn>
         <Id>string</Id>
         <Name>string</Name>
         <Version>long</Version>
      </CollectionSummary>
```

```
    </CidrCollections>
    <NextToken>string</NextToken>
</ListCidrCollectionsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListCidrCollectionsResponse**

Root level tag for the ListCidrCollectionsResponse parameters.

Required: Yes

**CidrCollections**

A complex type with information about the CIDR collection.

Type: Array of CollectionSummary objects

**NextToken**

An opaque pagination token to indicate where the service is to begin enumerating results.

If no value is provided, the listing of results starts from the beginning.

Type: String

Length Constraints: Maximum length of 1024.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example request

This example illustrates one usage of ListCidrCollections.

```
GET /2013-04-01/cidrcollection?maxresults=1
```

### Example response

This example illustrates one usage of ListCidrCollections.

```
HTTP/1.1 200
<?xml version="1.0"?>
<ListCidrCollectionsResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">>

 <NextToken>eyJjb2xsZWN0aW9uSWQiOiIwNGJmZjEyZS04NTdjLTFiNmEtNTc2OS0wMTQwMzg4NmE1NzkiLCJjb2xsZWN
NextToken>
     <CidrCollections>
       <member>
         <Arn>arn:aws:route53:::cidrcollection/c8c02a84-aaaa-bbbb-e0d2-d833a2f80106</
<Arn>
         <Id>c8c02a84-aaaa-bbbb-e0d2-d833a2f80106</Id>
         <Name>isp-city-cidrs</Name>
         <Version>1</ersion>
       </member>
    </CidrCollections>
</ListCidrCollectionsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListCidrLocations

Service: Amazon Route 53

Returns a paginated list of CIDR locations for the given collection (metadata only, does not include CIDR blocks).

## Request Syntax

```
GET /2013-04-01/cidrcollection/CidrCollectionId?
maxresults=MaxResults&nexttoken=NextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**CidrCollectionId**

The CIDR collection ID.

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: Yes

**maxresults**

The maximum number of CIDR collection locations to return in the response.

**nexttoken**

An opaque pagination token to indicate where the service is to begin enumerating results.

If no value is provided, the listing of results starts from the beginning.

Length Constraints: Maximum length of 1024.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
```

```
<ListCidrLocationsResponse>
   <CidrLocations>
      <LocationSummary>
         <LocationName>string</LocationName>
      </LocationSummary>
   </CidrLocations>
   <NextToken>string</NextToken>
</ListCidrLocationsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListCidrLocationsResponse**

Root level tag for the ListCidrLocationsResponse parameters.

Required: Yes

**CidrLocations**

A complex type that contains information about the list of CIDR locations.

Type: Array of LocationSummary objects

**NextToken**

An opaque pagination token to indicate where the service is to begin enumerating results.

If no value is provided, the listing of results starts from the beginning.

Type: String

Length Constraints: Maximum length of 1024.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchCidrCollectionException**

The CIDR collection you specified, doesn't exist.

HTTP Status Code: 404

## Examples

### Example request

This example illustrates one usage of ListCidrLocations.

```
GET /2013-04-01/cidrcollection/c8c02a84-aaaa-bbbb-e0d2-d833a2f80106?maxresults=1
```

### Example response

This example illustrates one usage of ListCidrLocations.

```
HTTP/1.1 200
<?xml version="1.0"?>
<ListCidrLocationsResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">>

 <NextToken>eyJjb2xsZWN0aW9uSWQiOiIwNGJmZjEyZS04NTdjLTFiNmEtNTc2OS0wMTQwMzg4NmE1NzkiLCJjb2xsZWN
NextToken>
      <CidrLocations>
         <member>
           <LocationName>location-1</LocationName>
         </member>
     </CidrLocations>
</ListCidrLocationsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListGeoLocations

Service: Amazon Route 53

Retrieves a list of supported geographic locations.

Countries are listed first, and continents are listed last. If Amazon Route 53 supports subdivisions for a country (for example, states or provinces), the subdivisions for that country are listed in alphabetical order immediately after the corresponding country.

Route 53 does not perform authorization for this API because it retrieves information that is already available to the public.

For a list of supported geolocation codes, see the GeoLocation data type.

## Request Syntax

```
GET /2013-04-01/geolocations?
maxitems=MaxItems&startcontinentcode=StartContinentCode&startcountrycode=StartCountryCode&start
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### maxitems

(Optional) The maximum number of geolocations to be included in the response body for this request. If more than `maxitems` geolocations remain to be listed, then the value of the `IsTruncated` element in the response is `true`.

### startcontinentcode

The code for the continent with which you want to start listing locations that Amazon Route 53 supports for geolocation. If Route 53 has already returned a page or more of results, if `IsTruncated` is true, and if `NextContinentCode` from the previous response has a value, enter that value in `startcontinentcode` to return the next page of results.

Include `startcontinentcode` only if you want to list continents. Don't include `startcontinentcode` when you're listing countries or countries with their subdivisions.

Length Constraints: Fixed length of 2.

**startcountrycode**

The code for the country with which you want to start listing locations that Amazon Route 53 supports for geolocation. If Route 53 has already returned a page or more of results, if `IsTruncated` is `true`, and if `NextCountryCode` from the previous response has a value, enter that value in `startcountrycode` to return the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 2.

**startsubdivisioncode**

The code for the state of the United States with which you want to start listing locations that Amazon Route 53 supports for geolocation. If Route 53 has already returned a page or more of results, if `IsTruncated` is `true`, and if `NextSubdivisionCode` from the previous response has a value, enter that value in `startsubdivisioncode` to return the next page of results.

To list subdivisions (U.S. states), you must include both `startcountrycode` and `startsubdivisioncode`.

Length Constraints: Minimum length of 1. Maximum length of 3.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListGeoLocationsResponse>
   <GeoLocationDetailsList>
      <GeoLocationDetails>
         <ContinentCode>string</ContinentCode>
         <ContinentName>string</ContinentName>
         <CountryCode>string</CountryCode>
         <CountryName>string</CountryName>
         <SubdivisionCode>string</SubdivisionCode>
         <SubdivisionName>string</SubdivisionName>
      </GeoLocationDetails>
   </GeoLocationDetailsList>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
```

```
    <NextContinentCode>string</NextContinentCode>
    <NextCountryCode>string</NextCountryCode>
    <NextSubdivisionCode>string</NextSubdivisionCode>
</ListGeoLocationsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListGeoLocationsResponse

Root level tag for the ListGeoLocationsResponse parameters.

Required: Yes

### GeoLocationDetailsList

A complex type that contains one `GeoLocationDetails` element for each location that Amazon Route 53 supports for geolocation.

Type: Array of GeoLocationDetails objects

### IsTruncated

A value that indicates whether more locations remain to be listed after the last location in this response. If so, the value of `IsTruncated` is `true`. To get more values, submit another request and include the values of `NextContinentCode`, `NextCountryCode`, and `NextSubdivisionCode` in the `startcontinentcode`, `startcountrycode`, and `startsubdivisioncode`, as applicable.

Type: Boolean

### MaxItems

The value that you specified for `MaxItems` in the request.

Type: String

### NextContinentCode

If `IsTruncated` is `true`, you can make a follow-up request to display more locations. Enter the value of `NextContinentCode` in the `startcontinentcode` parameter in another `ListGeoLocations` request.

Type: String

Length Constraints: Fixed length of 2.

**NextCountryCode**

If `IsTruncated` is `true`, you can make a follow-up request to display more locations. Enter the value of `NextCountryCode` in the `startcountrycode` parameter in another `ListGeoLocations` request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2.

**NextSubdivisionCode**

If `IsTruncated` is `true`, you can make a follow-up request to display more locations. Enter the value of `NextSubdivisionCode` in the `startsubdivisioncode` parameter in another `ListGeoLocations` request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 3.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example Request

The following request lists locations beginning with the United States state of Oregon.

```
GET /2013-04-01/geolocations?startcountrycode=US&startsubdivisioncode=OR&maxitems=2
```

### Example Response

This example illustrates one usage of ListGeoLocations.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListGeoLocationsResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <GeoLocationDetailsList>
      <GeoLocationDetails>
         <CountryCode>US</CountryCode>
         <CountryName>USA</CountryName>
         <SubdivisionCode>OR</SubdivisionCode>
         <SubdivisionName>Oregon</SubdivisionName>
      </GeoLocationDetails>
      <GeoLocationDetails>
         <CountryCode>US</CountryCode>
         <CountryName>USA</CountryName>
         <SubdivisionCode>PA</SubdivisionCode>
         <SubdivisionName>Pennsylvania</SubdivisionName>
      </GeoLocationDetails>
   </GeoLocationDetailsList>
   <IsTruncated>true</IsTruncated>
   <NextCountryCode>US</NextCountryCode>
   <NextSubdivisionCode>RI</NextSubdivisionCode>
   <MaxItems>2</MaxItems>
</ListGeoLocationsResponse>
```

### Example Follow-up Request

This example shows the follow-up request to the previous request. In this request, the value of `NextCountryCode` from the previous response is specified as the value for `startcountrycode`, and `NextSubdivisionCode` is specified as the value for `startsubdivisioncode`.

```
GET /2013-04-01/geolocations?startcountrycode=US&startsubdivisioncode=RI&maxitems=2
```

### Example Follow-up Response

This example illustrates one usage of ListGeoLocations.

```
HTTP/1.1 200 OK
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ListGeoLocationsResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <GeoLocationDetailsList>
      <GeoLocationDetails>
         <CountryCode>US</CountryCode>
         <CountryName>USA</CountryName>
         <SubdivisionCode>RI</SubdivisionCode>
         <SubdivisionName>Rhode Island</SubdivisionName>
      </GeoLocationDetails>
      <GeoLocationDetails>
         <CountryCode>US</CountryCode>
         <CountryName>USA</CountryName>
         <SubdivisionCode>SC</SubdivisionCode>
         <SubdivisionName>South Carolina</SubdivisionName>
      </GeoLocationDetails>
   </GeoLocationDetailsList>
   <IsTruncated>true</IsTruncated>
   <NextCountryCode>US</NextCountryCode>
   <NextSubdivisionCode>SD</NextSubdivisionCode>
   <MaxItems>2</MaxItems>
</ListGeoLocationsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListHealthChecks

Service: Amazon Route 53

Retrieve a list of the health checks that are associated with the current AWS account.

## Request Syntax

```
GET /2013-04-01/healthcheck?marker=Marker&maxitems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**marker**

If the value of `IsTruncated` in the previous response was `true`, you have more health checks. To get another group, submit another `ListHealthChecks` request.

For the value of `marker`, specify the value of `NextMarker` from the previous response, which is the ID of the first health check that Amazon Route 53 will return if you submit another request.

If the value of `IsTruncated` in the previous response was `false`, there are no more health checks to get.

Length Constraints: Maximum length of 64.

**maxitems**

The maximum number of health checks that you want `ListHealthChecks` to return in response to the current request. Amazon Route 53 returns a maximum of 1000 items. If you set `MaxItems` to a value greater than 1000, Route 53 returns only the first 1000 health checks.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListHealthChecksResponse>
   <HealthChecks>
```

```
      <HealthCheck>
         <CallerReference>string</CallerReference>
         <CloudWatchAlarmConfiguration>
            <ComparisonOperator>string</ComparisonOperator>
            <Dimensions>
               <Dimension>
                  <Name>string</Name>
                  <Value>string</Value>
               </Dimension>
            </Dimensions>
            <EvaluationPeriods>integer</EvaluationPeriods>
            <MetricName>string</MetricName>
            <Namespace>string</Namespace>
            <Period>integer</Period>
            <Statistic>string</Statistic>
            <Threshold>double</Threshold>
         </CloudWatchAlarmConfiguration>
         <HealthCheckConfig>
            <AlarmIdentifier>
               <Name>string</Name>
               <Region>string</Region>
            </AlarmIdentifier>
            <ChildHealthChecks>
               <ChildHealthCheck>string</ChildHealthCheck>
            </ChildHealthChecks>
            <Disabled>boolean</Disabled>
            <EnableSNI>boolean</EnableSNI>
            <FailureThreshold>integer</FailureThreshold>
            <FullyQualifiedDomainName>string</FullyQualifiedDomainName>
            <HealthThreshold>integer</HealthThreshold>
            <InsufficientDataHealthStatus>string</InsufficientDataHealthStatus>
            <Inverted>boolean</Inverted>
            <IPAddress>string</IPAddress>
            <MeasureLatency>boolean</MeasureLatency>
            <Port>integer</Port>
            <Regions>
               <Region>string</Region>
            </Regions>
            <RequestInterval>integer</RequestInterval>
            <ResourcePath>string</ResourcePath>
            <RoutingControlArn>string</RoutingControlArn>
            <SearchString>string</SearchString>
            <Type>string</Type>
         </HealthCheckConfig>
```

```
            <HealthCheckVersion>long</HealthCheckVersion>
            <Id>string</Id>
            <LinkedService>
               <Description>string</Description>
               <ServicePrincipal>string</ServicePrincipal>
            </LinkedService>
         </HealthCheck>
      </HealthChecks>
      <IsTruncated>boolean</IsTruncated>
      <Marker>string</Marker>
      <MaxItems>string</MaxItems>
      <NextMarker>string</NextMarker>
</ListHealthChecksResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListHealthChecksResponse

Root level tag for the ListHealthChecksResponse parameters.

Required: Yes

### HealthChecks

A complex type that contains one `HealthCheck` element for each health check that is associated with the current AWS account.

Type: Array of HealthCheck objects

### IsTruncated

A flag that indicates whether there are more health checks to be listed. If the response was truncated, you can get the next group of health checks by submitting another `ListHealthChecks` request and specifying the value of `NextMarker` in the `marker` parameter.

Type: Boolean

**Marker**

For the second and subsequent calls to `ListHealthChecks`, `Marker` is the value that you specified for the `marker` parameter in the previous request.

Type: String

Length Constraints: Maximum length of 64.

**MaxItems**

The value that you specified for the `maxitems` parameter in the call to `ListHealthChecks` that produced the current response.

Type: String

**NextMarker**

If `IsTruncated` is `true`, the value of `NextMarker` identifies the first health check that Amazon Route 53 returns if you submit another `ListHealthChecks` request and specify the value of `NextMarker` in the `marker` parameter.

Type: String

Length Constraints: Maximum length of 64.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**IncompatibleVersion**

The resource you're trying to access is unsupported on this Amazon Route 53 endpoint.

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListHealthChecks.

```
GET /2013-04-01/healthcheck?maxitems=1
```

### Example Response

This example illustrates one usage of ListHealthChecks.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHealthChecksResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthChecks>
      <HealthCheck>
         <Id>abcdef11-2222-3333-4444-555555fedcba</Id>
         <CallerReference>example.com 192.0.2.17</CallerReference>
         <HealthCheckConfig>
            <IPAddress>192.0.2.17</IPAddress>
            <Port>80</Port>
            <Type>HTTP</Type>
            <ResourcePath>/docs/route-53-health-check.html</ResourcePath>
            <FullyQualifiedDomainName>example.com</FullyQualifiedDomainName>
            <RequestInterval>30</RequestInterval>
            <FailureThreshold>3</FailureThreshold>
            <MeasureLatency>true</MeasureLatency>
            <EnableSNI>true</EnableSNI>
            <Inverted>false</Inverted>
         </HealthCheckConfig>
         <HealthCheckVersion>2</HealthCheckVersion>
      </HealthCheck>
   </HealthChecks>
   <IsTruncated>true</IsTruncated>
   <NextMarker>aaaaaaaa-1234-5678-9012-bbbbbbcccccc</NextMarker>
   <MaxItems>1</MaxItems>
</ListHealthChecksResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListHostedZones

Service: Amazon Route 53

Retrieves a list of the public and private hosted zones that are associated with the current AWS account. The response includes a `HostedZones` child element for each hosted zone.

Amazon Route 53 returns a maximum of 100 items in each response. If you have a lot of hosted zones, you can use the `maxitems` parameter to list them in groups of up to 100.

## Request Syntax

```
GET /2013-04-01/hostedzone?
delegationsetid=DelegationSetId&hostedzonetype=HostedZoneType&marker=Marker&maxitems=MaxItems
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**delegationsetid**

If you're using reusable delegation sets and you want to list all of the hosted zones that are associated with a reusable delegation set, specify the ID of that reusable delegation set.

Length Constraints: Maximum length of 32.

**hostedzonetype**

(Optional) Specifies if the hosted zone is private.

Valid Values: `PrivateHostedZone`

**marker**

If the value of `IsTruncated` in the previous response was `true`, you have more hosted zones. To get more hosted zones, submit another `ListHostedZones` request.

For the value of `marker`, specify the value of `NextMarker` from the previous response, which is the ID of the first hosted zone that Amazon Route 53 will return if you submit another request.

If the value of `IsTruncated` in the previous response was `false`, there are no more hosted zones to get.

Length Constraints: Maximum length of 64.

**maxitems**

(Optional) The maximum number of hosted zones that you want Amazon Route 53 to return. If you have more than `maxitems` hosted zones, the value of `IsTruncated` in the response is `true`, and the value of `NextMarker` is the hosted zone ID of the first hosted zone that Route 53 will return if you submit another request.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesResponse>
   <HostedZones>
      <HostedZone>
         <CallerReference>string</CallerReference>
         <Config>
            <Comment>string</Comment>
            <PrivateZone>boolean</PrivateZone>
         </Config>
         <Features>
            <AcceleratedRecoveryStatus>string</AcceleratedRecoveryStatus>
            <FailureReasons>
               <AcceleratedRecovery>string</AcceleratedRecovery>
            </FailureReasons>
         </Features>
         <Id>string</Id>
         <LinkedService>
            <Description>string</Description>
            <ServicePrincipal>string</ServicePrincipal>
         </LinkedService>
         <Name>string</Name>
         <ResourceRecordSetCount>long</ResourceRecordSetCount>
      </HostedZone>
   </HostedZones>
   <IsTruncated>boolean</IsTruncated>
   <Marker>string</Marker>
```

```
   <MaxItems>string</MaxItems>
   <NextMarker>string</NextMarker>
</ListHostedZonesResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListHostedZonesResponse**

Root level tag for the ListHostedZonesResponse parameters.

Required: Yes

**HostedZones**

A complex type that contains general information about the hosted zone.

Type: Array of HostedZone objects

**IsTruncated**

A flag indicating whether there are more hosted zones to be listed. If the response was truncated, you can get more hosted zones by submitting another `ListHostedZones` request and specifying the value of `NextMarker` in the `marker` parameter.

Type: Boolean

**Marker**

For the second and subsequent calls to `ListHostedZones`, `Marker` is the value that you specified for the `marker` parameter in the request that produced the current response.

Type: String

Length Constraints: Maximum length of 64.

**MaxItems**

The value that you specified for the `maxitems` parameter in the call to `ListHostedZones` that produced the current response.

Type: String

**NextMarker**

If `IsTruncated` is `true`, the value of `NextMarker` identifies the first hosted zone in the next group of hosted zones. Submit another `ListHostedZones` request, and specify the value of `NextMarker` from the response in the `marker` parameter.

This element is present only if `IsTruncated` is `true`.

Type: String

Length Constraints: Maximum length of 64.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DelegationSetNotReusable**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchDelegationSet**

A reusable delegation set with the specified ID does not exist.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListHostedZones.

```
GET /2013-04-01/hostedzone?maxitems=1
```

### Example Response

This example illustrates one usage of ListHostedZones.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZones>
      <HostedZone>
         <Id>/hostedzone/Z111111QQQQQQQ</Id>
         <Name>example.com.</Name>
         <CallerReference>MyUniqueIdentifier1</CallerReference>
         <Config>
            <Comment>This is my first hosted zone.</Comment>
            <PrivateZone>false</PrivateZone>
         </Config>
         <ResourceRecordSetCount>42</ResourceRecordSetCount>
      </HostedZone>
   </HostedZones>
   <IsTruncated>true</IsTruncated>
   <NextMarker>Z222222VVVVVVV</NextMarker>
   <MaxItems>1</MaxItems>
</ListHostedZonesResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListHostedZonesByName

Service: Amazon Route 53

Retrieves a list of your hosted zones in lexicographic order. The response includes a `HostedZones` child element for each hosted zone created by the current AWS account.

`ListHostedZonesByName` sorts hosted zones by name with the labels reversed. For example:

`com.example.www.`

Note the trailing dot, which can change the sort order in some circumstances.

If the domain name includes escape characters or Punycode, `ListHostedZonesByName` alphabetizes the domain name using the escaped or Punycoded value, which is the format that Amazon Route 53 saves in its database. For example, to create a hosted zone for exämple.com, you specify ex\344mple.com for the domain name. `ListHostedZonesByName` alphabetizes it as:

`com.ex\344mple.`

The labels are reversed and alphabetized using the escaped value. For more information about valid domain name formats, including internationalized domain names, see DNS Domain Name Format in the *Amazon Route 53 Developer Guide*.

Route 53 returns up to 100 items in each response. If you have a lot of hosted zones, use the `MaxItems` parameter to list them in groups of up to 100. The response includes values that help navigate from one group of `MaxItems` hosted zones to the next:

- The `DNSName` and `HostedZoneId` elements in the response contain the values, if any, specified for the `dnsname` and `hostedzoneid` parameters in the request that produced the current response.
- The `MaxItems` element in the response contains the value, if any, that you specified for the `maxitems` parameter in the request that produced the current response.
- If the value of `IsTruncated` in the response is true, there are more hosted zones associated with the current AWS account.

  If `IsTruncated` is false, this response includes the last hosted zone that is associated with the current account. The `NextDNSName` element and `NextHostedZoneId` elements are omitted from the response.
- The `NextDNSName` and `NextHostedZoneId` elements in the response contain the domain name and the hosted zone ID of the next hosted zone that is associated with the current AWS

account. If you want to list more hosted zones, make another call to `ListHostedZonesByName`, and specify the value of `NextDNSName` and `NextHostedZoneId` in the `dnsname` and `hostedzoneid` parameters, respectively.

## Request Syntax

```
GET /2013-04-01/hostedzonesbyname?
dnsname=DNSName&hostedzoneid=HostedZoneId&maxitems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### dnsname

(Optional) For your first request to `ListHostedZonesByName`, include the `dnsname` parameter only if you want to specify the name of the first hosted zone in the response. If you don't include the `dnsname` parameter, Amazon Route 53 returns all of the hosted zones that were created by the current AWS account, in ASCII order. For subsequent requests, include both `dnsname` and `hostedzoneid` parameters. For `dnsname`, specify the value of `NextDNSName` from the previous response.

Length Constraints: Maximum length of 1024.

### hostedzoneid

(Optional) For your first request to `ListHostedZonesByName`, do not include the `hostedzoneid` parameter.

If you have more hosted zones than the value of `maxitems`, `ListHostedZonesByName` returns only the first `maxitems` hosted zones. To get the next group of `maxitems` hosted zones, submit another request to `ListHostedZonesByName` and include both `dnsname` and `hostedzoneid` parameters. For the value of `hostedzoneid`, specify the value of the `NextHostedZoneId` element from the previous response.

Length Constraints: Maximum length of 32.

### maxitems

The maximum number of hosted zones to be included in the response body for this request. If you have more than `maxitems` hosted zones, then the value of the `IsTruncated` element in

the response is true, and the values of `NextDNSName` and `NextHostedZoneId` specify the first hosted zone in the next group of `maxitems` hosted zones.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesByNameResponse>
   <DNSName>string</DNSName>
   <HostedZoneId>string</HostedZoneId>
   <HostedZones>
      <HostedZone>
         <CallerReference>string</CallerReference>
         <Config>
            <Comment>string</Comment>
            <PrivateZone>boolean</PrivateZone>
         </Config>
         <Features>
            <AcceleratedRecoveryStatus>string</AcceleratedRecoveryStatus>
            <FailureReasons>
               <AcceleratedRecovery>string</AcceleratedRecovery>
            </FailureReasons>
         </Features>
         <Id>string</Id>
         <LinkedService>
            <Description>string</Description>
            <ServicePrincipal>string</ServicePrincipal>
         </LinkedService>
         <Name>string</Name>
         <ResourceRecordSetCount>long</ResourceRecordSetCount>
      </HostedZone>
   </HostedZones>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
   <NextDNSName>string</NextDNSName>
   <NextHostedZoneId>string</NextHostedZoneId>
</ListHostedZonesByNameResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListHostedZonesByNameResponse**

Root level tag for the ListHostedZonesByNameResponse parameters.

Required: Yes

**DNSName**

For the second and subsequent calls to `ListHostedZonesByName`, `DNSName` is the value that you specified for the `dnsname` parameter in the request that produced the current response.

Type: String

Length Constraints: Maximum length of 1024.

**HostedZoneId**

The ID that Amazon Route 53 assigned to the hosted zone when you created it.

Type: String

Length Constraints: Maximum length of 32.

**HostedZones**

A complex type that contains general information about the hosted zone.

Type: Array of HostedZone objects

**IsTruncated**

A flag that indicates whether there are more hosted zones to be listed. If the response was truncated, you can get the next group of `maxitems` hosted zones by calling `ListHostedZonesByName` again and specifying the values of `NextDNSName` and `NextHostedZoneId` elements in the `dnsname` and `hostedzoneid` parameters.

Type: Boolean

### MaxItems

The value that you specified for the `maxitems` parameter in the call to `ListHostedZonesByName` that produced the current response.

Type: String

### NextDNSName

If `IsTruncated` is true, the value of `NextDNSName` is the name of the first hosted zone in the next group of `maxitems` hosted zones. Call `ListHostedZonesByName` again and specify the value of `NextDNSName` and `NextHostedZoneId` in the `dnsname` and `hostedzoneid` parameters, respectively.

This element is present only if `IsTruncated` is `true`.

Type: String

Length Constraints: Maximum length of 1024.

### NextHostedZoneId

If `IsTruncated` is `true`, the value of `NextHostedZoneId` identifies the first hosted zone in the next group of `maxitems` hosted zones. Call `ListHostedZonesByName` again and specify the value of `NextDNSName` and `NextHostedZoneId` in the `dnsname` and `hostedzoneid` parameters, respectively.

This element is present only if `IsTruncated` is `true`.

Type: String

Length Constraints: Maximum length of 32.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidDomainName

The specified domain name is not valid.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListHostedZonesByName.

```
GET /2013-04-01/hostedzonesbyname?maxitems=1
```

### Example Response

This example illustrates one usage of ListHostedZonesByName.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesByNameResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZones>
      <HostedZone>
         <Id>/hostedzone/Z111111QQQQQQQ</Id>
         <Name>example.com.</Name>
         <CallerReference>MyUniqueIdentifier1</CallerReference>
         <Config>
            <Comment>This is my first hosted zone.</Comment>
            <PrivateZone>false</PrivateZone>
         </Config>
         <ResourceRecordSetCount>42</ResourceRecordSetCount>
      </HostedZone>
   </HostedZones>
   <IsTruncated>true</IsTruncated>
   <NextDNSName>example2.com</NextDNSName>
   <NextHostedZoneId>Z222222VVVVVVV</NextHostedZoneId>
   <MaxItems>1</MaxItems>
</ListHostedZonesByNameResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListHostedZonesByVPC

Service: Amazon Route 53

Lists all the private hosted zones that a specified VPC is associated with, regardless of which AWS account or AWS service owns the hosted zones. The `HostedZoneOwner` structure in the response contains one of the following values:

- An `OwningAccount` element, which contains the account number of either the current AWS account or another AWS account. Some services, such as AWS Cloud Map, create hosted zones using the current account.
- An `OwningService` element, which identifies the AWS service that created and owns the hosted zone. For example, if a hosted zone was created by Amazon Elastic File System (Amazon EFS), the value of `Owner` is `efs.amazonaws.com`.

`ListHostedZonesByVPC` returns the hosted zones associated with the specified VPC and does not reflect the hosted zone associations to VPCs via Route 53 Profiles. To get the associations to a Profile, call the ListProfileResourceAssociations API.

**Note**

When listing private hosted zones, the hosted zone and the Amazon VPC must belong to the same partition where the hosted zones were created. A partition is a group of AWS Regions. Each AWS account is scoped to one partition.
The following are the supported partitions:

- `aws` - AWS Regions
- `aws-cn` - China Regions
- `aws-us-gov` - AWS GovCloud (US) Region

For more information, see Access Management in the *AWS General Reference*.

## Request Syntax

```
GET /2013-04-01/hostedzonesbyvpc?
maxitems=MaxItems&nexttoken=NextToken&vpcid=VPCId&vpcregion=VPCRegion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxitems**

(Optional) The maximum number of hosted zones that you want Amazon Route 53 to return. If the specified VPC is associated with more than `MaxItems` hosted zones, the response includes a `NextToken` element. `NextToken` contains an encrypted token that identifies the first hosted zone that Route 53 will return if you submit another request.

**nexttoken**

If the previous response included a `NextToken` element, the specified VPC is associated with more hosted zones. To get more hosted zones, submit another `ListHostedZonesByVPC` request.

For the value of `NextToken`, specify the value of `NextToken` from the previous response.

If the previous response didn't include a `NextToken` element, there are no more hosted zones to get.

Length Constraints: Maximum length of 1024.

**vpcid**

The ID of the Amazon VPC that you want to list hosted zones for.

Length Constraints: Maximum length of 1024.

Required: Yes

**vpcregion**

For the Amazon VPC that you specified for `VPCId`, the AWS Region that you created the VPC in.

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-east-2 | us-west-1 | us-west-2 | eu-west-1 | eu-west-2 | eu-west-3 | eu-central-1 | eu-central-2 | ap-east-1 | me-south-1 | us-gov-west-1 | us-gov-east-1 | us-iso-east-1 | us-iso-west-1 | us-isob-east-1 | me-central-1 | ap-southeast-1 | ap-southeast-2 | ap-`

southeast-3 | ap-south-1 | ap-south-2 | ap-northeast-1 | ap-northeast-2 | ap-northeast-3 | eu-north-1 | sa-east-1 | ca-central-1 | cn-north-1 | cn-northwest-1 | af-south-1 | eu-south-1 | eu-south-2 | ap-southeast-4 | il-central-1 | ca-west-1 | ap-southeast-5 | mx-central-1 | us-isof-south-1 | us-isof-east-1 | ap-southeast-7 | ap-east-2 | eu-isoe-west-1 | ap-southeast-6 | us-isob-west-1 | eusc-de-east-1

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesByVPCResponse>
   <HostedZoneSummaries>
      <HostedZoneSummary>
         <HostedZoneId>string</HostedZoneId>
         <Name>string</Name>
         <Owner>
            <OwningAccount>string</OwningAccount>
            <OwningService>string</OwningService>
         </Owner>
      </HostedZoneSummary>
   </HostedZoneSummaries>
   <MaxItems>string</MaxItems>
   <NextToken>string</NextToken>
</ListHostedZonesByVPCResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListHostedZonesByVPCResponse

Root level tag for the ListHostedZonesByVPCResponse parameters.

Required: Yes

**HostedZoneSummaries**

A list that contains one `HostedZoneSummary` element for each hosted zone that the specified Amazon VPC is associated with. Each `HostedZoneSummary` element contains the hosted zone name and ID, and information about who owns the hosted zone.

Type: Array of HostedZoneSummary objects

**MaxItems**

The value that you specified for `MaxItems` in the most recent `ListHostedZonesByVPC` request.

Type: String

**NextToken**

The value that you will use for `NextToken` in the next `ListHostedZonesByVPC` request.

Type: String

Length Constraints: Maximum length of 1024.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidPaginationToken**

The value that you specified to get the second or subsequent page of results is invalid.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListHostedZonesByVPC.

```
GET /2013-04-01/hostedzonesbyvpc?maxitems=10&vpcid=vpc-a1b2c3d4e5&vpcregion=us-west-1
 HTTP/1.1
```

### Example Response

This example illustrates one usage of ListHostedZonesByVPC.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesByVPCResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZoneSummaries>
      <HostedZoneSummary>
         <HostedZoneId>Z111111QQQQQQQ</HostedZoneId>
         <Name>example.com</Name>
         <Owner>
           <OwningAccount>123456789012</OwningAccount>
         </Owner>
      </HostedZoneSummary>
      <HostedZoneSummary>
         <HostedZoneId>Z222222RRRRRRR</HostedZoneId>
         <Name>example.net</Name>
         <Owner>
            <OwningAccount>111122223333</OwningAccount>
         </Owner>
      </HostedZoneSummary>
      <HostedZoneSummary>
         <HostedZoneId>Z333333SSSSSSS</HostedZoneId>
         <Name>example.org</Name>
         <Owner>
            <OwningService>efs.amazonaws.com</OwningService>
         </Owner>
      </HostedZoneSummary>
   </HostedZoneSummaries>
   <MaxItems>10</MaxItems>
</ListHostedZonesByVPCResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListQueryLoggingConfigs

Service: Amazon Route 53

Lists the configurations for DNS query logging that are associated with the current AWS account or the configuration that is associated with a specified hosted zone.

For more information about DNS query logs, see CreateQueryLoggingConfig. Additional information, including the format of DNS query logs, appears in Logging DNS Queries in the *Amazon Route 53 Developer Guide*.

## Request Syntax

```
GET /2013-04-01/queryloggingconfig?
hostedzoneid=HostedZoneId&maxresults=MaxResults&nexttoken=NextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**hostedzoneid**

(Optional) If you want to list the query logging configuration that is associated with a hosted zone, specify the ID in `HostedZoneId`.

If you don't specify a hosted zone ID, `ListQueryLoggingConfigs` returns all of the configurations that are associated with the current AWS account.

Length Constraints: Maximum length of 32.

**maxresults**

(Optional) The maximum number of query logging configurations that you want Amazon Route 53 to return in response to the current request. If the current AWS account has more than `MaxResults` configurations, use the value of NextToken in the response to get the next page of results.

If you don't specify a value for `MaxResults`, Route 53 returns up to 100 configurations.

**nexttoken**

(Optional) If the current AWS account has more than `MaxResults` query logging configurations, use `NextToken` to get the second and subsequent pages of results.

For the first `ListQueryLoggingConfigs` request, omit this value.

For the second and subsequent requests, get the value of `NextToken` from the previous response and specify that value for `NextToken` in the request.

Length Constraints: Maximum length of 1024.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListQueryLoggingConfigsResponse>
   <NextToken>string</NextToken>
   <QueryLoggingConfigs>
      <QueryLoggingConfig>
         <CloudWatchLogsLogGroupArn>string</CloudWatchLogsLogGroupArn>
         <HostedZoneId>string</HostedZoneId>
         <Id>string</Id>
      </QueryLoggingConfig>
   </QueryLoggingConfigs>
</ListQueryLoggingConfigsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListQueryLoggingConfigsResponse

Root level tag for the ListQueryLoggingConfigsResponse parameters.

Required: Yes

### NextToken

If a response includes the last of the query logging configurations that are associated with the current AWS account, `NextToken` doesn't appear in the response.

If a response doesn't include the last of the configurations, you can get more configurations by submitting another ListQueryLoggingConfigs request. Get the value of `NextToken` that Amazon Route 53 returned in the previous response and include it in `NextToken` in the next request.

Type: String

Length Constraints: Maximum length of 1024.

**QueryLoggingConfigs**

An array that contains one QueryLoggingConfig element for each configuration for DNS query logging that is associated with the current AWS account.

Type: Array of QueryLoggingConfig objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidPaginationToken**

The value that you specified to get the second or subsequent page of results is invalid.

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## Examples

### Example Request

The following request gets the configuration that is associated with the hosted zone Z1D633PJN98FT9.

```
GET /2013-04-01/queryloggingconfig HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ListQueryLoggingConfigsRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
   <MaxResults>1</MaxResults>
</ListQueryLoggingConfigsRequest>
```

### Example Response

This example illustrates one usage of ListQueryLoggingConfigs.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListQueryLoggingConfigsResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <NextToken>87654321-dcba-1234-abcd-1a2b3c4d5e70</NextToken>
   <QueryLoggingConfigs>
      <QueryLoggingConfig>
         <Id>87654321-dcba-1234-abcd-1a2b3c4d5e6f</Id>
         <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
         <CloudWatchLogsLogGroupArn>arn:aws:logs:us-east-1:111111111111:log-
group:example.com:*</CloudWatchLogsLogGroupArn>
      </QueryLoggingConfig>
   </QueryLoggingConfigs>
</ListQueryLoggingConfigsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResourceRecordSetProtections

Service: Amazon Route 53

Lists the resource record set protections in a hosted zone. We recommend using pagination to ensure that the operation returns quickly and successfully.

If the response includes a `NextToken` element, there are more protections to list. To get the next page of results, submit another request and specify the value of `NextToken` in the `NextToken` parameter.

## Request Syntax

```
GET /2013-04-01/hostedzone/Id/rrsetprotection?
maxresults=MaxResults&name=StartRecordName&nexttoken=NextToken&type=StartRecordType
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**Id**

The ID of the hosted zone that contains the protections that you want to list.

Length Constraints: Maximum length of 32.

Required: Yes

**maxresults**

The maximum number of protections that you want Route 53 to return in this response. If you don't specify a value, or if you specify a value greater than 300, Route 53 returns up to 300 protections.

**name**

The first resource record set name that you want Route 53 to list protections for. If you don't specify a value, the list starts with the first protection in the hosted zone.

If you specify `NextToken`, Route 53 ignores `StartRecordName`.

Length Constraints: Maximum length of 1024.

**nexttoken**

If the response to a previous ListResourceRecordSetProtections request included a NextToken element, specify that value here to get the next page of results.

Length Constraints: Maximum length of 1024.

**type**

The first resource record set type, within the name specified by StartRecordName, that you want Route 53 to list protections for. If you specify StartRecordType, you must also specify StartRecordName.

If you specify NextToken, Route 53 ignores StartRecordType.

Valid Values: SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListResourceRecordSetProtectionsResponse>
   <NextToken>string</NextToken>
   <ResourceRecordSetProtections>
      <ResourceRecordSetProtection>
         <Comment>string</Comment>
         <RecordName>string</RecordName>
         <RecordType>string</RecordType>
      </ResourceRecordSetProtection>
   </ResourceRecordSetProtections>
</ListResourceRecordSetProtectionsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListResourceRecordSetProtectionsResponse**

Root level tag for the ListResourceRecordSetProtectionsResponse parameters.

Required: Yes

**NextToken**

If there are more protections to list, a token that you can specify in the `NextToken` parameter of another request to get the next page of results. If there are no more protections to list, the response doesn't include `NextToken`.

Type: String

Length Constraints: Maximum length of 1024.

**ResourceRecordSetProtections**

The protections in the hosted zone. The list is empty if the hosted zone has no protections.

Type: Array of ResourceRecordSetProtection objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidPaginationToken**

The value that you specified to get the second or subsequent page of results is invalid.

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResourceRecordSets

Service: Amazon Route 53

Lists the resource record sets in a specified hosted zone.

`ListResourceRecordSets` returns up to 300 resource record sets at a time in ASCII order, beginning at a position specified by the `name` and `type` elements.

**Sort order**

`ListResourceRecordSets` sorts results first by DNS name with the labels reversed, for example:

`com.example.www.`

Note the trailing dot, which can change the sort order when the record name contains characters that appear before `.` (decimal 46) in the ASCII table. These characters include the following: `! " # $ % & ' ( ) * + , -`

When multiple records have the same DNS name, `ListResourceRecordSets` sorts results by the record type.

**Specifying where to start listing records**

You can use the name and type elements to specify the resource record set that the list begins with:

If you do not specify Name or Type

The results begin with the first resource record set that the hosted zone contains.

If you specify Name but not Type

The results begin with the first resource record set in the list whose name is greater than or equal to `Name`.

If you specify Type but not Name

Amazon Route 53 returns the `InvalidInput` error.

If you specify both Name and Type

The results begin with the first resource record set in the list whose name is greater than or equal to `Name`, and whose type is greater than or equal to `Type`.

> **Note**
>
> Type is only used to sort between records with the same record Name.

**Resource record sets that are PENDING**

This action returns the most current version of the records. This includes records that are `PENDING`, and that are not yet available on all Route 53 DNS servers.

**Changing resource record sets**

To ensure that you get an accurate listing of the resource record sets for a hosted zone at a point in time, do not submit a `ChangeResourceRecordSets` request while you're paging through the results of a `ListResourceRecordSets` request. If you do, some pages may display results without the latest changes while other pages display results with the latest changes.

**Displaying the next page of results**

If a `ListResourceRecordSets` command returns more than one page of results, the value of `IsTruncated` is `true`. To display the next page of results, get the values of `NextRecordName`, `NextRecordType`, and `NextRecordIdentifier` (if any) from the response. Then submit another `ListResourceRecordSets` request, and specify those values for `StartRecordName`, `StartRecordType`, and `StartRecordIdentifier`.

## Request Syntax

```
GET /2013-04-01/hostedzone/Id/rrset?
identifier=StartRecordIdentifier&maxitems=MaxItems&name=StartRecordName&type=StartRecordType
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone that contains the resource record sets that you want to list.

Length Constraints: Maximum length of 32.

Required: Yes

**identifier**

*Resource record sets that have a routing policy other than simple:* If results were truncated for a given DNS name and type, specify the value of `NextRecordIdentifier` from the previous response to get the next resource record set that has the current DNS name and type.

Length Constraints: Minimum length of 1. Maximum length of 128.

**maxitems**

(Optional) The maximum number of resource records sets to include in the response body for this request. If the response includes more than `maxitems` resource record sets, the value of the `IsTruncated` element in the response is `true`, and the values of the `NextRecordName` and `NextRecordType` elements in the response identify the first resource record set in the next group of `maxitems` resource record sets.

**name**

The first name in the lexicographic ordering of resource record sets that you want to list. If the specified record name doesn't exist, the results begin with the first resource record set that has a name greater than the value of `name`.

Length Constraints: Maximum length of 1024.

**type**

The type of resource record set to begin the record listing from.

Valid values for basic resource record sets: `A` | `AAAA` | `CAA` | `CNAME` | `MX` | `NAPTR` | `NS` | `PTR` | `SOA` | `SPF` | `SRV` | `TXT`

Values for weighted, latency, geolocation, and failover resource record sets: `A` | `AAAA` | `CAA` | `CNAME` | `MX` | `NAPTR` | `PTR` | `SPF` | `SRV` | `TXT`

Values for alias resource record sets:

- **API Gateway custom regional API or edge-optimized API**: A
- **CloudFront distribution**: A or AAAA
- **Elastic Beanstalk environment that has a regionalized subdomain**: A
- **Elastic Load Balancing load balancer**: A | AAAA
- **S3 bucket**: A

- **VPC interface VPC endpoint**: A
- **Another resource record set in this hosted zone:** The type of the resource record set that the alias references.

Constraint: Specifying `type` without specifying `name` returns an `InvalidInput` error.

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListResourceRecordSetsResponse>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
   <NextRecordIdentifier>string</NextRecordIdentifier>
   <NextRecordName>string</NextRecordName>
   <NextRecordType>string</NextRecordType>
   <ResourceRecordSets>
      <ResourceRecordSet>
         <AliasTarget>
            <DNSName>string</DNSName>
            <EvaluateTargetHealth>boolean</EvaluateTargetHealth>
            <HostedZoneId>string</HostedZoneId>
         </AliasTarget>
         <CidrRoutingConfig>
            <CollectionId>string</CollectionId>
            <LocationName>string</LocationName>
         </CidrRoutingConfig>
         <Failover>string</Failover>
         <GeoLocation>
            <ContinentCode>string</ContinentCode>
            <CountryCode>string</CountryCode>
            <SubdivisionCode>string</SubdivisionCode>
         </GeoLocation>
         <GeoProximityLocation>
            <AWSRegion>string</AWSRegion>
```

```
            <Bias>integer</Bias>
            <Coordinates>
               <Latitude>string</Latitude>
               <Longitude>string</Longitude>
            </Coordinates>
            <LocalZoneGroup>string</LocalZoneGroup>
         </GeoProximityLocation>
         <HealthCheckId>string</HealthCheckId>
         <MultiValueAnswer>boolean</MultiValueAnswer>
         <Name>string</Name>
         <Region>string</Region>
         <ResourceRecords>
            <ResourceRecord>
               <Value>string</Value>
            </ResourceRecord>
         </ResourceRecords>
         <SetIdentifier>string</SetIdentifier>
         <TrafficPolicyInstanceId>string</TrafficPolicyInstanceId>
         <TTL>long</TTL>
         <Type>string</Type>
         <Weight>long</Weight>
      </ResourceRecordSet>
   </ResourceRecordSets>
</ListResourceRecordSetsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListResourceRecordSetsResponse

Root level tag for the ListResourceRecordSetsResponse parameters.

Required: Yes

### IsTruncated

A flag that indicates whether more resource record sets remain to be listed. If your results were truncated, you can make a follow-up pagination request by using the `NextRecordName` element.

Type: Boolean

### MaxItems

The maximum number of records you requested.

Type: String

### NextRecordIdentifier

*Resource record sets that have a routing policy other than simple:* If results were truncated for a given DNS name and type, the value of `SetIdentifier` for the next resource record set that has the current DNS name and type.

For information about routing policies, see Choosing a Routing Policy in the *Amazon Route 53 Developer Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

### NextRecordName

If the results were truncated, the name of the next record in the list.

This element is present only if `IsTruncated` is true.

Type: String

Length Constraints: Maximum length of 1024.

### NextRecordType

If the results were truncated, the type of the next record in the list.

This element is present only if `IsTruncated` is true.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

### ResourceRecordSets

Information about multiple resource record sets.

Type: Array of ResourceRecordSet objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of ListResourceRecordSets.

```
GET /2013-04-01/hostedzone/Z1PA6795UKMFR9/rrset?maxitems=1
```

### Example Response

This example illustrates one usage of ListResourceRecordSets.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListResourceRecordSetsResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ResourceRecordSets>
      <ResourceRecordSet>
         <Name>example.com.</Name>
         <Type>SOA</Type>
         <TTL>900</TTL>
         <ResourceRecords>
            <ResourceRecord>
```

```
                <Value>ns-2048.awsdns-64.net. hostmaster.awsdns.com. 1 7200 900 1209600
 86400</Value>
            </ResourceRecord>
         </ResourceRecords>
      </ResourceRecordSet>
   </ResourceRecordSets>
   <IsTruncated>true</IsTruncated>
   <MaxItems>1</MaxItems>
   <NextRecordName>example.com.</NextRecordName>
   <NextRecordType>NS</NextRecordType>
</ListResourceRecordSetsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListReusableDelegationSets

Service: Amazon Route 53

Retrieves a list of the reusable delegation sets that are associated with the current AWS account.

## Request Syntax

```
GET /2013-04-01/delegationset?marker=Marker&maxitems=MaxItems HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**marker**

If the value of `IsTruncated` in the previous response was `true`, you have more reusable delegation sets. To get another group, submit another `ListReusableDelegationSets` request.

For the value of `marker`, specify the value of `NextMarker` from the previous response, which is the ID of the first reusable delegation set that Amazon Route 53 will return if you submit another request.

If the value of `IsTruncated` in the previous response was `false`, there are no more reusable delegation sets to get.

Length Constraints: Maximum length of 64.

**maxitems**

The number of reusable delegation sets that you want Amazon Route 53 to return in the response to this request. If you specify a value greater than 100, Route 53 returns only the first 100 reusable delegation sets.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ListReusableDelegationSetsResponse>
   <DelegationSets>
      <DelegationSet>
         <CallerReference>string</CallerReference>
         <Id>string</Id>
         <NameServers>
            <NameServer>string</NameServer>
         </NameServers>
      </DelegationSet>
   </DelegationSets>
   <IsTruncated>boolean</IsTruncated>
   <Marker>string</Marker>
   <MaxItems>string</MaxItems>
   <NextMarker>string</NextMarker>
</ListReusableDelegationSetsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListReusableDelegationSetsResponse

Root level tag for the ListReusableDelegationSetsResponse parameters.

Required: Yes

### DelegationSets

A complex type that contains one `DelegationSet` element for each reusable delegation set that was created by the current AWS account.

Type: Array of DelegationSet objects

### IsTruncated

A flag that indicates whether there are more reusable delegation sets to be listed.

Type: Boolean

### Marker

For the second and subsequent calls to `ListReusableDelegationSets`, `Marker` is the value that you specified for the `marker` parameter in the request that produced the current response.

Type: String

Length Constraints: Maximum length of 64.

**MaxItems**

The value that you specified for the `maxitems` parameter in the call to `ListReusableDelegationSets` that produced the current response.

Type: String

**NextMarker**

If `IsTruncated` is `true`, the value of `NextMarker` identifies the next reusable delegation set that Amazon Route 53 will return if you submit another `ListReusableDelegationSets` request and specify the value of `NextMarker` in the `marker` parameter.

Type: String

Length Constraints: Maximum length of 64.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListReusableDelegationSets.

```
GET /2013-04-01/delegationset?maxitems=2
```

### Example Response

This example illustrates one usage of ListReusableDelegationSets.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListReusableDelegationSetsResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <DelegationSets>
      <DelegationSet>
         <Id>/delegationset/N1PA6795SAMPLE</Id>
         <CallerReference>2017-03-15T01:36:41.958Z</CallerReference>
         <NameServers>
            <NameServer>ns-2042.awsdns-64.com</NameServer>
            <NameServer>ns-2043.awsdns-65.net</NameServer>
            <NameServer>ns-2044.awsdns-66.org</NameServer>
            <NameServer>ns-2045.awsdns-67.co.uk</NameServer>
         </NameServers>
      </DelegationSet>
      <DelegationSet>
         <Id>/delegationset/N1PA7000SAMPLE</Id>
         <CallerReference>2017-03-16T01:37:42.959Z</CallerReference>
         <NameServers>
            <NameServer>ns-2046.awsdns-68.com</NameServer>
            <NameServer>ns-2047.awsdns-69.net</NameServer>
            <NameServer>ns-2048.awsdns-70.org</NameServer>
            <NameServer>ns-2049.awsdns-71.co.uk</NameServer>
         </NameServers>
      </DelegationSet>
   </DelegationSets>
   <IsTruncated>true</IsTruncated>
   <NextMarker>N1PA6797SAMPLE</NextMarker>
   <MaxItems>2</MaxItems>
</ListReusableDelegationSetsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTagsForResource

Service: Amazon Route 53

Lists tags for one health check or hosted zone.

For information about using tags for cost allocation, see Using Cost Allocation Tags in the *AWS Billing and Cost Management User Guide*.

## Request Syntax

```
GET /2013-04-01/tags/ResourceType/ResourceId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ResourceId

The ID of the resource for which you want to retrieve tags.

Length Constraints: Maximum length of 64.

Required: Yes

### ResourceType

The type of the resource.

- The resource type for health checks is `healthcheck`.
- The resource type for hosted zones is `hostedzone`.

Valid Values: `healthcheck | hostedzone`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ListTagsForResourceResponse>
   <ResourceTagSet>
      <ResourceId>string</ResourceId>
      <ResourceType>string</ResourceType>
      <Tags>
         <Tag>
            <Key>string</Key>
            <Value>string</Value>
         </Tag>
      </Tags>
   </ResourceTagSet>
</ListTagsForResourceResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListTagsForResourceResponse**

Root level tag for the ListTagsForResourceResponse parameters.

Required: Yes

**ResourceTagSet**

A `ResourceTagSet` containing tags associated with the specified resource.

Type: ResourceTagSet object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

**ThrottlingException**

The limit on the number of requests per second was exceeded.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListTagsForResource.

```
GET /2013-04-01/tags/healthcheck/abcdef11-2222-3333-4444-555555fedcba
```

### Example Response

This example illustrates one usage of ListTagsForResource.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListTagsForResourceResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ResourceTagSet>
      <ResourceType>healthcheck</ResourceType>
      <ResourceId>abcdef11-2222-3333-4444-555555fedcba</ResourceId>
      <Tags>
         <Tag>
            <Key>Owner<Key>
            <Value>dbadmin<Value>
         </Tag>
         <Tag>
            <Key>Cost Center<Key>
            <Value>80432<Value>
         </Tag>
      </Tags>
   <ResourceTagSet>
</ListTagsForResourceResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTagsForResources

Service: Amazon Route 53

Lists tags for up to 10 health checks or hosted zones.

For information about using tags for cost allocation, see Using Cost Allocation Tags in the *AWS Billing and Cost Management User Guide*.

## Request Syntax

```
POST /2013-04-01/tags/ResourceType HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ListTagsForResourcesRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ResourceIds>
      <ResourceId>string</ResourceId>
   </ResourceIds>
</ListTagsForResourcesRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### ResourceType

The type of the resources.

- The resource type for health checks is `healthcheck`.
- The resource type for hosted zones is `hostedzone`.

Valid Values: `healthcheck | hostedzone`

Required: Yes

## Request Body

The request accepts the following data in XML format.

### ListTagsForResourcesRequest

Root level tag for the ListTagsForResourcesRequest parameters.

Required: Yes

### ResourceIds

A complex type that contains the ResourceId element for each resource for which you want to get a list of tags.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Maximum length of 64.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListTagsForResourcesResponse>
   <ResourceTagSets>
      <ResourceTagSet>
         <ResourceId>string</ResourceId>
         <ResourceType>string</ResourceType>
         <Tags>
            <Tag>
               <Key>string</Key>
               <Value>string</Value>
            </Tag>
         </Tags>
      </ResourceTagSet>
   </ResourceTagSets>
</ListTagsForResourcesResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListTagsForResourcesResponse

Root level tag for the ListTagsForResourcesResponse parameters.

Required: Yes

**ResourceTagSets**

A list of `ResourceTagSets` containing tags associated with the specified resources.

Type: Array of ResourceTagSet objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

### ThrottlingException

The limit on the number of requests per second was exceeded.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListTagsForResources.

```
GET /2013-04-01/tags/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ListTagsForResourcesRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ResourceIds>
      <ResourceId>abcdef11-2222-3333-4444-555555fedcba</ResourceId>
      <ResourceId>aaaaaaaa-1234-5678-9012-bbbbbbcccccc</ResourceId>
   </ResourceIds>
</ListTagsForResourcesRequest>
```

### Example Response

This example illustrates one usage of ListTagsForResources.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListTagsForResourcesResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ResourceTagSets>
      <ResourceTagSet>
         <ResourceType>healthcheck</ResourceType>
         <ResourceId>abcdef11-2222-3333-4444-555555fedcba</ResourceId>
         <Tags>
            <Tag>
               <Key>Owner</Key>
               <Value>dbadmin</Value>
            </Tag>
         </Tags>
      </ResourceTagSet>
      <ResourceTagSet>
         <ResourceType>healthcheck</ResourceType>
         <ResourceId>aaaaaaaa-1234-5678-9012-bbbbbbcccccc</ResourceId>
```

```
         <Tags>
            <Tag>
               <Key>Cost Center</Key>
               <Value>80432</Value>
            </Tag>
         </Tags>
      </ResourceTagSet>
   </ResourceTagSets>
</ListTagsForResourcesResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTrafficPolicies

Service: Amazon Route 53

Gets information about the latest version for every traffic policy that is associated with the current AWS account. Policies are listed in the order that they were created in.

For information about how of deleting a traffic policy affects the response from `ListTrafficPolicies`, see DeleteTrafficPolicy.

## Request Syntax

```
GET /2013-04-01/trafficpolicies?maxitems=MaxItems&trafficpolicyid=TrafficPolicyIdMarker
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxitems**

(Optional) The maximum number of traffic policies that you want Amazon Route 53 to return in response to this request. If you have more than `MaxItems` traffic policies, the value of `IsTruncated` in the response is `true`, and the value of `TrafficPolicyIdMarker` is the ID of the first traffic policy that Route 53 will return if you submit another request.

**trafficpolicyid**

(Conditional) For your first request to `ListTrafficPolicies`, don't include the `TrafficPolicyIdMarker` parameter.

If you have more traffic policies than the value of `MaxItems`, `ListTrafficPolicies` returns only the first `MaxItems` traffic policies. To get the next group of policies, submit another request to `ListTrafficPolicies`. For the value of `TrafficPolicyIdMarker`, specify the value of `TrafficPolicyIdMarker` that was returned in the previous response.

Length Constraints: Minimum length of 1. Maximum length of 36.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPoliciesResponse>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
   <TrafficPolicyIdMarker>string</TrafficPolicyIdMarker>
   <TrafficPolicySummaries>
      <TrafficPolicySummary>
         <Id>string</Id>
         <LatestVersion>integer</LatestVersion>
         <Name>string</Name>
         <TrafficPolicyCount>integer</TrafficPolicyCount>
         <Type>string</Type>
      </TrafficPolicySummary>
   </TrafficPolicySummaries>
</ListTrafficPoliciesResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListTrafficPoliciesResponse

Root level tag for the ListTrafficPoliciesResponse parameters.

Required: Yes

### IsTruncated

A flag that indicates whether there are more traffic policies to be listed. If the response was truncated, you can get the next group of traffic policies by submitting another `ListTrafficPolicies` request and specifying the value of `TrafficPolicyIdMarker` in the `TrafficPolicyIdMarker` request parameter.

Type: Boolean

### MaxItems

The value that you specified for the `MaxItems` parameter in the `ListTrafficPolicies` request that produced the current response.

Type: String

**TrafficPolicyIdMarker**

If the value of `IsTruncated` is `true`, `TrafficPolicyIdMarker` is the ID of the first traffic policy in the next group of `MaxItems` traffic policies.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

**TrafficPolicySummaries**

A list that contains one `TrafficPolicySummary` element for each traffic policy that was created by the current AWS account.

Type: Array of TrafficPolicySummary objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of ListTrafficPolicies.

```
GET /2013-04-01/trafficpolicies?maxitems=1
```

### Example Response

This example illustrates one usage of ListTrafficPolicies.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPoliciesResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <TrafficPolicySummaries>
      <TrafficPolicySummary>
         <Id>12345678-abcd-9876-fedc-1a2b3c4de5f6</Id>
         <Name>MyTrafficPolicy</Name>
         <Type>A</Type>
         <LatestVersion>77</LatestVersion>
         <TrafficPolicyCount>44</TrafficPolicyCount>
      </TrafficPolicySummary>
   </TrafficPolicySummaries>
   <IsTrucated>true</IsTruncated>
   <TrafficPolicyIdMarker>12345678-abcd-9876-fedc-1a2b3c4de5f7</TrafficPolicyIdMarker>
   <MaxItems>1</MaxItems>
</ListTrafficPoliciesResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTrafficPolicyInstances

Service: Amazon Route 53

Gets information about the traffic policy instances that you created by using the current AWS account.

> **Note**
>
> After you submit an `UpdateTrafficPolicyInstance` request, there's a brief delay while Amazon Route 53 creates the resource record sets that are specified in the traffic policy definition. For more information, see the `State` response element.

Route 53 returns a maximum of 100 items in each response. If you have a lot of traffic policy instances, you can use the `MaxItems` parameter to list them in groups of up to 100.

## Request Syntax

```
GET /2013-04-01/trafficpolicyinstances?
hostedzoneid=HostedZoneIdMarker&maxitems=MaxItems&trafficpolicyinstancename=TrafficPolicyInstan
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### hostedzoneid

If the value of `IsTruncated` in the previous response was `true`, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstances` request. For the value of `HostedZoneId`, specify the value of `HostedZoneIdMarker` from the previous response, which is the hosted zone ID of the first traffic policy instance in the next group of traffic policy instances.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Length Constraints: Maximum length of 32.

**maxitems**

The maximum number of traffic policy instances that you want Amazon Route 53 to return in response to a `ListTrafficPolicyInstances` request. If you have more than `MaxItems` traffic policy instances, the value of the `IsTruncated` element in the response is `true`, and the values of `HostedZoneIdMarker`, `TrafficPolicyInstanceNameMarker`, and `TrafficPolicyInstanceTypeMarker` represent the first traffic policy instance in the next group of `MaxItems` traffic policy instances.

**trafficpolicyinstancename**

If the value of `IsTruncated` in the previous response was `true`, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstances` request. For the value of `trafficpolicyinstancename`, specify the value of `TrafficPolicyInstanceNameMarker` from the previous response, which is the name of the first traffic policy instance in the next group of traffic policy instances.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Length Constraints: Maximum length of 1024.

**trafficpolicyinstancetype**

If the value of `IsTruncated` in the previous response was `true`, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstances` request. For the value of `trafficpolicyinstancetype`, specify the value of `TrafficPolicyInstanceTypeMarker` from the previous response, which is the type of the first traffic policy instance in the next group of traffic policy instances.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyInstancesResponse>
   <HostedZoneIdMarker>string</HostedZoneIdMarker>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
   <TrafficPolicyInstanceNameMarker>string</TrafficPolicyInstanceNameMarker>
   <TrafficPolicyInstances>
      <TrafficPolicyInstance>
         <HostedZoneId>string</HostedZoneId>
         <Id>string</Id>
         <Message>string</Message>
         <Name>string</Name>
         <State>string</State>
         <TrafficPolicyId>string</TrafficPolicyId>
         <TrafficPolicyType>string</TrafficPolicyType>
         <TrafficPolicyVersion>integer</TrafficPolicyVersion>
         <TTL>long</TTL>
      </TrafficPolicyInstance>
   </TrafficPolicyInstances>
   <TrafficPolicyInstanceTypeMarker>string</TrafficPolicyInstanceTypeMarker>
</ListTrafficPolicyInstancesResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListTrafficPolicyInstancesResponse

Root level tag for the ListTrafficPolicyInstancesResponse parameters.

Required: Yes

### HostedZoneIdMarker

If `IsTruncated` is `true`, `HostedZoneIdMarker` is the ID of the hosted zone of the first traffic policy instance that Route 53 will return if you submit another `ListTrafficPolicyInstances` request.

Type: String

Length Constraints: Maximum length of 32.

### IsTruncated

A flag that indicates whether there are more traffic policy instances to be listed. If the response was truncated, you can get more traffic policy instances by calling `ListTrafficPolicyInstances` again and specifying the values of the `HostedZoneIdMarker`, `TrafficPolicyInstanceNameMarker`, and `TrafficPolicyInstanceTypeMarker` in the corresponding request parameters.

Type: Boolean

### MaxItems

The value that you specified for the `MaxItems` parameter in the call to `ListTrafficPolicyInstances` that produced the current response.

Type: String

### TrafficPolicyInstanceNameMarker

If `IsTruncated` is `true`, `TrafficPolicyInstanceNameMarker` is the name of the first traffic policy instance that Route 53 will return if you submit another `ListTrafficPolicyInstances` request.

Type: String

Length Constraints: Maximum length of 1024.

### TrafficPolicyInstances

A list that contains one `TrafficPolicyInstance` element for each traffic policy instance that matches the elements in the request.

Type: Array of TrafficPolicyInstance objects

### TrafficPolicyInstanceTypeMarker

If `IsTruncated` is `true`, `TrafficPolicyInstanceTypeMarker` is the DNS type of the resource record sets that are associated with the first traffic policy instance that Amazon Route 53 will return if you submit another `ListTrafficPolicyInstances` request.

Type: String

Valid Values: SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The input is not valid.

**message**

HTTP Status Code: 400

### NoSuchTrafficPolicyInstance

No traffic policy instance exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

The following example shows a request after the first request. (For the first request, you'd specify only the maxitems parameter.)

```
GET /2013-04-01/trafficpolicyinstances?hostedzoneid=Z1D633PJN98FT9
   &trafficpolicyinstancename=www.example.com
   &trafficpolicyinstancetype=A
   &maxitems=1
```

### Example Response

This example illustrates one usage of ListTrafficPolicyInstances.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
```

```
<ListTrafficPolicyInstancesResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstances>
      <TrafficPolicyInstance>
         <Id>12131415-abac-5432-caba-6f5e4d3c2b1a</Id>
         <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
         <Name>www.example.com</Name>
         <TTL>300</TTL>
         <State>Applied</State>
         <Message/>
         <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
         <TrafficPolicyVersion>7</TrafficPolicyVersion>
         <TrafficPolicyType>A</TrafficPolicyType>
      </TrafficPolicyInstance>
   </TrafficPolicyInstances>
   <HostedZoneIdMarker>Z217DLHR85079R</HostedZoneIdMarker>
   <TrafficPolicyInstanceNameMarker>www.example.net</TrafficPolicyInstanceNameMarker>
   <TrafficPolicyInstanceTypeMarker>A</TrafficPolicyInstanceTypeMarker>
   <IsTruncated>true</IsTruncated>
   <MaxItems>1</MaxItems>
</ListTrafficPolicyInstancesResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTrafficPolicyInstancesByHostedZone

Service: Amazon Route 53

Gets information about the traffic policy instances that you created in a specified hosted zone.

> **Note**
>
> After you submit a `CreateTrafficPolicyInstance` or an `UpdateTrafficPolicyInstance` request, there's a brief delay while Amazon Route 53 creates the resource record sets that are specified in the traffic policy definition. For more information, see the `State` response element.

Route 53 returns a maximum of 100 items in each response. If you have a lot of traffic policy instances, you can use the `MaxItems` parameter to list them in groups of up to 100.

## Request Syntax

```
GET /2013-04-01/trafficpolicyinstances/hostedzone?
id=HostedZoneId&maxitems=MaxItems&trafficpolicyinstancename=TrafficPolicyInstanceNameMarker&tra
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### id

The ID of the hosted zone that you want to list traffic policy instances for.

Length Constraints: Maximum length of 32.

Required: Yes

### maxitems

The maximum number of traffic policy instances to be included in the response body for this request. If you have more than `MaxItems` traffic policy instances, the value of the `IsTruncated` element in the response is `true`, and the values of `HostedZoneIdMarker`, `TrafficPolicyInstanceNameMarker`, and `TrafficPolicyInstanceTypeMarker`

represent the first traffic policy instance that Amazon Route 53 will return if you submit another request.

**trafficpolicyinstancename**

If the value of `IsTruncated` in the previous response is true, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstances` request. For the value of `trafficpolicyinstancename`, specify the value of `TrafficPolicyInstanceNameMarker` from the previous response, which is the name of the first traffic policy instance in the next group of traffic policy instances.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Length Constraints: Maximum length of 1024.

**trafficpolicyinstancetype**

If the value of `IsTruncated` in the previous response is true, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstances` request. For the value of `trafficpolicyinstancetype`, specify the value of `TrafficPolicyInstanceTypeMarker` from the previous response, which is the type of the first traffic policy instance in the next group of traffic policy instances.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyInstancesByHostedZoneResponse>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
```

```
   <TrafficPolicyInstanceNameMarker>string</TrafficPolicyInstanceNameMarker>
   <TrafficPolicyInstances>
      <TrafficPolicyInstance>
         <HostedZoneId>string</HostedZoneId>
         <Id>string</Id>
         <Message>string</Message>
         <Name>string</Name>
         <State>string</State>
         <TrafficPolicyId>string</TrafficPolicyId>
         <TrafficPolicyType>string</TrafficPolicyType>
         <TrafficPolicyVersion>integer</TrafficPolicyVersion>
         <TTL>long</TTL>
      </TrafficPolicyInstance>
   </TrafficPolicyInstances>
   <TrafficPolicyInstanceTypeMarker>string</TrafficPolicyInstanceTypeMarker>
</ListTrafficPolicyInstancesByHostedZoneResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListTrafficPolicyInstancesByHostedZoneResponse

Root level tag for the ListTrafficPolicyInstancesByHostedZoneResponse parameters.

Required: Yes

### IsTruncated

A flag that indicates whether there are more traffic policy instances to be listed. If the response was truncated, you can get the next group of traffic policy instances by submitting another `ListTrafficPolicyInstancesByHostedZone` request and specifying the values of `HostedZoneIdMarker`, `TrafficPolicyInstanceNameMarker`, and `TrafficPolicyInstanceTypeMarker` in the corresponding request parameters.

Type: Boolean

### MaxItems

The value that you specified for the `MaxItems` parameter in the `ListTrafficPolicyInstancesByHostedZone` request that produced the current response.

Type: String

**TrafficPolicyInstanceNameMarker**

If `IsTruncated` is `true`, `TrafficPolicyInstanceNameMarker` is the name of the first traffic policy instance in the next group of traffic policy instances.

Type: String

Length Constraints: Maximum length of 1024.

**TrafficPolicyInstances**

A list that contains one `TrafficPolicyInstance` element for each traffic policy instance that matches the elements in the request.

Type: Array of TrafficPolicyInstance objects

**TrafficPolicyInstanceTypeMarker**

If `IsTruncated` is true, `TrafficPolicyInstanceTypeMarker` is the DNS type of the resource record sets that are associated with the first traffic policy instance in the next group of traffic policy instances.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**NoSuchTrafficPolicyInstance**

No traffic policy instance exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

The following example shows a request after the first request. For the first request, you'd specify only the `maxitems` parameter or no parameters at all.

```
GET /2013-04-01/trafficpolicyinstances/hostedzone?id=Z1D633PJN98FT9
&trafficpolicyinstancename=www.example.com
&trafficpolicyinstancetype=A
&maxitems=1
```

### Example Response

This example illustrates one usage of ListTrafficPolicyInstancesByHostedZone.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyInstancesByHostedZoneResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstances>
      <TrafficPolicyInstance>
         <Id>12131415-abac-5432-caba-6f5e4d3c2b1a</Id>
         <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
         <Name>www.example.com</Name>
         <TTL>300</TTL>
         <State>Applied</State>
         <Message/>
         <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
```

```
         <TrafficPolicyVersion>7</TrafficPolicyVersion>
         <TrafficPolicyType>A</TrafficPolicyType>
      </TrafficPolicyInstance>
   </TrafficPolicyInstances>
   <HostedZoneIdMarker>Z217DLHR85079R</HostedZoneIdMarker>
   <TrafficPolicyInstanceNameMarker>wwwtest.example.com</
TrafficPolicyInstanceNameMarker>
   <TrafficPolicyInstanceTypeMarker>A</TrafficPolicyInstanceTypeMarker>
   <IsTruncated>true</IsTruncated>
   <MaxItems>1</MaxItems>
</ListTrafficPolicyInstancesByHostedZoneResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTrafficPolicyInstancesByPolicy

Service: Amazon Route 53

Gets information about the traffic policy instances that you created by using a specify traffic policy version.

> **Note**
>
> After you submit a `CreateTrafficPolicyInstance` or an `UpdateTrafficPolicyInstance` request, there's a brief delay while Amazon Route 53 creates the resource record sets that are specified in the traffic policy definition. For more information, see the `State` response element.

Route 53 returns a maximum of 100 items in each response. If you have a lot of traffic policy instances, you can use the `MaxItems` parameter to list them in groups of up to 100.

## Request Syntax

```
GET /2013-04-01/trafficpolicyinstances/trafficpolicy?
hostedzoneid=HostedZoneIdMarker&id=TrafficPolicyId&maxitems=MaxItems&trafficpolicyinstancename=
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### hostedzoneid

If the value of `IsTruncated` in the previous response was `true`, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstancesByPolicy` request.

For the value of `hostedzoneid`, specify the value of `HostedZoneIdMarker` from the previous response, which is the hosted zone ID of the first traffic policy instance that Amazon Route 53 will return if you submit another request.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Length Constraints: Maximum length of 32.

**id**

The ID of the traffic policy for which you want to list traffic policy instances.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

**maxitems**

The maximum number of traffic policy instances to be included in the response body for this request. If you have more than `MaxItems` traffic policy instances, the value of the `IsTruncated` element in the response is `true`, and the values of `HostedZoneIdMarker`, `TrafficPolicyInstanceNameMarker`, and `TrafficPolicyInstanceTypeMarker` represent the first traffic policy instance that Amazon Route 53 will return if you submit another request.

**trafficpolicyinstancename**

If the value of `IsTruncated` in the previous response was `true`, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstancesByPolicy` request.

For the value of `trafficpolicyinstancename`, specify the value of `TrafficPolicyInstanceNameMarker` from the previous response, which is the name of the first traffic policy instance that Amazon Route 53 will return if you submit another request.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Length Constraints: Maximum length of 1024.

**trafficpolicyinstancetype**

If the value of `IsTruncated` in the previous response was `true`, you have more traffic policy instances. To get more traffic policy instances, submit another `ListTrafficPolicyInstancesByPolicy` request.

For the value of `trafficpolicyinstancetype`, specify the value of `TrafficPolicyInstanceTypeMarker` from the previous response, which is the name of the first traffic policy instance that Amazon Route 53 will return if you submit another request.

If the value of `IsTruncated` in the previous response was `false`, there are no more traffic policy instances to get.

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

**version**

The version of the traffic policy for which you want to list traffic policy instances. The version must be associated with the traffic policy that is specified by `TrafficPolicyId`.

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyInstancesByPolicyResponse>
   <HostedZoneIdMarker>string</HostedZoneIdMarker>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
   <TrafficPolicyInstanceNameMarker>string</TrafficPolicyInstanceNameMarker>
   <TrafficPolicyInstances>
      <TrafficPolicyInstance>
         <HostedZoneId>string</HostedZoneId>
         <Id>string</Id>
         <Message>string</Message>
         <Name>string</Name>
         <State>string</State>
         <TrafficPolicyId>string</TrafficPolicyId>
         <TrafficPolicyType>string</TrafficPolicyType>
         <TrafficPolicyVersion>integer</TrafficPolicyVersion>
         <TTL>long</TTL>
      </TrafficPolicyInstance>
   </TrafficPolicyInstances>
   <TrafficPolicyInstanceTypeMarker>string</TrafficPolicyInstanceTypeMarker>
```

```
</ListTrafficPolicyInstancesByPolicyResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**ListTrafficPolicyInstancesByPolicyResponse**

Root level tag for the ListTrafficPolicyInstancesByPolicyResponse parameters.

Required: Yes

**HostedZoneIdMarker**

If `IsTruncated` is `true`, `HostedZoneIdMarker` is the ID of the hosted zone of the first traffic policy instance in the next group of traffic policy instances.

Type: String

Length Constraints: Maximum length of 32.

**IsTruncated**

A flag that indicates whether there are more traffic policy instances to be listed. If the response was truncated, you can get the next group of traffic policy instances by calling `ListTrafficPolicyInstancesByPolicy` again and specifying the values of the `HostedZoneIdMarker`, `TrafficPolicyInstanceNameMarker`, and `TrafficPolicyInstanceTypeMarker` elements in the corresponding request parameters.

Type: Boolean

**MaxItems**

The value that you specified for the `MaxItems` parameter in the call to `ListTrafficPolicyInstancesByPolicy` that produced the current response.

Type: String

**TrafficPolicyInstanceNameMarker**

If `IsTruncated` is `true`, `TrafficPolicyInstanceNameMarker` is the name of the first traffic policy instance in the next group of `MaxItems` traffic policy instances.

Type: String

Length Constraints: Maximum length of 1024.

**TrafficPolicyInstances**

A list that contains one `TrafficPolicyInstance` element for each traffic policy instance that matches the elements in the request.

Type: Array of TrafficPolicyInstance objects

**TrafficPolicyInstanceTypeMarker**

If `IsTruncated` is `true`, `TrafficPolicyInstanceTypeMarker` is the DNS type of the resource record sets that are associated with the first traffic policy instance in the next group of `MaxItems` traffic policy instances.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

**NoSuchTrafficPolicyInstance**

No traffic policy instance exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

The following example shows a request after the first request. For the first request, you'd specify only the `TrafficPolicyId`, `TrafficPolicyVersion`, and (optionally) `MaxItems` parameters.

```
GET /2013-04-01/trafficpolicyinstances/trafficpolicy?id=12345678-abcd-9876-
fedc-1a2b3c4de5f6
&version=42
&hostedzoneid=Z1D633PJN98FT9
&trafficpolicyinstancename=www.example.com
&trafficpolicyinstancetype=A
&maxitems=1
```

### Example Response

This example illustrates one usage of ListTrafficPolicyInstancesByPolicy.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyInstancesByPolicyResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstances>
      <TrafficPolicyInstance>
         <Id>12131415-abac-5432-caba-6f5e4d3c2b1a</Id>
         <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
         <Name>www.example.com</Name>
         <TTL>300</TTL>
         <State>Applied</State>
         <Message/>
         <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
         <TrafficPolicyVersion>42</TrafficPolicyVersion>
         <TrafficPolicyType>A</TrafficPolicyType>
      </TrafficPolicyInstance>
   </TrafficPolicyInstances>
   <HostedZoneIdMarker>Z217DLHR85079R</HostedZoneIdMarker>
```

```
   <TrafficPolicyInstanceNameMarker>www-test.example.com</
TrafficPolicyInstanceNameMarker>
   <TrafficPolicyInstanceTypeMarker>A</TrafficPolicyInstanceTypeMarker>
   <IsTruncated>true</IsTruncated>
   <MaxItems>1</MaxItems>
</ListTrafficPolicyInstancesByPolicyResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTrafficPolicyVersions

Service: Amazon Route 53

Gets information about all of the versions for a specified traffic policy.

Traffic policy versions are listed in numerical order by `VersionNumber`.

## Request Syntax

```
GET /2013-04-01/trafficpolicies/Id/versions?
maxitems=MaxItems&trafficpolicyversion=TrafficPolicyVersionMarker HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

Specify the value of `Id` of the traffic policy for which you want to list all versions.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

### maxitems

The maximum number of traffic policy versions that you want Amazon Route 53 to include in the response body for this request. If the specified traffic policy has more than `MaxItems` versions, the value of `IsTruncated` in the response is `true`, and the value of the `TrafficPolicyVersionMarker` element is the ID of the first version that Route 53 will return if you submit another request.

### trafficpolicyversion

For your first request to `ListTrafficPolicyVersions`, don't include the `TrafficPolicyVersionMarker` parameter.

If you have more traffic policy versions than the value of `MaxItems`, `ListTrafficPolicyVersions` returns only the first group of `MaxItems` versions. To get more traffic policy versions, submit another `ListTrafficPolicyVersions` request. For the value of `TrafficPolicyVersionMarker`, specify the value of `TrafficPolicyVersionMarker` in the previous response.

Length Constraints: Maximum length of 4.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyVersionsResponse>
   <IsTruncated>boolean</IsTruncated>
   <MaxItems>string</MaxItems>
   <TrafficPolicies>
      <TrafficPolicy>
         <Comment>string</Comment>
         <Document>string</Document>
         <Id>string</Id>
         <Name>string</Name>
         <Type>string</Type>
         <Version>integer</Version>
      </TrafficPolicy>
   </TrafficPolicies>
   <TrafficPolicyVersionMarker>string</TrafficPolicyVersionMarker>
</ListTrafficPolicyVersionsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListTrafficPolicyVersionsResponse

Root level tag for the ListTrafficPolicyVersionsResponse parameters.

Required: Yes

### IsTruncated

A flag that indicates whether there are more traffic policies to be listed. If the response was truncated, you can get the next group of traffic policies by submitting another

`ListTrafficPolicyVersions` request and specifying the value of `NextMarker` in the `marker` parameter.

Type: Boolean

**MaxItems**

The value that you specified for the `maxitems` parameter in the `ListTrafficPolicyVersions` request that produced the current response.

Type: String

**TrafficPolicies**

A list that contains one `TrafficPolicy` element for each traffic policy version that is associated with the specified traffic policy.

Type: Array of TrafficPolicy objects

**TrafficPolicyVersionMarker**

If `IsTruncated` is `true`, the value of `TrafficPolicyVersionMarker` identifies the first traffic policy that Amazon Route 53 will return if you submit another request. Call `ListTrafficPolicyVersions` again and specify the value of `TrafficPolicyVersionMarker` in the `TrafficPolicyVersionMarker` request parameter.

This element is present only if `IsTruncated` is `true`.

Type: String

Length Constraints: Maximum length of 4.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of ListTrafficPolicyVersions.

```
GET /2013-04-01/trafficpolicy/12345678-abcd-9876-fedc-1a2b3c4de5f6/versions?maxitems=1
```

### Example Response

This example illustrates one usage of ListTrafficPolicyVersions.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListTrafficPolicyVersionsResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicies>
      <TrafficPolicy>
         <Id>12345678-abcd-9876-fedc-1a2b3c4de5f6</Id>
         <VersionNumber>77</VersionNumber>
         <Name>MyTrafficPolicy</Name>
         <Type>A</Type>
         <Document>JSON-formatted definition of this traffic policy</Definition>
         <Comment>First traffic policy</Comment>
      </TrafficPolicy>
   </TrafficPolicies>
   <IsTrucated>true</IsTruncated>
   <TrafficPolicyVersionMarker>12345678-abcd-9876-fedc-1a2b3c4de5f7</
TrafficPolicyVersionMarker>
   <MaxItems>1</MaxItems>
</ListTrafficPolicyVersionsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListVPCAssociationAuthorizations

Service: Amazon Route 53

Gets a list of the VPCs that were created by other accounts and that can be associated with a specified hosted zone because you've submitted one or more `CreateVPCAssociationAuthorization` requests.

The response includes a `VPCs` element with a `VPC` child element for each VPC that can be associated with the hosted zone.

## Request Syntax

```
GET /2013-04-01/hostedzone/Id/authorizevpcassociation?
maxresults=MaxResults&nexttoken=NextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone for which you want a list of VPCs that can be associated with the hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

### maxresults

*Optional*: An integer that specifies the maximum number of VPCs that you want Amazon Route 53 to return. If you don't specify a value for `MaxResults`, Route 53 returns up to 50 VPCs per page.

### nexttoken

*Optional*: If a response includes a `NextToken` element, there are more VPCs that can be associated with the specified hosted zone. To get the next page of results, submit another request, and include the value of `NextToken` from the response in the `nexttoken` parameter in another `ListVPCAssociationAuthorizations` request.

Length Constraints: Maximum length of 1024.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListVPCAssociationAuthorizationsResponse>
   <HostedZoneId>string</HostedZoneId>
   <NextToken>string</NextToken>
   <VPCs>
      <VPC>
         <VPCId>string</VPCId>
         <VPCRegion>string</VPCRegion>
      </VPC>
   </VPCs>
</ListVPCAssociationAuthorizationsResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### ListVPCAssociationAuthorizationsResponse

Root level tag for the ListVPCAssociationAuthorizationsResponse parameters.

Required: Yes

### HostedZoneId

The ID of the hosted zone that you can associate the listed VPCs with.

Type: String

Length Constraints: Maximum length of 32.

### NextToken

When the response includes a `NextToken` element, there are more VPCs that can be associated with the specified hosted zone. To get the next page of VPCs, submit another `ListVPCAssociationAuthorizations` request, and include the value of the `NextToken` element from the response in the `nexttoken` request parameter.

Type: String

Length Constraints: Maximum length of 1024.

**VPCs**

The list of VPCs that are authorized to be associated with the specified hosted zone.

Type: Array of VPC objects

Array Members: Minimum number of 1 item.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**InvalidPaginationToken**

The value that you specified to get the second or subsequent page of results is invalid.

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of ListVPCAssociationAuthorizations.

```
GET /2013-04-01/hostedzone/Z1PA6795UKMFR9/authorizevpcassociation&maxresults=1 HTTP/1.1
```

### Example Response

This example illustrates one usage of ListVPCAssociationAuthorizations.

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<ListVPCAssociationAuthorizationsResponse>
   <HostedZoneId>Z1PA6795UKMFR9</HostedZoneId>
   <NextToken>Z222222VVVVVVV</NextToken>
   <VPCs>
      <VPC>
         <VPCId>vpc-a1b2c3d4e5</VPCId>
         <VPCRegion>us-east-2</VPCRegion>
      </VPC>
   </VPCs>
</ListVPCAssociationAuthorizationsResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# TestDNSAnswer

Service: Amazon Route 53

Gets the value that Amazon Route 53 returns in response to a DNS request for a specified record name and type. You can optionally specify the IP address of a DNS resolver, an EDNS0 client subnet IP address, and a subnet mask.

This call only supports querying public hosted zones.

> **Note**
>
> The `TestDnsAnswer` returns information similar to what you would expect from the answer section of the `dig` command. Therefore, if you query for the name servers of a subdomain that point to the parent name servers, those will not be returned.

## Request Syntax

```
GET /2013-04-01/testdnsanswer?
edns0clientsubnetip=EDNS0ClientSubnetIP&edns0clientsubnetmask=EDNS0ClientSubnetMask&hostedzonei
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### edns0clientsubnetip

If the resolver that you specified for resolverip supports EDNS0, specify the IPv4 or IPv6 address of a client in the applicable location, for example, `192.0.2.44` or `2001:db8:85a3::8a2e:370:7334`.

Length Constraints: Maximum length of 45.

Pattern: `(^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$|^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:)`

```
{1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]
{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-
fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::
(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.)
{3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:
((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}
[0-9]){0,1}[0-9]))$)
```

**edns0clientsubnetmask**

If you specify an IP address for `edns0clientsubnetip`, you can optionally specify the number of bits of the IP address that you want the checking tool to include in the DNS query. For example, if you specify `192.0.2.44` for `edns0clientsubnetip` and `24` for `edns0clientsubnetmask`, the checking tool will simulate a request from 192.0.2.0/24. The default value is 24 bits for IPv4 addresses and 64 bits for IPv6 addresses.

The range of valid values depends on whether `edns0clientsubnetip` is an IPv4 or an IPv6 address:

- **IPv4**: Specify a value between 0 and 32
- **IPv6**: Specify a value between 0 and 128

Length Constraints: Minimum length of 0. Maximum length of 3.

**hostedzoneid**

The ID of the hosted zone that you want Amazon Route 53 to simulate a query for.

Length Constraints: Maximum length of 32.

Required: Yes

**recordname**

The name of the resource record set that you want Amazon Route 53 to simulate a query for.

Length Constraints: Maximum length of 1024.

Required: Yes

**recordtype**

The type of the resource record set.

Valid Values: SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS

Required: Yes

**resolverip**

If you want to simulate a request from a specific DNS resolver, specify the IP address for that resolver. If you omit this value, TestDnsAnswer uses the IP address of a DNS resolver in the AWS US East (N. Virginia) Region (us-east-1).

Length Constraints: Maximum length of 45.

Pattern: (^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$|^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$)

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<TestDNSAnswerResponse>
   <Nameserver>string</Nameserver>
   <Protocol>string</Protocol>
   <RecordData>
      <RecordDataEntry>string</RecordDataEntry>
   </RecordData>
```

```
    <RecordName>string</RecordName>
    <RecordType>string</RecordType>
    <ResponseCode>string</ResponseCode>
</TestDNSAnswerResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**TestDNSAnswerResponse**

Root level tag for the TestDNSAnswerResponse parameters.

Required: Yes

**Nameserver**

The Amazon Route 53 name server used to respond to the request.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

**Protocol**

The protocol that Amazon Route 53 used to respond to the request, either UDP or TCP.

Type: String

**RecordData**

A list that contains values that Amazon Route 53 returned for this resource record set.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 512.

**RecordName**

The name of the resource record set that you submitted a request for.

Type: String

Length Constraints: Maximum length of 1024.

**RecordType**

The type of the resource record set that you submitted a request for.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

**ResponseCode**

A code that indicates whether the request is valid or not. The most common response code is `NOERROR`, meaning that the request is valid. If the response is not valid, Amazon Route 53 returns a response code that describes the error. For a list of possible response codes, see DNS RCODES on the IANA website.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of TestDNSAnswer.

```
GET /2013-04-01/testdnsanswer?
hostedzoneid=Z111111QQQQQQQ&recordname=www.example.com&recordtype=A&resolverip=192.0.2.44
```

### Example Response

This example illustrates one usage of TestDNSAnswer.

```
<?xml version="1.0" encoding="UTF-8"?>
<TestDnsAnswerResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Nameserver>ns-2048.awsdns-64.com</Nameserver>
   <RecordName>www.example.com</RecordName>
   <RecordType>A</RecordType>
   <RecordData>
      <RecordDataEntry>198.51.100.222</RecordDataEntry>
   </RecordData>
   <ResponseCode>NOERROR</ResponseCode>
   <Protocol>UDP</Protocol>
</TestDnsAnswerResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateHealthCheck

Service: Amazon Route 53

Updates an existing health check. Note that some values can't be updated.

For more information about updating health checks, see Creating, Updating, and Deleting Health Checks in the *Amazon Route 53 Developer Guide*.

## Request Syntax

```
POST /2013-04-01/healthcheck/HealthCheckId HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <AlarmIdentifier>
      <Name>string</Name>
      <Region>string</Region>
   </AlarmIdentifier>
   <ChildHealthChecks>
      <ChildHealthCheck>string</ChildHealthCheck>
   </ChildHealthChecks>
   <Disabled>boolean</Disabled>
   <EnableSNI>boolean</EnableSNI>
   <FailureThreshold>integer</FailureThreshold>
   <FullyQualifiedDomainName>string</FullyQualifiedDomainName>
   <HealthCheckVersion>long</HealthCheckVersion>
   <HealthThreshold>integer</HealthThreshold>
   <InsufficientDataHealthStatus>string</InsufficientDataHealthStatus>
   <Inverted>boolean</Inverted>
   <IPAddress>string</IPAddress>
   <Port>integer</Port>
   <Regions>
      <Region>string</Region>
   </Regions>
   <ResetElements>
      <ResettableElementName>string</ResettableElementName>
   </ResetElements>
   <ResourcePath>string</ResourcePath>
   <SearchString>string</SearchString>
</UpdateHealthCheckRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

**HealthCheckId**

The ID for the health check for which you want detailed information. When you created the health check, `CreateHealthCheck` returned the ID in the response, in the `HealthCheckId` element.

Length Constraints: Maximum length of 64.

Required: Yes

## Request Body

The request accepts the following data in XML format.

**UpdateHealthCheckRequest**

Root level tag for the UpdateHealthCheckRequest parameters.

Required: Yes

**AlarmIdentifier**

A complex type that identifies the CloudWatch alarm that you want Amazon Route 53 health checkers to use to determine whether the specified health check is healthy.

Type: AlarmIdentifier object

Required: No

**ChildHealthChecks**

A complex type that contains one `ChildHealthCheck` element for each health check that you want to associate with a `CALCULATED` health check.

Type: Array of strings

Array Members: Maximum number of 256 items.

Length Constraints: Maximum length of 64.

Required: No

### Disabled

Stops Route 53 from performing health checks. When you disable a health check, here's what happens:

- **Health checks that check the health of endpoints:** Route 53 stops submitting requests to your application, server, or other resource.
- **Calculated health checks:** Route 53 stops aggregating the status of the referenced health checks.
- **Health checks that monitor CloudWatch alarms:** Route 53 stops monitoring the corresponding CloudWatch metrics.

After you disable a health check, Route 53 considers the status of the health check to always be healthy. If you configured DNS failover, Route 53 continues to route traffic to the corresponding resources. Additionally, in disabled state, you can also invert the status of the health check to route traffic differently. For more information, see Inverted.

Charges for a health check still apply when the health check is disabled. For more information, see Amazon Route 53 Pricing.

Type: Boolean

Required: No

### EnableSNI

Specify whether you want Amazon Route 53 to send the value of `FullyQualifiedDomainName` to the endpoint in the `client_hello` message during TLS negotiation. This allows the endpoint to respond to HTTPS health check requests with the applicable SSL/TLS certificate.

Some endpoints require that HTTPS requests include the host name in the `client_hello` message. If you don't enable SNI, the status of the health check will be SSL alert `handshake_failure`. A health check can also have that status for other reasons. If SNI is enabled and you're still getting the error, check the SSL/TLS configuration on your endpoint and confirm that your certificate is valid.

The SSL/TLS certificate on your endpoint includes a domain name in the `Common Name` field and possibly several more in the `Subject Alternative Names` field. One of the domain names in the certificate should match the value that you specify

for FullyQualifiedDomainName. If the endpoint responds to the client_hello message with a certificate that does not include the domain name that you specified in FullyQualifiedDomainName, a health checker will retry the handshake. In the second attempt, the health checker will omit FullyQualifiedDomainName from the client_hello message.

Type: Boolean

Required: No

**FailureThreshold**

The number of consecutive health checks that an endpoint must pass or fail for Amazon Route 53 to change the current status of the endpoint from unhealthy to healthy or vice versa. For more information, see How Amazon Route 53 Determines Whether an Endpoint Is Healthy in the *Amazon Route 53 Developer Guide*.

Otherwise, if you don't specify a value for FailureThreshold, the default value is three health checks.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

**FullyQualifiedDomainName**

Amazon Route 53 behavior depends on whether you specify a value for IPAddress.

> **Note**
>
> If a health check already has a value for IPAddress, you can change the value. However, you can't update an existing health check to add or remove the value of IPAddress.

**If you specify a value for** IPAddress:

Route 53 sends health check requests to the specified IPv4 or IPv6 address and passes the value of FullyQualifiedDomainName in the Host header for all health checks except TCP health

checks. This is typically the fully qualified DNS name of the endpoint on which you want Route 53 to perform health checks.

When Route 53 checks the health of an endpoint, here is how it constructs the `Host` header:

- If you specify a value of `80` for `Port` and `HTTP` or `HTTP_STR_MATCH` for `Type`, Route 53 passes the value of `FullyQualifiedDomainName` to the endpoint in the `Host` header.
- If you specify a value of `443` for `Port` and `HTTPS` or `HTTPS_STR_MATCH` for `Type`, Route 53 passes the value of `FullyQualifiedDomainName` to the endpoint in the `Host` header.
- If you specify another value for `Port` and any value except `TCP` for `Type`, Route 53 passes *`FullyQualifiedDomainName:Port`* to the endpoint in the `Host` header.

If you don't specify a value for `FullyQualifiedDomainName`, Route 53 substitutes the value of `IPAddress` in the `Host` header in each of the above cases.

**If you don't specify a value for** `IPAddress`:

If you don't specify a value for `IPAddress`, Route 53 sends a DNS request to the domain that you specify in `FullyQualifiedDomainName` at the interval you specify in `RequestInterval`. Using an IPv4 address that is returned by DNS, Route 53 then checks the health of the endpoint.

If you don't specify a value for `IPAddress`, you can’t update the health check to remove the `FullyQualifiedDomainName`; if you don’t specify a value for `IPAddress` on creation, a `FullyQualifiedDomainName` is required.

> **Note**
>
> If you don't specify a value for `IPAddress`, Route 53 uses only IPv4 to send health checks to the endpoint. If there's no resource record set with a type of A for the name that you specify for `FullyQualifiedDomainName`, the health check fails with a "DNS resolution failed" error.

If you want to check the health of weighted, latency, or failover resource record sets and you choose to specify the endpoint only by `FullyQualifiedDomainName`, we recommend that you create a separate health check for each endpoint. For example, create a health check for each HTTP server that is serving content for www.example.com. For the value of

FullyQualifiedDomainName, specify the domain name of the server (such as us-east-2-www.example.com), not the name of the resource record sets (www.example.com).

> **Important**
>
> In this configuration, if the value of FullyQualifiedDomainName matches the name of the resource record sets and you then associate the health check with those resource record sets, health check results will be unpredictable.

In addition, if the value of Type is HTTP, HTTPS, HTTP_STR_MATCH, or HTTPS_STR_MATCH, Route 53 passes the value of FullyQualifiedDomainName in the Host header, as it does when you specify a value for IPAddress. If the value of Type is TCP, Route 53 doesn't pass a Host header.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**HealthCheckVersion**

A sequential counter that Amazon Route 53 sets to 1 when you create a health check and increments by 1 each time you update settings for the health check.

We recommend that you use GetHealthCheck or ListHealthChecks to get the current value of HealthCheckVersion for the health check that you want to update, and that you include that value in your UpdateHealthCheck request. This prevents Route 53 from overwriting an intervening update:

- If the value in the UpdateHealthCheck request matches the value of HealthCheckVersion in the health check, Route 53 updates the health check with the new settings.
- If the value of HealthCheckVersion in the health check is greater, the health check was changed after you got the version number. Route 53 does not update the health check, and it returns a HealthCheckVersionMismatch error.

Type: Long

Valid Range: Minimum value of 1.

Required: No

### HealthThreshold

The number of child health checks that are associated with a `CALCULATED` health that Amazon Route 53 must consider healthy for the `CALCULATED` health check to be considered healthy. To specify the child health checks that you want to associate with a `CALCULATED` health check, use the `ChildHealthChecks` and `ChildHealthCheck` elements.

Note the following:

- If you specify a number greater than the number of child health checks, Route 53 always considers this health check to be unhealthy.
- If you specify `0`, Route 53 always considers this health check to be healthy.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 256.

Required: No

### InsufficientDataHealthStatus

When CloudWatch has insufficient data about the metric to determine the alarm state, the status that you want Amazon Route 53 to assign to the health check:

- `Healthy`: Route 53 considers the health check to be healthy.
- `Unhealthy`: Route 53 considers the health check to be unhealthy.
- `LastKnownStatus`: By default, Route 53 uses the status of the health check from the last time CloudWatch had sufficient data to determine the alarm state. For new health checks that have no last known status, the status for the health check is healthy.

Type: String

Valid Values: `Healthy | Unhealthy | LastKnownStatus`

Required: No

### Inverted

Specify whether you want Amazon Route 53 to invert the status of a health check, for example, to consider a health check unhealthy when it otherwise would be considered healthy.

Type: Boolean

Required: No

### IPAddress

The IPv4 or IPv6 IP address for the endpoint that you want Amazon Route 53 to perform health checks on. If you don't specify a value for `IPAddress`, Route 53 sends a DNS request to resolve the domain name that you specify in `FullyQualifiedDomainName` at the interval that you specify in `RequestInterval`. Using an IP address that is returned by DNS, Route 53 then checks the health of the endpoint.

Use one of the following formats for the value of `IPAddress`:

- **IPv4 address**: four values between 0 and 255, separated by periods (.), for example, `192.0.2.44`.
- **IPv6 address**: eight groups of four hexadecimal values, separated by colons (:), for example, `2001:0db8:85a3:0000:0000:abcd:0001:2345`. You can also shorten IPv6 addresses as described in RFC 5952, for example, `2001:db8:85a3::abcd:1:2345`.

If the endpoint is an EC2 instance, we recommend that you create an Elastic IP address, associate it with your EC2 instance, and specify the Elastic IP address for `IPAddress`. This ensures that the IP address of your instance never changes. For more information, see the applicable documentation:

- Linux: Elastic IP Addresses (EIP) in the *Amazon EC2 User Guide for Linux Instances*
- Windows: Elastic IP Addresses (EIP) in the *Amazon EC2 User Guide for Windows Instances*

> **Note**
>
> If a health check already has a value for `IPAddress`, you can change the value. However, you can't update an existing health check to add or remove the value of `IPAddress`.

For more information, see FullyQualifiedDomainName.

Constraints: Route 53 can't check the health of endpoints for which the IP address is in local, private, non-routable, or multicast ranges. For more information about IP addresses for which you can't create health checks, see the following documents:

- RFC 5735, Special Use IPv4 Addresses
- RFC 6598, IANA-Reserved IPv4 Prefix for Shared Address Space

- RFC 5156, Special-Use IPv6 Addresses

Type: String

Length Constraints: Maximum length of 45.

Pattern: `(^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$|^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$)`

Required: No

## Port

The port on the endpoint that you want Amazon Route 53 to perform health checks on.

> **Note**
>
> Don't specify a value for `Port` when you specify a value for `Type` of `CLOUDWATCH_METRIC` or `CALCULATED`.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65535.

Required: No

## Regions

A complex type that contains one `Region` element for each region that you want Amazon Route 53 health checkers to check the specified endpoint from.

Type: Array of strings

Array Members: Minimum number of 3 items. Maximum number of 64 items.

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-west-1 | us-west-2 | eu-west-1 | ap-southeast-1 | ap-southeast-2 | ap-northeast-1 | sa-east-1`

Required: No

**ResetElements**

A complex type that contains one `ResettableElementName` element for each element that you want to reset to the default value. Valid values for `ResettableElementName` include the following:

- `ChildHealthChecks`: Amazon Route 53 resets ChildHealthChecks to null.
- `FullyQualifiedDomainName`: Route 53 resets FullyQualifiedDomainName. to null.
- `Regions`: Route 53 resets the Regions list to the default set of regions.
- `ResourcePath`: Route 53 resets ResourcePath to null.

Type: Array of strings

Array Members: Maximum number of 64 items.

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `FullyQualifiedDomainName | Regions | ResourcePath | ChildHealthChecks`

Required: No

**ResourcePath**

The path that you want Amazon Route 53 to request when performing health checks. The path can be any value for which your endpoint will return an HTTP status code of 2xx or 3xx when the endpoint is healthy, for example the file /docs/route53-health-check.html. You can also include query string parameters, for example, `/welcome.html?language=jp&login=y`.

Specify this value only if you want to change it.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**SearchString**

If the value of Type is HTTP_STR_MATCH or HTTPS_STR_MATCH, the string that you want Amazon Route 53 to search for in the response body from the specified resource. If the string appears in the response body, Route 53 considers the resource healthy. (You can't change the value of Type when you update a health check.)

Type: String

Length Constraints: Maximum length of 255.

Required: No

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckResponse>
   <HealthCheck>
      <CallerReference>string</CallerReference>
      <CloudWatchAlarmConfiguration>
         <ComparisonOperator>string</ComparisonOperator>
         <Dimensions>
            <Dimension>
               <Name>string</Name>
               <Value>string</Value>
            </Dimension>
         </Dimensions>
         <EvaluationPeriods>integer</EvaluationPeriods>
         <MetricName>string</MetricName>
         <Namespace>string</Namespace>
         <Period>integer</Period>
         <Statistic>string</Statistic>
         <Threshold>double</Threshold>
      </CloudWatchAlarmConfiguration>
      <HealthCheckConfig>
         <AlarmIdentifier>
            <Name>string</Name>
            <Region>string</Region>
```

```
         </AlarmIdentifier>
         <ChildHealthChecks>
            <ChildHealthCheck>string</ChildHealthCheck>
         </ChildHealthChecks>
         <Disabled>boolean</Disabled>
         <EnableSNI>boolean</EnableSNI>
         <FailureThreshold>integer</FailureThreshold>
         <FullyQualifiedDomainName>string</FullyQualifiedDomainName>
         <HealthThreshold>integer</HealthThreshold>
         <InsufficientDataHealthStatus>string</InsufficientDataHealthStatus>
         <Inverted>boolean</Inverted>
         <IPAddress>string</IPAddress>
         <MeasureLatency>boolean</MeasureLatency>
         <Port>integer</Port>
         <Regions>
            <Region>string</Region>
         </Regions>
         <RequestInterval>integer</RequestInterval>
         <ResourcePath>string</ResourcePath>
         <RoutingControlArn>string</RoutingControlArn>
         <SearchString>string</SearchString>
         <Type>string</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>long</HealthCheckVersion>
      <Id>string</Id>
      <LinkedService>
         <Description>string</Description>
         <ServicePrincipal>string</ServicePrincipal>
      </LinkedService>
   </HealthCheck>
</UpdateHealthCheckResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### UpdateHealthCheckResponse

Root level tag for the UpdateHealthCheckResponse parameters.

Required: Yes

**HealthCheck**

A complex type that contains the response to an `UpdateHealthCheck` request.

Type: HealthCheck object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**HealthCheckVersionMismatch**

The value of `HealthCheckVersion` in the request doesn't match the value of `HealthCheckVersion` in the health check.

HTTP Status Code: 409

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHealthCheck**

No health check exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Request Syntax for HTTP[S], HTTP[S]_STR_MATCH, and TCP Health Checks

This example illustrates one usage of UpdateHealthCheck.

```
POST /2013-04-01/healthcheck/health check ID HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
```

```
   <EnableSNI>true | false</EnableSNI>
   <FailureThreshold>number of health checks that must pass or fail to change the
 status of the health check</FailureThreshold>
   <FullyQualifiedDomainName>domain name of the endpoint to check</
FullyQualifiedDomainName>
   <HealthCheckVersion>sequential counter</HealthCheckVersion>
   <Inverted>true | false</Inverted>
   <IPAddress>IP address of the endpoint to check</IPAddress>
   <Port>port on the endpoint to check</Port>
   <Regions>
      <Region>us-west-1 | us-west-2 | us-east-1 | eu-west-1 | ap-southeast-1 | ap-
southeast-2 | ap-northeast-1 | sa-east-1</Region>
      ...
   </Regions>
   <ResourcePath>path of the file that you want Route 53 to request</ResourcePath>
   <SearchString>if Type is HTTP_STR_MATCH or HTTPS_STR_MATCH, the string to search for
 in the response body from the specified resource</SearchString>
</UpdateHealthCheckRequest>
```

### Response Syntax for HTTP[S], HTTP[S]_STR_MATCH, and TCP Health Checks

This example illustrates one usage of UpdateHealthCheck.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>ID that Route 53 assigned to the health check when you created it</Id>
      <CallerReference>unique description</CallerReference>
      <HealthCheckConfig>
         <EnableSNI>true | false</EnableSNI>
         <FailureThreshold>number of health checks that must pass or fail to change the
 status of the health check</FailureThreshold>
         <FullyQualifiedDomainName>domain name of the endpoint to check</
FullyQualifiedDomainName>
         <Inverted>true | false</Inverted>
         <IPAddress>IP address of the endpoint to check</IPAddress>
         <MeasureLatency>true | false</MeasureLatency>
         <Port>port on the endpoint to check</Port>
         <RequestInterval>10 | 30</RequestInterval>
         <ResourcePath>path of the file that you want Route 53 to request</
ResourcePath>
         <SearchString>if Type is HTTP_STR_MATCH or HTTPS_STR_MATCH, the string to
 search for in the response body from the specified resource</SearchString>
```

```
         <Type>HTTP | HTTPS | HTTP_STR_MATCH | HTTPS_STR_MATCH | TCP</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>sequential counter</HealthCheckVersion>
   </HealthCheck>
</UpdateHealthCheckResponse>
```

### Request Syntax for CLOUDWATCH_METRIC Health Checks

This example illustrates one usage of UpdateHealthCheck.

```
POST /2013-04-01/healthcheck/health check ID HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <AlarmIdentifier>
      <Name>name of CloudWatch alarm</Name>
      <Region>region that CloudWatch alarm was created in</Region>
   </AlarmIdentifier>
   <HealthCheckVersion>sequential counter</HealthCheckVersion>
   <InsufficientDataHealthStatus>Healthy | Unhealthy | LastKnownStatus</
InsufficientDataHealthStatus>
   <Inverted>true | false</Inverted>
</UpdateHealthCheckRequest>
```

### Response Syntax for CLOUDWATCH_METRIC Health Checks

This example illustrates one usage of UpdateHealthCheck.

```
POST /2013-04-01/healthcheck HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>ID that Route 53 assigned to the health check when you created it</Id>
      <CallerReference>unique description</CallerReference>
      <HealthCheckConfig>
         <AlarmIdentifier>
            <Name>name of CloudWatch alarm</Name>
            <Region>region of CloudWatch alarm</Region>
         </AlarmIdentifier>
         <InsufficientDataHealthStatus>Healthy | Unhealthy | LastKnownStatus</
InsufficientDataHealthStatus>
         <Inverted>true | false</Inverted>
         <Type>CLOUDWATCH_METRIC</Type>
      </HealthCheckConfig>
```

```
      <CloudWatchAlarmConfiguration>
         <EvaluationPeriods>number of periods that metric is compared to threshold</
EvaluationPeriods>
         <Threshold>value the metric is compared with</Threshold>
         <ComparisonOperator>GreaterThanOrEqualToThreshold | GreaterThanThreshold |
 LessThanThreshold | LessThanOrEqualToThreshold</ComparisonOperator>
         <Period>duration of a period in seconds</Period>
         <MetricName>name of the metric that's associated with the alarm</MetricName>
         <Namespace>namespace of the metric that the alarm is associated with</
Namespace>
         <Statistic>statistic applied to the CloudWatch metric</Statistic>
         <Dimensions>
            <Dimension>
               <Name>name of a dimension for the metric</Name>
               <Value>value of a dimension for the metric</Value>
            </Dimension>
            ...
         </Dimensions>
      </CloudWatchAlarmConfiguration>
      <HealthCheckVersion>sequential counter</HealthCheckVersion>
   </HealthCheck>
</UpdateHealthCheckResponse>
```

### Request Syntax for CALCULATED Health Checks

This example illustrates one usage of UpdateHealthCheck.

```
POST /2013-04-01/healthcheck/health check ID HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <ChildHealthChecks>
      <ChildHealthCheck>health check ID</ChildHealthCheck>
      ...
   </ChildHealthChecks>
   <HealthCheckVersion>sequential counter</HealthCheckVersion>
   <HealthThreshold>number of health checks that are associated with a CALCULATED
 health check that must be healthy</HealthThreshold>
   <Inverted>true | false</Inverted>
</UpdateHealthCheckRequest>
```

### Response Syntax for CALCULATED Health Checks

This example illustrates one usage of UpdateHealthCheck.

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHealthCheckResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HealthCheck>
      <Id>ID that Route 53 assigned to the health check when you created it</Id>
      <CallerReference>unique description</CallerReference>
      <HealthCheckConfig>
         <ChildHealthChecks>
            <ChildHealthCheck>health check ID</ChildHealthCheck>
            ...
         </ChildHealthChecks>
         <HealthThreshold>number of health checks associated with a CALCULATED health
 check that must be healthy</HealthThreshold>
         <Inverted>true | false</Inverted>
         <Type>CALCULATED</Type>
      </HealthCheckConfig>
      <HealthCheckVersion>sequential counter</HealthCheckVersion>
   </HealthCheck>
</UpdateHealthCheckResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateHostedZoneComment

Service: Amazon Route 53

Updates the comment for a specified hosted zone.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHostedZoneCommentRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Comment>string</Comment>
</UpdateHostedZoneCommentRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID for the hosted zone that you want to update the comment for.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### UpdateHostedZoneCommentRequest

Root level tag for the UpdateHostedZoneCommentRequest parameters.

Required: Yes

### Comment

The new comment for the hosted zone. If you don't specify a value for `Comment`, Amazon Route 53 deletes the existing value of the `Comment` element, if any.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHostedZoneCommentResponse>
   <HostedZone>
      <CallerReference>string</CallerReference>
      <Config>
         <Comment>string</Comment>
         <PrivateZone>boolean</PrivateZone>
      </Config>
      <Features>
         <AcceleratedRecoveryStatus>string</AcceleratedRecoveryStatus>
         <FailureReasons>
            <AcceleratedRecovery>string</AcceleratedRecovery>
         </FailureReasons>
      </Features>
      <Id>string</Id>
      <LinkedService>
         <Description>string</Description>
         <ServicePrincipal>string</ServicePrincipal>
      </LinkedService>
      <Name>string</Name>
      <ResourceRecordSetCount>long</ResourceRecordSetCount>
   </HostedZone>
</UpdateHostedZoneCommentResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### UpdateHostedZoneCommentResponse

Root level tag for the UpdateHostedZoneCommentResponse parameters.

Required: Yes

### HostedZone

A complex type that contains the response to the `UpdateHostedZoneComment` request.

Type: HostedZone object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of UpdateHostedZoneComment.

```
POST /2013-04-01/hostedzone/hosted zone ID HTTP/1.1
```

```
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHostedZoneCommentRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <Comment>for internal testing</Comment>
</UpdateHostedZoneCommentRequest>
```

### Example Response

This example illustrates one usage of UpdateHostedZoneComment.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHostedZoneCommentResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <HostedZone>
      <Id>/hostedzone/Z1D633PJN98FT9</Id>
      <Name>example.com</Name>
      <CallerReference>2014-10-15T01:36:41.958Z</CallerReference>
      <Config>
         <Comment>for internal testing</Comment>
         <PrivateZone>false</PrivateZone>
      </Config>
      <ResourceRecordSetCount>42</ResourceRecordSetCount>
   </HostedZone>
</UpdateHostedZoneCommentResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateHostedZoneFeatures

Service: Amazon Route 53

Updates the features configuration for a hosted zone. This operation allows you to enable or disable specific features for your hosted zone, such as accelerated recovery.

Accelerated recovery enables you to update DNS records in your public hosted zone even when the us-east-1 region is unavailable.

## Request Syntax

```
POST /2013-04-01/hostedzone/Id/features HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateHostedZoneFeaturesRequest xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
   <EnableAcceleratedRecovery>boolean</EnableAcceleratedRecovery>
</UpdateHostedZoneFeaturesRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the hosted zone for which you want to update features. This is the unique identifier for your hosted zone.

Length Constraints: Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### UpdateHostedZoneFeaturesRequest

Root level tag for the UpdateHostedZoneFeaturesRequest parameters.

Required: Yes

**EnableAcceleratedRecovery**

Specifies whether to enable accelerated recovery for the hosted zone. Set to `true` to enable accelerated recovery, or `false` to disable it.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**LimitsExceeded**

This operation can't be completed because the current account has reached the limit on the resource you are trying to create. To request a higher limit, create a case with the AWS Support Center.

**message**

HTTP Status Code: 400

**NoSuchHostedZone**

No hosted zone exists with the ID that you specified.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (`Bad request`). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateTrafficPolicyComment

Service: Amazon Route 53

Updates the comment for a specified traffic policy version.

## Request Syntax

```
POST /2013-04-01/trafficpolicy/Id/Version HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyCommentRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Comment>string</Comment>
</UpdateTrafficPolicyCommentRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The value of `Id` for the traffic policy that you want to update the comment for.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

### Version

The value of `Version` for the traffic policy that you want to update the comment for.

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### UpdateTrafficPolicyCommentRequest

Root level tag for the UpdateTrafficPolicyCommentRequest parameters.

Required: Yes

**Comment**

The new comment for the specified traffic policy and version.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyCommentResponse>
   <TrafficPolicy>
      <Comment>string</Comment>
      <Document>string</Document>
      <Id>string</Id>
      <Name>string</Name>
      <Type>string</Type>
      <Version>integer</Version>
   </TrafficPolicy>
</UpdateTrafficPolicyCommentResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

**UpdateTrafficPolicyCommentResponse**

Root level tag for the UpdateTrafficPolicyCommentResponse parameters.

Required: Yes

**TrafficPolicy**

A complex type that contains settings for the specified traffic policy.

Type: TrafficPolicy object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConcurrentModification**

Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

## Examples

### Example Request

This example illustrates one usage of UpdateTrafficPolicyComment.

```
POST /2013-04-01/trafficpolicy/12345678-abcd-9876-fedc-1a2b3c4de5f6/42 HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyCommentRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Comment>Updated comment</Comment>
</UpdateTrafficPolicyCommentRequest>
```

### Example Response

This example illustrates one usage of UpdateTrafficPolicyComment.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyCommentResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <Id>12345678-abcd-9876-fedc-1a2b3c4de5f6</Id>
   <VersionNumber>42</VersionNumber>
   <Name>MyTrafficPolicy</Name>
   <Type>A</Type>
   <Document>definition of the traffic policy</Document>
   <Comment>Updated comment</Comment>
</UpdateTrafficPolicyCommentResponse>
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateTrafficPolicyInstance

Service: Amazon Route 53

> **Note**
>
> After you submit a `UpdateTrafficPolicyInstance` request, there's a brief delay while Route 53 creates the resource record sets that are specified in the traffic policy definition. Use `GetTrafficPolicyInstance` with the `id` of updated traffic policy instance confirm that the `UpdateTrafficPolicyInstance` request completed successfully. For more information, see the `State` response element.

Updates the resource record sets in a specified hosted zone that were created based on the settings in a specified traffic policy version.

When you update a traffic policy instance, Amazon Route 53 continues to respond to DNS queries for the root resource record set name (such as example.com) while it replaces one group of resource record sets with another. Route 53 performs the following operations:

1. Route 53 creates a new group of resource record sets based on the specified traffic policy. This is true regardless of how significant the differences are between the existing resource record sets and the new resource record sets.
2. When all of the new resource record sets have been created, Route 53 starts to respond to DNS queries for the root resource record set name (such as example.com) by using the new resource record sets.
3. Route 53 deletes the old group of resource record sets that are associated with the root resource record set name.

## Request Syntax

```
POST /2013-04-01/trafficpolicyinstance/Id HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyInstanceRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyId>string</TrafficPolicyId>
   <TrafficPolicyVersion>integer</TrafficPolicyVersion>
   <TTL>long</TTL>
</UpdateTrafficPolicyInstanceRequest>
```

## URI Request Parameters

The request uses the following URI parameters.

### Id

The ID of the traffic policy instance that you want to update.

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## Request Body

The request accepts the following data in XML format.

### UpdateTrafficPolicyInstanceRequest

Root level tag for the UpdateTrafficPolicyInstanceRequest parameters.

Required: Yes

### TrafficPolicyId

The ID of the traffic policy that you want Amazon Route 53 to use to update resource record sets for the specified traffic policy instance.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

### TrafficPolicyVersion

The version of the traffic policy that you want Amazon Route 53 to use to update resource record sets for the specified traffic policy instance.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

### TTL

The TTL that you want Amazon Route 53 to assign to all of the updated resource record sets.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 2147483647.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyInstanceResponse>
   <TrafficPolicyInstance>
      <HostedZoneId>string</HostedZoneId>
      <Id>string</Id>
      <Message>string</Message>
      <Name>string</Name>
      <State>string</State>
      <TrafficPolicyId>string</TrafficPolicyId>
      <TrafficPolicyType>string</TrafficPolicyType>
      <TrafficPolicyVersion>integer</TrafficPolicyVersion>
      <TTL>long</TTL>
   </TrafficPolicyInstance>
</UpdateTrafficPolicyInstanceResponse>
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in XML format by the service.

### UpdateTrafficPolicyInstanceResponse

Root level tag for the UpdateTrafficPolicyInstanceResponse parameters.

Required: Yes

### TrafficPolicyInstance

A complex type that contains settings for the updated traffic policy instance.

Type: TrafficPolicyInstance object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ConflictingTypes**

You tried to update a traffic policy instance by using a traffic policy version that has a different DNS type than the current type for the instance. You specified the type in the JSON document in the `CreateTrafficPolicy` or `CreateTrafficPolicyVersion`request.

**message**

HTTP Status Code: 400

**InvalidInput**

The input is not valid.

**message**

HTTP Status Code: 400

**NoSuchTrafficPolicy**

No traffic policy exists with the specified ID.

**message**

HTTP Status Code: 404

**NoSuchTrafficPolicyInstance**

No traffic policy instance exists with the specified ID.

**message**

HTTP Status Code: 404

**PriorRequestNotComplete**

If Amazon Route 53 can't process a request before the next request arrives, it will reject subsequent requests for the same hosted zone and return an `HTTP 400 error` (Bad

request). If Route 53 returns this error repeatedly for the same request, we recommend that you wait, in intervals of increasing duration, before you try the request again.

HTTP Status Code: 400

## Examples

### Example Request

This example illustrates one usage of UpdateTrafficPolicyInstance.

```
POST /2013-04-01/trafficpolicyinstance/12131415-abac-5432-caba-6f5e4d3c2b1a HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyInstanceRequest xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TTL>300</TTL>
   <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
   <VersionNumber>7</VersionNumber>
</UpdateTrafficPolicyInstanceRequest>
```

### Example Response

This example illustrates one usage of UpdateTrafficPolicyInstance.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<UpdateTrafficPolicyInstanceResponse xmlns="https://route53.amazonaws.com/
doc/2013-04-01/">
   <TrafficPolicyInstance>
      <Id>12131415-abac-5432-caba-6f5e4d3c2b1a</Id>
      <HostedZoneId>Z1D633PJN98FT9</HostedZoneId>
      <Name>www.example.com</Name>
      <TTL>300</TTL>
      <State>Applied</State>
      <Message/>
      <TrafficPolicyId>12345678-abcd-9876-fedc-1a2b3c4de5f6</TrafficPolicyId>
      <TrafficPolicyVersion>7</TrafficPolicyVersion>
      <TrafficPolicyType>A</TrafficPolicyType>
   </TrafficPolicyInstance>
</UpdateTrafficPolicyInstanceResponse>
```

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

## Amazon Route 53 domain registration

The following actions are supported by Amazon Route 53 domain registration:

- AcceptDomainTransferFromAnotherAwsAccount
- AssociateDelegationSignerToDomain
- CancelDomainTransferToAnotherAwsAccount
- CheckDomainAvailability
- CheckDomainTransferability
- DeleteDomain
- DeleteTagsForDomain
- DisableDomainAutoRenew
- DisableDomainTransferLock
- DisassociateDelegationSignerFromDomain
- EnableDomainAutoRenew
- EnableDomainTransferLock
- GetContactReachabilityStatus

- GetDomainDetail
- GetDomainPrices
- GetDomainSuggestions
- GetOperationDetail
- ListDomains
- ListOperations
- ListPrices
- ListTagsForDomain
- PushDomain
- RegisterDomain
- RejectDomainTransferFromAnotherAwsAccount
- RenewDomain
- ResendContactReachabilityEmail
- ResendOperationAuthorization
- RestoreDomain
- RetrieveDomainAuthCode
- TransferDomain
- TransferDomainToAnotherAwsAccount
- UpdateDomainContact
- UpdateDomainContactPrivacy
- UpdateDomainNameservers
- UpdateTagsForDomain
- ViewBilling

# AcceptDomainTransferFromAnotherAwsAccount

Service: Amazon Route 53 domain registration

Accepts the transfer of a domain from another AWS account to the currentAWS account. You initiate a transfer between AWS accounts using TransferDomainToAnotherAwsAccount.

If you use the AWS CLI command at accept-domain-transfer-from-another-aws-account, use JSON format as input instead of text because otherwise AWS CLI will throw an error from domain transfer input that includes single quotes.

Use either ListOperations or GetOperationDetail to determine whether the operation succeeded. GetOperationDetail provides additional information, for example, `Domain Transfer from Aws Account 111122223333 has been cancelled`.

## Request Syntax

```
{
   "DomainName": "string",
   "Password": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that was specified when another AWS account submitted a TransferDomainToAnotherAwsAccount request.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**Password**

The password that was returned by the TransferDomainToAnotherAwsAccount request.

Type: String

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DomainLimitExceeded**

The number of domains has exceeded the allowed threshold for the account.

**message**

The number of domains has exceeded the allowed threshold for the account.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the

request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### AcceptDomainTransferFromAnotherAwsAccount Example

This example illustrates one usage of AcceptDomainTransferFromAnotherAwsAccount.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20200311T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
```

```
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.AcceptDomainTransferFromAnotherAwsAccount
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
    "DomainName":"example.com",
    "Password":"CeT2Zxs~Example"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
    "OperationId":"308c56712-faa4-40fe-94c8-b4230example"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# AssociateDelegationSignerToDomain

Service: Amazon Route 53 domain registration

Creates a delegation signer (DS) record in the registry zone for this domain name.

Note that creating DS record at the registry impacts DNSSEC validation of your DNS records. This action may render your domain name unavailable on the internet if the steps are completed in the wrong order, or with incorrect timing. For more information about DNSSEC signing, see Configuring DNSSEC signing in the *Route 53 developer guide*.

## Request Syntax

```
{
   "DomainName": "string",
   "SigningAttributes": {
      "Algorithm": number,
      "Flags": number,
      "PublicKey": "string"
   }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**SigningAttributes**

The information about a key, including the algorithm, public key-value, and flags.

Type: DnssecSigningAttributes object

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

The identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DnssecLimitExceeded**

This error is returned if you call `AssociateDelegationSignerToDomain` when the specified domain has reached the maximum number of DS records. You can't add any additional DS records unless you delete an existing one first.

HTTP Status Code: 400

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CancelDomainTransferToAnotherAwsAccount

Service: Amazon Route 53 domain registration

Cancels the transfer of a domain from the current AWS account to another AWS account. You initiate a transfer betweenAWS accounts using TransferDomainToAnotherAwsAccount.

> **Important**
>
> You must cancel the transfer before the other AWS account accepts the transfer using AcceptDomainTransferFromAnotherAwsAccount.

Use either ListOperations or GetOperationDetail to determine whether the operation succeeded. GetOperationDetail provides additional information, for example, `Domain Transfer from Aws Account 111122223333 has been cancelled`.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainName

The name of the domain for which you want to cancel the transfer to another AWS account.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
```

```
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

The identifier that `TransferDomainToAnotherAwsAccount` returned to track the progress of the request. Because the transfer request was canceled, the value is no longer valid, and you can't use `GetOperationDetail` to query the operation status.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### CancelDomainTransferToAnotherAwsAccount Example

This example illustrates one usage of CancelDomainTransferToAnotherAwsAccount.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20200311T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.CancelDomainTransferToAnotherAwsAccount
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
    "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
```

```
Content-Length:[number of characters in the JSON string]
{
    "OperationId":"308c56712-faa4-40fe-94c8-b4230example"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CheckDomainAvailability

Service: Amazon Route 53 domain registration

This operation checks the availability of one domain name. Note that if the availability status of a domain is pending, you must submit another request to determine the availability of the domain name.

## Request Syntax

```
{
   "DomainName": "string",
   "IdnLangCode": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainName

The name of the domain that you want to get availability for. The top-level domain (TLD), such as .com, must be a TLD that Route 53 supports. For a list of supported TLDs, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

The domain name can contain only the following characters:

- Letters a through z. Domain names are not case sensitive.
- Numbers 0 through 9.
- Hyphen (-). You can't specify a hyphen at the beginning or end of a label.
- Period (.) to separate the labels in the name, such as the `.` in `example.com`.

Internationalized domain names are not supported for some top-level domains. To determine whether the TLD that you want to use supports internationalized domain names, see Domains that You Can Register with Amazon Route 53. For more information, see Formatting Internationalized Domain Names.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**IdnLangCode**

Reserved for future use.

Type: String

Pattern: `(|[A-Za-z]{2,3})`

Required: No

## Response Syntax

```
{
   "Availability": "string",
   "Price": {
      "Currency": "string",
      "Price": number,
      "PriceType": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Availability**

Whether the domain name is available for registering.

> **Note**
>
> You can register only domains designated as `AVAILABLE`.

Valid values:

AVAILABLE

The domain name is available.

AVAILABLE_RESERVED

The domain name is reserved under specific conditions.

AVAILABLE_PREORDER

The domain name is available and can be preordered.

DONT_KNOW

The TLD registry didn't reply with a definitive answer about whether the domain name is available. Route 53 can return this response for a variety of reasons, for example, the registry is performing maintenance. Try again later.

INVALID_NAME_FOR_TLD

The TLD isn't valid. For example, it can contain characters that aren't allowed.

PENDING

The TLD registry didn't return a response in the expected amount of time. When the response is delayed, it usually takes just a few extra seconds. You can resubmit the request immediately.

RESERVED

The domain name has been reserved for another person or organization.

UNAVAILABLE

The domain name is not available.

UNAVAILABLE_PREMIUM

The domain name is not available.

UNAVAILABLE_RESTRICTED

The domain name is forbidden.

Type: String

Valid Values: `AVAILABLE | AVAILABLE_RESERVED | AVAILABLE_PREORDER | UNAVAILABLE | UNAVAILABLE_PREMIUM | UNAVAILABLE_RESTRICTED | RESERVED | DONT_KNOW | INVALID_NAME_FOR_TLD | PENDING`

**Price**

The price to register the domain name, in the currency that `Currency` specifies. If the domain has registry premium pricing, this price is different from the standard rate for the TLD that `ListPrices` returns. Use `PriceType` to determine which rate applies.

This element is returned only when `Availability` is `AVAILABLE`.

Type: PriceWithCurrency object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### CheckDomainAvailability Example

This example illustrates one usage of CheckDomainAvailability.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205225Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.CheckDomainAvailability
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
connections:Keep-Alive
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "Availability":"AVAILABLE"
```

```
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CheckDomainTransferability

Service: Amazon Route 53 domain registration

Checks whether a domain name can be transferred to Amazon Route 53.

## Request Syntax

```
{
   "AuthCode": "string",
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**AuthCode**

If the registrar for the top-level domain (TLD) requires an authorization code to transfer the domain, the code that you got from the current registrar for the domain.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

**DomainName**

The name of the domain that you want to transfer to Route 53. The top-level domain (TLD), such as .com, must be a TLD that Route 53 supports. For a list of supported TLDs, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

The domain name can contain only the following characters:

- Letters a through z. Domain names are not case sensitive.
- Numbers 0 through 9.
- Hyphen (-). You can't specify a hyphen at the beginning or end of a label.
- Period (.) to separate the labels in the name, such as the `.` in `example.com`.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "Message": "string",
   "Price": {
      "Currency": "string",
      "Price": number,
      "PriceType": "string"
   },
   "Transferability": {
      "Transferable": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### Message

Provides an explanation for when a domain can't be transferred.

Type: String

### Price

The price to transfer the domain name to Route 53, in the currency that `Currency` specifies. If the domain has registry premium pricing, this price is different from the standard rate for the TLD that `ListPrices` returns. Use `PriceType` to determine which rate applies.

This element is returned only when Route 53 can determine whether the domain is transferable.

Type: PriceWithCurrency object

**Transferability**

A complex type that contains information about whether the specified domain can be transferred to Route 53.

Type: DomainTransferability object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### CheckDomainTransferability Example

This example illustrates one usage of CheckDomainTransferability.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205225Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.CheckDomainTransferability
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
connections:Keep-Alive
{
   "DomainName": "example.com",
   "AuthCode": "T92XJ38"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "Transferability":
      {"Transferable":"TRANSFERABLE"}
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteDomain

Service: Amazon Route 53 domain registration

This operation deletes the specified domain. This action is permanent. For more information, see Deleting a domain name registration.

To transfer the domain registration to another registrar, use the transfer process that's provided by the registrar to which you want to transfer the registration. Otherwise, the following apply:

1. You can't get a refund for the cost of a deleted domain registration.
2. The registry for the top-level domain might hold the domain name for a brief time before releasing it for other users to register (varies by registry).
3. When the registration has been deleted, we'll send you a confirmation to the registrant contact. The email will come from `noreply@domainnameverification.net` or `noreply@emailverification.info` or `noreply@registrar.amazon`.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

Name of the domain to be deleted.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the

request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteTagsForDomain

Service: Amazon Route 53 domain registration

This operation deletes the specified tags for a domain.

All tag operations are eventually consistent; subsequent operations might not immediately represent all issued operations.

## Request Syntax

```
{
   "DomainName": "string",
   "TagsToDelete": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The domain for which you want to delete one or more tags.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**TagsToDelete**

A list of tag keys to delete.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

### OperationLimitExceeded

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

### UnsupportedTLD

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### DeleteTagsForDomain Example

This example illustrates one usage of DeleteTagsForDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.DeleteTagsForDomain
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName": "example.com",
   "TagsToDelete": [
      "foo",
      "foo2"
   ]
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisableDomainAutoRenew

Service: Amazon Route 53 domain registration

This operation disables automatic renewal of domain registration for the specified domain.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that you want to disable automatic renewal for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### DisableDomainAutoRenew Example

This example illustrates one usage of DisableDomainAutoRenew.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.DisableDomainAutoRenew
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisableDomainTransferLock

Service: Amazon Route 53 domain registration

This operation removes the transfer lock on the domain (specifically the `clientTransferProhibited` status) to allow domain transfers. We recommend you refrain from performing this action unless you intend to transfer the domain to a different registrar. Successful submission returns an operation ID that you can use to track the progress and completion of the action. If the request is not completed successfully, the domain registrant will be notified by email.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that you want to remove the transfer lock for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### DisableDomainTransferLock Example

This example illustrates one usage of DisableDomainTransferLock.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
```

```
               Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.DisableDomainTransferLock
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
"DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
"OperationId":"0b370c79-faa4-40fe-94c8-b423069de3f6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateDelegationSignerFromDomain

Service: Amazon Route 53 domain registration

Deletes a delegation signer (DS) record in the registry zone for this domain name.

## Request Syntax

```
{
   "DomainName": "string",
   "Id": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

Name of the domain.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**Id**

An internal identification number assigned to each DS record after it's created. You can retrieve it as part of DNSSEC information returned by GetDomainDetail.

Type: String

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# EnableDomainAutoRenew

Service: Amazon Route 53 domain registration

This operation configures Amazon Route 53 to automatically renew the specified domain before the domain registration expires. The cost of renewing your domain registration is billed to your AWS account.

The period during which you can renew a domain name varies by TLD. For a list of TLDs and their renewal policies, see Domains That You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*. Route 53 requires that you renew before the end of the renewal period so we can complete processing before the deadline.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that you want to enable automatic renewal for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### EnableDomainAutoRenew Example

This example illustrates one usage of EnableDomainAutoRenew.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
```

```
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.EnableDomainAutoRenew
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# EnableDomainTransferLock

Service: Amazon Route 53 domain registration

This operation sets the transfer lock on the domain (specifically the `clientTransferProhibited` status) to prevent domain transfers. Successful submission returns an operation ID that you can use to track the progress and completion of the action. If the request is not completed successfully, the domain registrant will be notified by email.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that you want to set the transfer lock for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### EnableDomainTransferLock Example

This example illustrates one usage of EnableDomainTransferLock.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
```

```
               Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.EnableDomainTransferLock
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "OperationId":"0b370c79-faa4-40fe-94c8-b423069de3f6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetContactReachabilityStatus

Service: Amazon Route 53 domain registration

For operations that require confirmation that the email address for the registrant contact is valid, such as registering a new domain, this operation returns information about whether the registrant contact has responded.

If you want us to resend the email, use the `ResendContactReachabilityEmail` operation.

## Request Syntax

```
{
   "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**domainName**

The name of the domain for which you want to know whether the registrant contact has confirmed that the email address is valid.

Type: String

Length Constraints: Maximum length of 255.

Required: No

## Response Syntax

```
{
   "domainName": "string",
   "status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**domainName**

The domain name for which you requested the reachability status.

Type: String

Length Constraints: Maximum length of 255.

**status**

Whether the registrant contact has responded. Values include the following:

PENDING

We sent the confirmation email and haven't received a response yet.

DONE

We sent the email and got confirmation from the registrant contact.

EXPIRED

The time limit expired before the registrant contact responded.

Type: String

Valid Values: `PENDING | DONE | EXPIRED`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### GetContactReachabilityStatus Example

This example illustrates one usage of GetContactReachabilityStatus.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205225Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
```

```
x-amz-target:Route53Domains_v20140515.GetContactReachabilityStatus
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
connections:Keep-Alive
{
   "domainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "domainName":"example.com",
   "status":"PENDING"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetDomainDetail

Service: Amazon Route 53 domain registration

This operation returns detailed information about a specified domain that is associated with the current AWS account. Contact information for the domain is also returned as part of the output.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainName

The name of the domain that you want to get detailed information about.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "AbuseContactEmail": "string",
   "AbuseContactPhone": "string",
   "AdminContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
```

```
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "AdminPrivacy": boolean,
   "AutoRenew": boolean,
   "BillingContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "BillingPrivacy": boolean,
   "CreationDate": number,
   "DnsSec": "string",
   "DnssecKeys": [
      {
         "Algorithm": number,
         "Digest": "string",
         "DigestType": number,
         "Flags": number,
```

```
         "Id": "string",
         "KeyTag": number,
         "PublicKey": "string"
      }
   ],
   "DomainName": "string",
   "ExpirationDate": number,
   "Nameservers": [
      {
         "GlueIps": [ "string" ],
         "Name": "string"
      }
   ],
   "RegistrantContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "RegistrantPrivacy": boolean,
   "RegistrarName": "string",
   "RegistrarUrl": "string",
   "RegistryDomainId": "string",
   "Reseller": "string",
   "StatusList": [ "string" ],
   "TechContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
```

```
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "TechPrivacy": boolean,
   "UpdatedDate": number,
   "WhoIsServer": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### AbuseContactEmail

Email address to contact to report incorrect contact information for a domain, to report that the domain is being used to send spam, to report that someone is cybersquatting on a domain name, or report some other type of abuse.

Type: String

Length Constraints: Maximum length of 254.

### AbuseContactPhone

Phone number for reporting abuse.

Type: String

Length Constraints: Maximum length of 30.

**AdminContact**

Provides details about the domain administrative contact.

Type: ContactDetail object

**AdminPrivacy**

Specifies whether contact information is concealed from WHOIS queries. If the value is `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If the value is `false`, WHOIS queries return the information that you entered for the admin contact.

Type: Boolean

**AutoRenew**

Specifies whether the domain registration is set to renew automatically.

Type: Boolean

**BillingContact**

Provides details about the domain billing contact.

Type: ContactDetail object

**BillingPrivacy**

Specifies whether contact information is concealed from WHOIS queries. If the value is `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If the value is `false`, WHOIS queries return the information that you entered for the billing contact.

Type: Boolean

**CreationDate**

The date when the domain was created as found in the response to a WHOIS query. The date and time is in Unix time format and Coordinated Universal time (UTC).

Type: Timestamp

**DnsSec**

Deprecated.

Type: String

**DnssecKeys**

A complex type that contains information about the DNSSEC configuration.

Type: Array of DnssecKey objects

**DomainName**

The name of a domain.

Type: String

Length Constraints: Maximum length of 255.

**ExpirationDate**

The date when the registration for the domain is set to expire. The date and time is in Unix time format and Coordinated Universal time (UTC).

Type: Timestamp

**Nameservers**

The name servers of the domain.

Type: Array of Nameserver objects

**RegistrantContact**

Provides details about the domain registrant.

Type: ContactDetail object

**RegistrantPrivacy**

Specifies whether contact information is concealed from WHOIS queries. If the value is `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If the value is `false`, WHOIS queries return the information that you entered for the registrant contact (domain owner).

Type: Boolean

**RegistrarName**

Name of the registrar of the domain as identified in the registry.

Type: String

**RegistrarUrl**

Web address of the registrar.

Type: String

**RegistryDomainId**

Reserved for future use.

Type: String

**Reseller**

Reserved for future use.

Type: String

**StatusList**

An array of domain name status codes, also known as Extensible Provisioning Protocol (EPP) status codes.

ICANN, the organization that maintains a central database of domain names, has developed a set of domain name status codes that tell you the status of a variety of operations on a domain name, for example, registering a domain name, transferring a domain name to another registrar, renewing the registration for a domain name, and so on. All registrars use this same set of status codes.

For a current list of domain name status codes and an explanation of what each code means, go to the ICANN website and search for `epp status codes`. (Search on the ICANN website; web searches sometimes return an old version of the document.)

Type: Array of strings

**TechContact**

Provides details about the domain technical contact.

Type: ContactDetail object

**TechPrivacy**

Specifies whether contact information is concealed from WHOIS queries. If the value is `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our

registrar associate, Gandi. If the value is `false`, WHOIS queries return the information that you entered for the technical contact.

Type: Boolean

**UpdatedDate**

The last updated date of the domain as found in the response to a WHOIS query. The date and time is in Unix time format and Coordinated Universal time (UTC).

Type: Timestamp

**WhoIsServer**

The fully qualified name of the WHOIS server that can answer the WHOIS query for the domain.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### GetDomainDetail Example

This example illustrates one usage of GetDomainDetail.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.GetDomainDetail
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "AbuseContactEmail":"abuse@support.gandi.net",
   "AbuseContactPhone":"+33.170377661",
   "AdminContact":{
      "AddressLine1":"1 Any Street",
      "AddressLine2":"",
      "City":"Anytown",
      "CountryCode":"US",
      "Email":"john@example.com",
      "ExtraParams":[
      ],
      "FirstName":"John",
      "LastName":"Doe",
```

```
      "PhoneNumber":"+1.1234567890",
      "State":"WA",
      "ZipCode":"98101"
   },
   "AdminPrivacy":true,
   "AutoRenew":true,
   "CreationDate":1400010459,
   "DomainName":"example.com",
   "ExpirationDate":1431539259,
   "Nameservers":[
      {
         "GlueIps":[
         ],
         "Name":"ns-2048.awsdns-64.com"
      },
      {
         "GlueIps":[
         ],
         "Name":"ns-2051.awsdns-67.co.uk"
      },
      {
         "GlueIps":[
         ],
         "Name":"ns-2050.awsdns-66.org"
      },
      {
         "GlueIps":[
         ],
         "Name":"ns-2049.awsdns-65.net"
      }
   ],
   "RegistrantContact":{
      "AddressLine1":"1 Any Street",
      "AddressLine2":"",
      "City":"Anytown",
      "CountryCode":"US",
      "Email":"john@example.com",
      "ExtraParams":[
      ],
      "FirstName":"John",
      "LastName":"Doe",
      "PhoneNumber":"+1.1234567890",
      "State":"WA",
      "ZipCode":"98101"
```

```
    },
    "RegistrantPrivacy":true,
    "RegistrarName":"GANDI SAS",
    "RegistrarUrl":"http://www.gandi.net",
    "StatusList":[
    "clientTransferProhibited"
    ],
    "TechContact":{
       "AddressLine1":"1 Any Street",
       "AddressLine2":"",
       "City":"Anytown",
       "CountryCode":"US",
       "Email":"john@example.com",
       "ExtraParams":[
       ],
       "FirstName":"John",
       "LastName":"Doe",
       "PhoneNumber":"+1.1234567890",
       "State":"WA",
       "ZipCode":"98101"
       },
    "TechPrivacy":true,
    "UpdatedDate":1400010459,
    "WhoIsServer":"whois.gandi.net"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# GetDomainPrices

Service: Amazon Route 53 domain registration

Returns the following prices for the specified domain:

- Registration
- Transfer
- Owner change
- Renewal
- Restoration

For most domains, the prices match the standard prices for the TLD that the ListPrices operation returns. For a premium domain, the registry sets the price individually. Premium prices might differ from the standard prices and can change over time.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that you want to get the prices for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "DomainPrice": {
      "ChangeOwnershipPrice": {
         "Currency": "string",
         "Price": number,
         "PriceType": "string"
      },
      "Name": "string",
      "RegistrationPrice": {
         "Currency": "string",
         "Price": number,
         "PriceType": "string"
      },
      "RenewalPrice": {
         "Currency": "string",
         "Price": number,
         "PriceType": "string"
      },
      "RestorationPrice": {
         "Currency": "string",
         "Price": number,
         "PriceType": "string"
      },
      "TransferPrice": {
         "Currency": "string",
         "Price": number,
         "PriceType": "string"
      }
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### DomainPrice

The registration, transfer, owner change, renewal, and restoration prices for the specified domain.

Type: DomainPrice object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetDomainSuggestions

Service: Amazon Route 53 domain registration

The GetDomainSuggestions operation returns a list of suggested domain names.

## Request Syntax

```
{
   "DomainName": "string",
   "OnlyAvailable": boolean,
   "OnlyStandardPrices": boolean,
   "SuggestionCount": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainName

A domain name that you want to use as the basis for a list of possible domain names. The top-level domain (TLD), such as .com, must be a TLD that Route 53 supports. For a list of supported TLDs, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

The domain name can contain only the following characters:

- Letters a through z. Domain names are not case sensitive.
- Numbers 0 through 9.
- Hyphen (-). You can't specify a hyphen at the beginning or end of a label.
- Period (.) to separate the labels in the name, such as the `.` in `example.com`.

Internationalized domain names are not supported for some top-level domains. To determine whether the TLD that you want to use supports internationalized domain names, see Domains that You Can Register with Amazon Route 53.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**OnlyAvailable**

If `OnlyAvailable` is `true`, Route 53 returns only domain names that are available. If `OnlyAvailable` is `false`, Route 53 returns domain names without checking whether they're available to be registered. To determine whether the domain is available, call `checkDomainAvailability` for each suggestion.

If `OnlyAvailable` is `false`, Route 53 does not return pricing information for the suggested domain names.

Type: Boolean

Required: Yes

**OnlyStandardPrices**

If `true`, Route 53 returns only domain names that are priced at the standard registration rate for their TLD. If `false`, Route 53 includes domain names with premium pricing in the suggestions list. The default is `true`.

Type: Boolean

Required: No

**SuggestionCount**

The number of suggested domain names that you want Route 53 to return. Specify a value between 1 and 50. Note that fewer than the requested number might be returned.

Type: Integer

Required: Yes

## Response Syntax

```
{
   "SuggestionsList": [
      {
         "Availability": "string",
         "DomainName": "string",
         "Price": {
            "Currency": "string",
```

```
            "Price": number,
            "PriceType": "string"
         }
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**SuggestionsList**

A list of possible domain names. If you specified `true` for `OnlyAvailable` in the request, the list contains only domains that are available for registration.

Type: Array of DomainSuggestion objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### GetDomainSuggestions Example

This example illustrates one usage of GetDomainSuggestions.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.GetDomainSuggestions
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
```

```
    "DomainName": "example.com",
    "SuggestionCount": 8,
    "OnlyAvailable": false
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
    "SuggestionsList":[
        {"DomainName": "example.net"},
        {"DomainName": "example.org"},
        {"DomainName": "example.io"},
        {"DomainName": "example.com.au"},
        {"DomainName": "example.co.uk"},
        {"DomainName": "example.de"},
        {"DomainName": "example.co"},
        {"DomainName": "example.info"}
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetOperationDetail

Service: Amazon Route 53 domain registration

This operation returns the current status of an operation that is not completed.

## Request Syntax

```
{
   "OperationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### OperationId

The identifier for the operation for which you want to get the status. Route 53 returned the identifier in the response to the original request.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "DomainName": "string",
   "LastUpdatedDate": number,
   "Message": "string",
   "OperationId": "string",
   "Status": "string",
   "StatusFlag": "string",
   "SubmittedDate": number,
   "Type": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**DomainName**

The name of a domain.

Type: String

Length Constraints: Maximum length of 255.

**LastUpdatedDate**

The date when the operation was last updated.

Type: Timestamp

**Message**

Detailed information on the status including possible errors.

Type: String

**OperationId**

The identifier for the operation.

Type: String

Length Constraints: Maximum length of 255.

**Status**

The current status of the requested operation in the system.

Type: String

Valid Values: `SUBMITTED | IN_PROGRESS | ERROR | SUCCESSFUL | FAILED`

**StatusFlag**

Lists any outstanding operations that require customer action. Valid values are:

- `PENDING_ACCEPTANCE`: The operation is waiting for acceptance from the account that is receiving the domain.

- PENDING_CUSTOMER_ACTION: The operation is waiting for customer action, for example, returning an email.
- PENDING_AUTHORIZATION: The operation is waiting for the form of authorization. For more information, see ResendOperationAuthorization.
- PENDING_PAYMENT_VERIFICATION: The operation is waiting for the payment method to validate.
- PENDING_SUPPORT_CASE: The operation includes a support case and is waiting for its resolution.

Type: String

Valid Values: PENDING_ACCEPTANCE | PENDING_CUSTOMER_ACTION | PENDING_AUTHORIZATION | PENDING_PAYMENT_VERIFICATION | PENDING_SUPPORT_CASE

**SubmittedDate**

The date when the request was submitted.

Type: Timestamp

**Type**

The type of operation that was requested.

Type: String

Valid Values: REGISTER_DOMAIN | DELETE_DOMAIN | TRANSFER_IN_DOMAIN | UPDATE_DOMAIN_CONTACT | UPDATE_NAMESERVER | CHANGE_PRIVACY_PROTECTION | DOMAIN_LOCK | ENABLE_AUTORENEW | DISABLE_AUTORENEW | ADD_DNSSEC | REMOVE_DNSSEC | EXPIRE_DOMAIN | TRANSFER_OUT_DOMAIN | CHANGE_DOMAIN_OWNER | RENEW_DOMAIN | PUSH_DOMAIN | INTERNAL_TRANSFER_OUT_DOMAIN | INTERNAL_TRANSFER_IN_DOMAIN | RELEASE_TO_GANDI | TRANSFER_ON_RENEW | RESTORE_DOMAIN

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

## Examples

### GetOperationDetail Example

This example illustrates one usage of GetOperationDetail.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.GetOperationDetail
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "OperationId":"43884ce5-e30a-4801-858f-7aa86356c127"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "DomainName":"happierdomain.ca",
   "OperationId":"43884ce5-e30a-4801-858f-7aa86356c127",
   "Status":"WORKFLOW_IN_PROGRESS",
   "SubmittedDate" : 1402630939.057,
   "Type" : "REGISTER_DOMAIN"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListDomains

Service: Amazon Route 53 domain registration

This operation returns all the domain names registered with Amazon Route 53 for the current AWS account if no filtering conditions are used.

## Request Syntax

```
{
   "FilterConditions": [
      {
         "Name": "string",
         "Operator": "string",
         "Values": [ "string" ]
      }
   ],
   "Marker": "string",
   "MaxItems": number,
   "SortCondition": {
      "Name": "string",
      "SortOrder": "string"
   }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FilterConditions

A complex type that contains information about the filters applied during the `ListDomains` request. The filter conditions can include domain name and domain expiration.

Type: Array of FilterCondition objects

Required: No

### Marker

For an initial request for a list of domains, omit this element. If the number of domains that are associated with the current AWS account is greater than the value that you

specified for `MaxItems`, you can use `Marker` to return additional domains. Get the value of `NextPageMarker` from the previous response, and submit another request that includes the value of `NextPageMarker` in the `Marker` element.

Constraints: The marker must match the value specified in the previous request.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

**MaxItems**

Number of domains to be returned.

Default: 20

Type: Integer

Valid Range: Maximum value of 100.

Required: No

**SortCondition**

A complex type that contains information about the requested ordering of domains in the returned list.

Type: SortCondition object

Required: No

## Response Syntax

```
{
   "Domains": [
      {
         "AutoRenew": boolean,
         "DomainName": "string",
         "Expiry": number,
         "TransferLock": boolean
      }
```

```
    ],
    "NextPageMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Domains**

A list of domains.

Type: Array of DomainSummary objects

**NextPageMarker**

If there are more domains than you specified for `MaxItems` in the request, submit another request and include the value of `NextPageMarker` in the value of `Marker`.

Type: String

Length Constraints: Maximum length of 4096.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

## Examples

### ListDomains Example

This example illustrates one usage of ListDomains.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.ListDomains
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "Marker":"AxDAClaROQAXasf29GHWAIKPLA=",
   "MaxItems":20
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "Domains":[
      {
         "AutoRenew":false,
         "DomainName":"example.com",
         "Expiry":1431203765,
         "TransferLock":false
      },
      {
         "AutoRenew":false,
         "DomainName":"example.net",
         "Expiry":1431539260,
```

```
            "TransferLock":false
         },
         {
            "AutoRenew":false,
            "DomainName":"example.org",
            "Expiry":1431240024,
            "TransferLock":false
         },
         {
            "AutoRenew":false,
            "DomainName":"example.test",
            "Expiry":1431539259,
            "TransferLock":false
         }
      ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListOperations

Service: Amazon Route 53 domain registration

Returns information about all of the operations that return an operation ID and that have ever been performed on domains that were registered by the current account.

This command runs only in the us-east-1 Region.

## Request Syntax

```
{
   "Marker": "string",
   "MaxItems": number,
   "SortBy": "string",
   "SortOrder": "string",
   "Status": [ "string" ],
   "SubmittedSince": number,
   "Type": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Marker

For an initial request for a list of operations, omit this element. If the number of operations that are not yet complete is greater than the value that you specified for `MaxItems`, you can use `Marker` to return additional operations. Get the value of `NextPageMarker` from the previous response, and submit another request that includes the value of `NextPageMarker` in the `Marker` element.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

### MaxItems

Number of domains to be returned.

Default: 20

Type: Integer

Valid Range: Maximum value of 100.

Required: No

**SortBy**

The sort type for returned values.

Type: String

Valid Values: `SubmittedDate`

Required: No

**SortOrder**

The sort order for returned values, either ascending or descending.

Type: String

Valid Values: `ASC | DESC`

Required: No

**Status**

The status of the operations.

Type: Array of strings

Array Members: Maximum number of 5 items.

Valid Values: `SUBMITTED | IN_PROGRESS | ERROR | SUCCESSFUL | FAILED`

Required: No

**SubmittedSince**

An optional parameter that lets you get information about all the operations that you submitted after a specified date and time. Specify the date and time in Unix time format and Coordinated Universal time (UTC).

Type: Timestamp

Required: No

### Type

An arrays of the domains operation types.

Type: Array of strings

Array Members: Maximum number of 21 items.

Valid Values: `REGISTER_DOMAIN | DELETE_DOMAIN | TRANSFER_IN_DOMAIN | UPDATE_DOMAIN_CONTACT | UPDATE_NAMESERVER | CHANGE_PRIVACY_PROTECTION | DOMAIN_LOCK | ENABLE_AUTORENEW | DISABLE_AUTORENEW | ADD_DNSSEC | REMOVE_DNSSEC | EXPIRE_DOMAIN | TRANSFER_OUT_DOMAIN | CHANGE_DOMAIN_OWNER | RENEW_DOMAIN | PUSH_DOMAIN | INTERNAL_TRANSFER_OUT_DOMAIN | INTERNAL_TRANSFER_IN_DOMAIN | RELEASE_TO_GANDI | TRANSFER_ON_RENEW | RESTORE_DOMAIN`

Required: No

## Response Syntax

```
{
   "NextPageMarker": "string",
   "Operations": [
      {
         "DomainName": "string",
         "LastUpdatedDate": number,
         "Message": "string",
         "OperationId": "string",
         "Status": "string",
         "StatusFlag": "string",
         "SubmittedDate": number,
         "Type": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**NextPageMarker**

If there are more operations than you specified for `MaxItems` in the request, submit another request and include the value of `NextPageMarker` in the value of `Marker`.

Type: String

Length Constraints: Maximum length of 4096.

**Operations**

Lists summaries of the operations.

Type: Array of OperationSummary objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

## Examples

**ListOperations Example**

This example illustrates one usage of ListOperations.

## Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.ListOperations
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "MaxItems" : 2
}
```

## Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "Operations":[
       {
         "OperationId":"4ced3d4a-e011-45ee-b94f-1e2d73477562",
         "Status":"WORKFLOW_IN_PROGRESS",
         "SubmittedDate":1403548979.088,
         "Type":"CHANGE_PRIVACY_PROTECTION"
      },
      {
         "OperationId":"2e3ac45b-89b3-47ea-a042-f56dcd1b6883",
         "Status":"WORKFLOW_IN_PROGRESS",
         "SubmittedDate":1403548986.429,
         "Type":"DOMAIN_LOCK"
      }
   ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListPrices

Service: Amazon Route 53 domain registration

Lists the following prices for either all the TLDs supported by Route 53, or the specified TLD:

- Registration
- Transfer
- Owner change
- Renewal
- Restoration

> **Note**
>
> The prices that `ListPrices` returns are the standard rates for a TLD. `ListPrices` doesn't return registry premium prices, which apply to individual domain names rather than to a TLD. To get accurate pricing for a specific domain name, including premium prices, call `GetDomainPrices`.

## Request Syntax

```
{
   "Marker": "string",
   "MaxItems": number,
   "Tld": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Marker

For an initial request for a list of prices, omit this element. If the number of prices that are not yet complete is greater than the value that you specified for `MaxItems`, you can use `Marker`

to return additional prices. Get the value of `NextPageMarker` from the previous response, and submit another request that includes the value of `NextPageMarker` in the `Marker` element.

Used only for all TLDs. If you specify a TLD, don't specify a `Marker`.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

**MaxItems**

Number of `Prices` to be returned.

Used only for all TLDs. If you specify a TLD, don't specify a `MaxItems`.

Type: Integer

Valid Range: Maximum value of 1000.

Required: No

**Tld**

The TLD for which you want to receive the pricing information. For example. `.net`.

If a `Tld` value is not provided, a list of prices for all TLDs supported by Route 53 is returned.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

Required: No

## Response Syntax

```
{
   "NextPageMarker": "string",
   "Prices": [
      {
         "ChangeOwnershipPrice": {
            "Currency": "string",
            "Price": number,
```

```
            "PriceType": "string"
         },
         "Name": "string",
         "RegistrationPrice": {
            "Currency": "string",
            "Price": number,
            "PriceType": "string"
         },
         "RenewalPrice": {
            "Currency": "string",
            "Price": number,
            "PriceType": "string"
         },
         "RestorationPrice": {
            "Currency": "string",
            "Price": number,
            "PriceType": "string"
         },
         "TransferPrice": {
            "Currency": "string",
            "Price": number,
            "PriceType": "string"
         }
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextPageMarker

If there are more prices than you specified for `MaxItems` in the request, submit another request and include the value of `NextPageMarker` in the value of `Marker`.

Used only for all TLDs. If you specify a TLD, don't specify a `NextPageMarker`.

Type: String

Length Constraints: Maximum length of 4096.

**Prices**

A complex type that includes all the pricing information. If you specify a TLD, this array contains only the pricing for that TLD.

Type: Array of DomainPrice objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTagsForDomain

Service: Amazon Route 53 domain registration

This operation returns all of the tags that are associated with the specified domain.

All tag operations are eventually consistent; subsequent operations might not immediately represent all issued operations.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainName

The domain for which you want to get a list of tags.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "TagList": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**TagList**

A list of the tags that are associated with the specified domain.

Type: Array of Tag objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### ListTagsForDomain Example

This example illustrates one usage of ListTagsForDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.ListTagsForDomain
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "tagList":[
      {
         "Key": "key1",
         "Value": "value1"
      }, {
```

```
            "Key": "key2",
            "Value": "value2"
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# PushDomain

Service: Amazon Route 53 domain registration

Moves a domain from AWS to another registrar.

Supported actions:

- Changes the IPS tags of a .uk domain, and pushes it to transit. Transit means that the domain is ready to be transferred to another registrar.

## Request Syntax

```
{
   "DomainName": "string",
   "Target": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

Name of the domain.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**Target**

New IPS tag for the domain.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# RegisterDomain

Service: Amazon Route 53 domain registration

This operation registers a domain. For some top-level domains (TLDs), this operation requires extra parameters.

When you register a domain, Amazon Route 53 does the following:

- Creates a Route 53 hosted zone that has the same name as the domain. Route 53 assigns four name servers to your hosted zone and automatically updates your domain registration with the names of these name servers.
- Enables auto renew, so your domain registration will renew automatically each year. We'll notify you in advance of the renewal date so you can choose whether to renew the registration.
- Optionally enables privacy protection, so WHOIS queries return contact for the registrar or the phrase "REDACTED FOR PRIVACY", or "On behalf of <domain name> owner." If you don't enable privacy protection, WHOIS queries return the information that you entered for the administrative, registrant, and technical contacts.

  > **Note**
  >
  > While some domains may allow different privacy settings per contact, we recommend specifying the same privacy setting for all contacts.

- If registration is successful, returns an operation ID that you can use to track the progress and completion of the action. If the request is not completed successfully, the domain registrant is notified by email.
- Charges your AWS account an amount based on the top-level domain. For more information, see Amazon Route 53 Pricing.

## Request Syntax

```
{
   "AdminContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
```

```
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "AutoRenew": boolean,
   "BillingContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "Consent": {
      "Currency": "string",
      "MaxPrice": number
   },
   "DomainName": "string",
   "DurationInYears": number,
   "IdnLangCode": "string",
```

```
    "PrivacyProtectAdminContact": boolean,
    "PrivacyProtectBillingContact": boolean,
    "PrivacyProtectRegistrantContact": boolean,
    "PrivacyProtectTechContact": boolean,
    "RegistrantContact": {
       "AddressLine1": "string",
       "AddressLine2": "string",
       "City": "string",
       "ContactType": "string",
       "CountryCode": "string",
       "Email": "string",
       "ExtraParams": [
          {
             "Name": "string",
             "Value": "string"
          }
       ],
       "Fax": "string",
       "FirstName": "string",
       "LastName": "string",
       "OrganizationName": "string",
       "PhoneNumber": "string",
       "State": "string",
       "ZipCode": "string"
    },
    "TechContact": {
       "AddressLine1": "string",
       "AddressLine2": "string",
       "City": "string",
       "ContactType": "string",
       "CountryCode": "string",
       "Email": "string",
       "ExtraParams": [
          {
             "Name": "string",
             "Value": "string"
          }
       ],
       "Fax": "string",
       "FirstName": "string",
       "LastName": "string",
       "OrganizationName": "string",
       "PhoneNumber": "string",
       "State": "string",
```

```
        "ZipCode": "string"
    }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**AdminContact**

Provides detailed contact information. For information about the values that you specify for each element, see ContactDetail.

Type: ContactDetail object

Required: Yes

**AutoRenew**

Indicates whether the domain will be automatically renewed (`true`) or not (`false`). Auto renewal only takes effect after the account is charged.

Default: `true`

Type: Boolean

Required: No

**BillingContact**

Provides detailed contact information. For information about the values that you specify for each element, see ContactDetail.

Type: ContactDetail object

Required: No

**Consent**

Specifies the maximum price that you agree to pay to register the domain name. This element is required if the domain has registry premium pricing, and optional if the domain is priced at the

standard rate for its TLD. If you include it and the registration price is more than `MaxPrice`, the request fails.

Type: Consent object

Required: No

**DomainName**

The domain name that you want to register. The top-level domain (TLD), such as .com, must be a TLD that Route 53 supports. For a list of supported TLDs, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

The domain name can contain only the following characters:

- Letters a through z. Domain names are not case sensitive.
- Numbers 0 through 9.
- Hyphen (-). You can't specify a hyphen at the beginning or end of a label.
- Period (.) to separate the labels in the name, such as the `.` in `example.com`.

Internationalized domain names are not supported for some top-level domains. To determine whether the TLD that you want to use supports internationalized domain names, see Domains that You Can Register with Amazon Route 53. For more information, see Formatting Internationalized Domain Names.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**DurationInYears**

The number of years that you want to register the domain for. Domains are registered for a minimum of one year. The maximum period depends on the top-level domain. For the range of valid values for your domain, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

Default: 1

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: Yes

**IdnLangCode**

Reserved for future use.

Type: String

Pattern: `(|[A-Za-z]{2,3})`

Required: No

**PrivacyProtectAdminContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the admin contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Default: `true`

Type: Boolean

Required: No

**PrivacyProtectBillingContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the billing contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Type: Boolean

Required: No

**PrivacyProtectRegistrantContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the registrant contact (the domain owner).

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Default: `true`

Type: Boolean

Required: No

**PrivacyProtectTechContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the technical contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Default: `true`

Type: Boolean

Required: No

**RegistrantContact**

Provides detailed contact information. For information about the values that you specify for each element, see ContactDetail.

Type: ContactDetail object

Required: Yes

**TechContact**

Provides detailed contact information. For information about the values that you specify for each element, see ContactDetail.

Type: ContactDetail object

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OperationId**

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DomainLimitExceeded**

The number of domains has exceeded the allowed threshold for the account.

**message**

The number of domains has exceeded the allowed threshold for the account.

HTTP Status Code: 400

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### RegisterDomain Example

This example illustrates one usage of RegisterDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.RegisterDomain
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com",
   "DurationInYears":1,
   "AutoRenew":true,
```

```
    "AdminContact":{
       "FirstName":"John",
       "MiddleName":"Richard",
       "LastName":"Doe",
       "ContactType":"PERSON",
       "OrganizationName":"",
       "AddressLine1":"123 Any Street",
       "AddressLine2":"",
       "City":"Any Town",
       "State":"WA",
       "CountryCode":"US",
       "ZipCode":"98101",
       "PhoneNumber":"+1.1234567890",
       "Email":"john@example.com",
       "Fax":"+1.1234567891"
    },
    "RegistrantContact":{
       "FirstName":"John",
       "MiddleName":"Richard",
       "LastName":"Doe",
       "ContactType":"PERSON",
       "OrganizationName":"",
       "AddressLine1":"123 Any Street",
       "AddressLine2":"",
       "City":"Any Town",
       "State":"WA",
       "CountryCode":"US",
       "ZipCode":"98101",
       "PhoneNumber":"+1.1234567890",
       "Email":"john@example.com",
       "Fax":"+1.1234567891"
    },
    "TechContact":{
       "FirstName":"John",
       "MiddleName":"Richard",
       "LastName":"Doe",
       "ContactType":"PERSON",
       "OrganizationName":"",
       "AddressLine1":"123 Any Street",
       "AddressLine2":"",
       "City":"Any Town",
       "State":"WA",
       "CountryCode":"US",
       "ZipCode":"98101",
```

```
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
      "Fax":"+1.1234567891"
},
"PrivacyProtectAdminContact":true,
"PrivacyProtectRegistrantContact":true,
"PrivacyProtectTechContact":true
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "OperationId":"308c56712-faa4-40fe-94c8-b423069de3f6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# RejectDomainTransferFromAnotherAwsAccount

Service: Amazon Route 53 domain registration

Rejects the transfer of a domain from another AWS account to the current AWS account. You initiate a transfer betweenAWS accounts using TransferDomainToAnotherAwsAccount.

Use either ListOperations or GetOperationDetail to determine whether the operation succeeded. GetOperationDetail provides additional information, for example, `Domain Transfer from Aws Account 111122223333 has been cancelled`.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that was specified when another AWS account submitted a TransferDomainToAnotherAwsAccount request.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

The identifier that `TransferDomainToAnotherAwsAccount` returned to track the progress of the request. Because the transfer request was rejected, the value is no longer valid, and you can't use `GetOperationDetail` to query the operation status.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### RejectDomainTransferFromAnotherAwsAccount Example

This example illustrates one usage of RejectDomainTransferFromAnotherAwsAccount.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20200311T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.RejectDomainTransferFromAnotherAwsAccount
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
    "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
    "OperationId":"308c56712-faa4-40fe-94c8-b4230example"
```

```
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# RenewDomain

Service: Amazon Route 53 domain registration

This operation renews a domain for the specified number of years. The cost of renewing your domain is billed to your AWS account.

We recommend that you renew your domain several weeks before the expiration date. Some TLD registries delete domains before the expiration date if you haven't renewed far enough in advance. For more information about renewing domain registration, see Renewing Registration for a Domain in the *Amazon Route 53 Developer Guide*.

## Request Syntax

```
{
   "Consent": {
      "Currency": "string",
      "MaxPrice": number
   },
   "CurrentExpiryYear": number,
   "DomainName": "string",
   "DurationInYears": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**Consent**

Specifies the maximum price that you agree to pay to renew the domain name. This element is required if the domain has registry premium pricing, and optional if the domain is priced at the standard rate for its TLD. If you include it and the renewal price is more than `MaxPrice`, the request fails.

Type: Consent object

Required: No

**CurrentExpiryYear**

The year when the registration for the domain is set to expire. This value must match the current expiration date for the domain.

Type: Integer

Required: Yes

**DomainName**

The name of the domain that you want to renew.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**DurationInYears**

The number of years that you want to renew the domain for. The maximum number of years depends on the top-level domain. For the range of valid values for your domain, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

Default: 1

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### RenewDomain Example

This example illustrates one usage of RenewDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
```

```
               Signature=[calculated-signature]
               x-amz-target:Route53Domains_v20140515.RenewDomain
               user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com",
   "DurationInYears":"6",
   "CurrentExpiryYear":"2017"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ResendContactReachabilityEmail

Service: Amazon Route 53 domain registration

For operations that require confirmation that the email address for the registrant contact is valid, such as registering a new domain, this operation resends the confirmation email to the current email address for the registrant contact.

## Request Syntax

```
{
   "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### domainName

The name of the domain for which you want Route 53 to resend a confirmation email to the registrant contact.

Type: String

Length Constraints: Maximum length of 255.

Required: No

## Response Syntax

```
{
   "domainName": "string",
   "emailAddress": "string",
   "isAlreadyVerified": boolean
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**domainName**

The domain name for which you requested a confirmation email.

Type: String

Length Constraints: Maximum length of 255.

**emailAddress**

The email address for the registrant contact at the time that we sent the verification email.

Type: String

Length Constraints: Maximum length of 254.

**isAlreadyVerified**

`True` if the email address for the registrant contact has already been verified, and `false` otherwise. If the email address has already been verified, we don't send another confirmation email.

Type: Boolean

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### ResendContactReachabilityEmail Example

This example illustrates one usage of ResendContactReachabilityEmail.

### Sample Request

```
POST / HTTP/1.1
```

```
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205225Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.ResendContactReachabilityEmail
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
connections:Keep-Alive
{
   "domainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "domainName":"example.com",
   "emailAddress":"jdoe@example.com",
   "status":"PENDING"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ResendOperationAuthorization

Service: Amazon Route 53 domain registration

Resend the form of authorization email for this operation.

## Request Syntax

```
{
   "OperationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### OperationId

Operation ID.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InvalidInput

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# RestoreDomain

Service: Amazon Route 53 domain registration

Restores a domain that has expired, or was deleted, before it becomes available for others to register. The cost of restoring your domain is billed to your AWS account.

Not every TLD registry supports restoring domains, and the period during which a domain can be restored varies by TLD. To find out whether your domain can be restored and the period during which you can restore it, see Domains that you can register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

> **Important**
>
> Restoring a domain typically costs more, and sometimes much more, than registering or renewing a domain. To get the restoration price for a domain before you restore it, use GetDomainPrices.

Restoration is asynchronous. The response includes an operation ID that you can use with GetOperationDetail to track the progress of the request. When the restoration succeeds, the domain reappears in the response to ListDomains.

For more information, see Restoring an expired or deleted domain in the *Amazon Route 53 Developer Guide*.

## Request Syntax

```
{
   "Consent": {
      "Currency": "string",
      "MaxPrice": number
   },
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**Consent**

Specifies the maximum price that you agree to pay to restore the domain name. This element is required if the domain has registry premium pricing, and optional if the domain is priced at the standard rate for its TLD. If you include it and the restoration price is more than `MaxPrice`, the request fails.

Type: Consent object

Required: No

**DomainName**

The name of the domain that you want to restore. The domain must have been registered to the AWS account that submits the request.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OperationId**

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### Example – Restoring a domain

This example illustrates one usage of RestoreDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.RestoreDomain
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "OperationId":"308c56712-faa4-40fe-94c8-b4230example"
```

```
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# RetrieveDomainAuthCode

Service: Amazon Route 53 domain registration

This operation returns the authorization code for the domain. To transfer a domain to another registrar, you provide this value to the new registrar.

## Request Syntax

```
{
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The name of the domain that you want to get an authorization code for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "AuthCode": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### AuthCode

The authorization code for the domain.

Type: String

Length Constraints: Maximum length of 1024.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**TLDInMaintenance**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**message**

The top-level domain is currently undergoing maintenance and the request cannot be processed. Try again later.

**tld**

The top-level domain that is currently undergoing maintenance.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### RetrieveDomainAuthCode Example

This example illustrates one usage of RetrieveDomainAuthCode.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.RetrieveDomainAuthCode
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com"
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "AuthCode":"rqL3*REjYH"
```

```
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# TransferDomain

Service: Amazon Route 53 domain registration

Transfers a domain from another registrar to Amazon Route 53.

For more information about transferring domains, see the following topics:

- For transfer requirements, a detailed procedure, and information about viewing the status of a domain that you're transferring to Route 53, see Transferring Registration for a Domain to Amazon Route 53 in the *Amazon Route 53 Developer Guide*.
- For information about how to transfer a domain from one AWS account to another, see TransferDomainToAnotherAwsAccount.
- For information about how to transfer a domain to another domain registrar, see Transferring a Domain from Amazon Route 53 to Another Registrar in the *Amazon Route 53 Developer Guide*.

**Important**

During the transfer of any country code top-level domains (ccTLDs) to Route 53, except for .cc and .tv, updates to the owner contact are ignored and the owner contact data from the registry is used. You can update the owner contact after the transfer is complete. For more information, see UpdateDomainContact.

If the registrar for your domain is also the DNS service provider for the domain, we highly recommend that you transfer your DNS service to Route 53 or to another DNS service provider before you transfer your registration. Some registrars provide free DNS service when you purchase a domain registration. When you transfer the registration, the previous registrar will not renew your domain registration and could end your DNS service at any time.

**Important**

If the registrar for your domain is also the DNS service provider for the domain and you don't transfer DNS service to another provider, your website, email, and the web applications associated with the domain might become unavailable.

If the transfer is successful, this method returns an operation ID that you can use to track the progress and completion of the action. If the transfer doesn't complete successfully, the domain registrant will be notified by email.

## Request Syntax

```
{
   "AdminContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "AuthCode": "string",
   "AutoRenew": boolean,
   "BillingContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
```

```
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "Consent": {
      "Currency": "string",
      "MaxPrice": number
   },
   "DomainName": "string",
   "DurationInYears": number,
   "IdnLangCode": "string",
   "Nameservers": [
      {
         "GlueIps": [ "string" ],
         "Name": "string"
      }
   ],
   "PrivacyProtectAdminContact": boolean,
   "PrivacyProtectBillingContact": boolean,
   "PrivacyProtectRegistrantContact": boolean,
   "PrivacyProtectTechContact": boolean,
   "RegistrantContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
```

```
      "ZipCode": "string"
   },
   "TechContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### AdminContact

Provides detailed contact information.

Type: ContactDetail object

Required: Yes

### AuthCode

The authorization code for the domain. You get this value from the current registrar.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

**AutoRenew**

Indicates whether the domain will be automatically renewed (true) or not (false). Auto renewal only takes effect after the account is charged.

Default: true

Type: Boolean

Required: No

**BillingContact**

Provides detailed contact information.

Type: ContactDetail object

Required: No

**Consent**

Specifies the maximum price that you agree to pay to transfer the domain name to Route 53. This element is required if the domain has registry premium pricing, and optional if the domain is priced at the standard rate for its TLD. If you include it and the transfer price is more than `MaxPrice`, the request fails.

Type: Consent object

Required: No

**DomainName**

The name of the domain that you want to transfer to Route 53. The top-level domain (TLD), such as .com, must be a TLD that Route 53 supports. For a list of supported TLDs, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*.

The domain name can contain only the following characters:

- Letters a through z. Domain names are not case sensitive.
- Numbers 0 through 9.
- Hyphen (-). You can't specify a hyphen at the beginning or end of a label.

- Period (.) to separate the labels in the name, such as the `.` in `example.com`.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**DurationInYears**

Reserved for future use.

Currently, the effect of a domain transfer on the registration period varies by TLD. For information about how transferring a domain affects the expiration date, see the Transfer Term column in the pricing information at Amazon Route 53 Pricing.

Default: 1

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

**IdnLangCode**

Reserved for future use.

Type: String

Pattern: `(|[A-Za-z]{2,3})`

Required: No

**Nameservers**

Contains details for the host and glue IP addresses.

Type: Array of Nameserver objects

Required: No

**PrivacyProtectAdminContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information for the registrar, the phrase "REDACTED FOR PRIVACY", or "On behalf of <domain name> owner.".

> **Note**
>
> While some domains may allow different privacy settings per contact, we recommend specifying the same privacy setting for all contacts.

Default: `true`

Type: Boolean

Required: No

**PrivacyProtectBillingContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the billing contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Type: Boolean

Required: No

**PrivacyProtectRegistrantContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the registrant contact (domain owner).

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Default: `true`

Type: Boolean

Required: No

**PrivacyProtectTechContact**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the technical contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Default: `true`

Type: Boolean

Required: No

**RegistrantContact**

Provides detailed contact information.

Type: ContactDetail object

Required: Yes

**TechContact**

Provides detailed contact information.

Type: ContactDetail object

Required: Yes

## Response Syntax

```
{
```

```
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DomainLimitExceeded**

The number of domains has exceeded the allowed threshold for the account.

**message**

The number of domains has exceeded the allowed threshold for the account.

HTTP Status Code: 400

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### TransferDomain Example

This example illustrates one usage of TransferDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.TransferDomain
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com",
   "DurationInYears":1,
   "Nameservers":[
      {
         "Name":"ns-2048.awsdns-64.com",
         "GlueIps":[
         "192.0.2.11"
         ]
      },
      {
         "Name":"ns-2049.awsdns-65.net",
         "GlueIps":[
         "192.0.2.12"
         ]
      }
   ],
    "AuthCode":"a42qxjz1",
   "AutoRenew":true,
   "AdminContact":{
      "FirstName":"John",
      "MiddleName":"Richard",
```

```
      "LastName":"Doe",
      "ContactType":"PERSON",
      "OrganizationName":"",
      "AddressLine1":"123 Any Street",
      "AddressLine2":"",
      "City":"Any Town",
      "State":"WA",
      "CountryCode":"US",
      "ZipCode":"98101",
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
      "Fax":"+1.1234567891"
   },
   "RegistrantContact":{
      "FirstName":"John",
      "MiddleName":"Richard",
      "LastName":"Doe",
      "ContactType":"PERSON",
      "OrganizationName":"",
      "AddressLine1":"123 Any Street",
      "AddressLine2":"",
      "City":"Any Town",
      "State":"WA",
      "CountryCode":"US",
      "ZipCode":"98101",
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
      "Fax":"+1.1234567891"
   },
   "TechContact":{
      "FirstName":"John",
      "MiddleName":"Richard",
      "LastName":"Doe",
      "ContactType":"PERSON",
      "OrganizationName":"",
      "AddressLine1":"123 Any Street",
      "AddressLine2":"",
      "City":"Any Town",
      "State":"WA",
      "CountryCode":"US",
      "ZipCode":"98101",
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
      "Fax":"+1.1234567891"
```

```
    },
    "PrivacyProtectAdminContact":true,
    "PrivacyProtectRegistrantContact":true,
    "PrivacyProtectTechContact":true,
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
"OperationId":"308c56712-faa4-40fe-94c8-b423069de3f6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# TransferDomainToAnotherAwsAccount

Service: Amazon Route 53 domain registration

Transfers a domain from the current AWS account to another AWS account. Note the following:

- The AWS account that you're transferring the domain to must accept the transfer. If the other account doesn't accept the transfer within 3 days, we cancel the transfer. See AcceptDomainTransferFromAnotherAwsAccount.
- You can cancel the transfer before the other account accepts it. See CancelDomainTransferToAnotherAwsAccount.
- The other account can reject the transfer. See RejectDomainTransferFromAnotherAwsAccount.

> **Important**
>
> When you transfer a domain from one AWS account to another, Route 53 doesn't transfer the hosted zone that is associated with the domain. DNS resolution isn't affected if the domain and the hosted zone are owned by separate accounts, so transferring the hosted zone is optional. For information about transferring the hosted zone to another AWS account, see Migrating a Hosted Zone to a Different AWS Account in the *Amazon Route 53 Developer Guide*.

Use either ListOperations or GetOperationDetail to determine whether the operation succeeded. GetOperationDetail provides additional information, for example, `Domain Transfer from Aws Account 111122223333 has been cancelled`.

## Request Syntax

```
{
   "AccountId": "string",
   "DomainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**AccountId**

The account ID of the AWS account that you want to transfer the domain to, for example, 111122223333.

Type: String

Length Constraints: Fixed length of 12.

Pattern: ^(\d{12})$

Required: Yes

**DomainName**

The name of the domain that you want to transfer from the current AWS account to another account.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "OperationId": "string",
   "Password": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OperationId**

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

**Password**

To finish transferring a domain to another AWS account, the account that the domain is being transferred to must submit an AcceptDomainTransferFromAnotherAwsAccount request. The request must include the value of the `Password` element that was returned in the `TransferDomainToAnotherAwsAccount` response.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### TransferDomainToAnotherAwsAccount Example

This example illustrates one usage of TransferDomainToAnotherAwsAccount.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20200311T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.TransferDomainToAnotherAwsAccount
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
    "DomainName":"example.com",
    "AccountId":"111122223333"
```

```
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
    "OperationId":"308c56712-faa4-40fe-94c8-b4230example",
    "Password":"CeT2Zxs~Example"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateDomainContact

Service: Amazon Route 53 domain registration

This operation updates the contact information for a particular domain. You must specify information for at least one contact: registrant, administrator, or technical.

If the update is successful, this method returns an operation ID that you can use to track the progress and completion of the operation. If the request is not completed successfully, the domain registrant will be notified by email.

## Request Syntax

```
{
   "AdminContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "BillingContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
```

```
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "Consent": {
      "Currency": "string",
      "MaxPrice": number
   },
   "DomainName": "string",
   "RegistrantContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   },
   "TechContact": {
      "AddressLine1": "string",
      "AddressLine2": "string",
      "City": "string",
      "ContactType": "string",
      "CountryCode": "string",
```

```
      "Email": "string",
      "ExtraParams": [
         {
            "Name": "string",
            "Value": "string"
         }
      ],
      "Fax": "string",
      "FirstName": "string",
      "LastName": "string",
      "OrganizationName": "string",
      "PhoneNumber": "string",
      "State": "string",
      "ZipCode": "string"
   }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**AdminContact**

Provides detailed contact information.

Type: ContactDetail object

Required: No

**BillingContact**

Provides detailed contact information.

Type: ContactDetail object

Required: No

**Consent**

The maximum amount that you agree to pay for the owner change. Required if the domain is not free (consent price is more than USD $0.00).

Type: Consent object

Required: No

**DomainName**

The name of the domain that you want to update contact information for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**RegistrantContact**

Provides detailed contact information.

Type: ContactDetail object

Required: No

**TechContact**

Provides detailed contact information.

Type: ContactDetail object

Required: No

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OperationId**

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### UpdateDomainContact Example

This example illustrates one usage of UpdateDomainContact.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.UpdateDomainContact
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com",
   "RegistrantContact":{
      "FirstName":"John",
```

```
      "MiddleName":"Richard",
      "LastName":"Doe",
      "ContactType":"PERSON",
      "OrganizationName":"",
      "AddressLine1":"123 Any Street",
      "AddressLine2":"",
      "City":"Any Town",
      "State":"WA",
      "CountryCode":"US",
      "ZipCode":"98101",
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
      "Fax":"+1.1234567891"
      },
   "AdminContact":{
      "FirstName":"John",
      "MiddleName":"Richard",
      "LastName":"Doe",
      "ContactType":"PERSON",
      "OrganizationName":"",
      "AddressLine1":"123 Any Street",
      "AddressLine2":"",
      "City":"Any Town",
      "State":"WA",
      "CountryCode":"US",
      "ZipCode":"98101",
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
      "Fax":"+1.1234567891"
   },
   "TechContact":{
      "FirstName":"John",
      "MiddleName":"Richard",
      "LastName":"Doe",
      "ContactType":"PERSON",
      "OrganizationName":"",
      "AddressLine1":"123 Any Street",
      "AddressLine2":"",
      "City":"Any Town",
      "State":"WA",
      "CountryCode":"US",
      "ZipCode":"98101",
      "PhoneNumber":"+1.1234567890",
      "Email":"john@example.com",
```

```
      "Fax":"+1.1234567891"
   },
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
"OperationId":"308c56712-faa4-40fe-94c8-b423069de3f6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateDomainContactPrivacy

Service: Amazon Route 53 domain registration

This operation updates the specified domain contact's privacy setting. When privacy protection is enabled, your contact information is replaced with contact information for the registrar or with the phrase "REDACTED FOR PRIVACY", or "On behalf of <domain name> owner."

> **Note**
>
> While some domains may allow different privacy settings per contact, we recommend specifying the same privacy setting for all contacts.

This operation affects only the contact information for the specified contact type (administrative, registrant, or technical). If the request succeeds, Amazon Route 53 returns an operation ID that you can use with GetOperationDetail to track the progress and completion of the action. If the request doesn't complete successfully, the domain registrant will be notified by email.

> **Important**
>
> By disabling the privacy service via API, you consent to the publication of the contact information provided for this domain via the public WHOIS database. You certify that you are the registrant of this domain name and have the authority to make this decision. You may withdraw your consent at any time by enabling privacy protection using either `UpdateDomainContactPrivacy` or the Route 53 console. Enabling privacy protection removes the contact information provided for this domain from the WHOIS database. For more information on our privacy practices, see https://aws.amazon.com/privacy/.

## Request Syntax

```
{
   "AdminPrivacy": boolean,
   "BillingPrivacy": boolean,
   "DomainName": "string",
   "RegistrantPrivacy": boolean,
   "TechPrivacy": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### AdminPrivacy

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the admin contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Type: Boolean

Required: No

### BillingPrivacy

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the billing contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Type: Boolean

Required: No

### DomainName

The name of the domain that you want to update the privacy setting for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**RegistrantPrivacy**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the registrant contact (domain owner).

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Type: Boolean

Required: No

**TechPrivacy**

Whether you want to conceal contact information from WHOIS queries. If you specify `true`, WHOIS ("who is") queries return contact information either for Amazon Registrar or for our registrar associate, Gandi. If you specify `false`, WHOIS queries return the information that you entered for the technical contact.

> **Note**
>
> You must specify the same privacy setting for the administrative, billing, registrant, and technical contacts.

Type: Boolean

Required: No

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OperationId

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the

request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### UpdateDomainContactPrivacy Example

This example illustrates one usage of UpdateDomainContactPrivacy.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.UpdateDomainContactPrivacy
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
"DomainName":"example.com",
"AdminPrivacy":true,
"RegistrantPrivacy":true,
"TechPrivacy":true,
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
"OperationId":"777bc5da-fbf7-482c-b2ba-8946884a7dd6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateDomainNameservers

Service: Amazon Route 53 domain registration

This operation replaces the current set of name servers for the domain with the specified set of name servers. If you use Amazon Route 53 as your DNS service, specify the four name servers in the delegation set for the hosted zone for the domain.

If successful, this operation returns an operation ID that you can use to track the progress and completion of the action. If the request is not completed successfully, the domain registrant will be notified by email.

## Request Syntax

```
{
   "DomainName": "string",
   "FIAuthKey": "string",
   "Nameservers": [
      {
         "GlueIps": [ "string" ],
         "Name": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainName

The name of the domain that you want to change name servers for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

### FIAuthKey

*This parameter has been deprecated.*

The authorization key for .fi domains

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

**Nameservers**

A list of new name servers for the domain.

Type: Array of Nameserver objects

Required: Yes

## Response Syntax

```
{
   "OperationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OperationId**

Identifier for tracking the progress of the request. To query the operation status, use GetOperationDetail.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**DuplicateRequest**

The request is already in progress for the domain.

**message**

The request is already in progress for the domain.

**requestId**

ID of the request operation.

HTTP Status Code: 400

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**TLDRulesViolation**

The top-level domain does not support this operation.

**message**

The top-level domain does not support this operation.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

## Examples

### UpdateDomainNameservers Example

This example illustrates one usage of UpdateDomainNameservers.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.UpdateDomainNameservers
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName":"example.com",
   "Nameservers":[
      {
         "Name":"ns1.example.net"
      },
      {
         "Name":"ns1.example.com",
         "GlueIps":[
         "192.0.2.44"
         ]
```

```
      }
   ]
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
   "OperationId":"0b370c79-faa4-40fe-94c8-b423069de3f6"
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateTagsForDomain

Service: Amazon Route 53 domain registration

This operation adds or updates tags for a specified domain.

All tag operations are eventually consistent; subsequent operations might not immediately represent all issued operations.

## Request Syntax

```
{
   "DomainName": "string",
   "TagsToUpdate": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**DomainName**

The domain for which you want to add or update tags.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

**TagsToUpdate**

A list of the tag keys and values that you want to add or update. If you specify a key that already exists, the corresponding value will be replaced.

Type: Array of Tag objects

Required: No

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

**OperationLimitExceeded**

The number of operations or jobs running exceeded the allowed threshold for the account.

**message**

The number of operations or jobs running exceeded the allowed threshold for the account.

HTTP Status Code: 400

**UnsupportedTLD**

Amazon Route 53 does not support this top-level domain (TLD).

**message**

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

# Examples

## UpdateTagsForDomain Example

This example illustrates one usage of UpdateTagsForDomain.

### Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domain_v20140515.UpdateTagsForDomain
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
   "DomainName": "example.com",
   "TagsToUpdate":[
      {
         "Key": "foo",
         "Value": "bar"
      }, {
         "Key": "foo2",
         "Value": ""
      }
  ]
}
```

### Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ViewBilling

Service: Amazon Route 53 domain registration

Returns all the domain-related billing records for the current AWS account for a specified period

## Request Syntax

```
{
   "End": number,
   "Marker": "string",
   "MaxItems": number,
   "Start": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### End

The end date and time for the time period for which you want a list of billing records. Specify the date and time in Unix time format and Coordinated Universal time (UTC).

Type: Timestamp

Required: No

### Marker

For an initial request for a list of billing records, omit this element. If the number of billing records that are associated with the current AWS account during the specified period is greater than the value that you specified for `MaxItems`, you can use `Marker` to return additional billing records. Get the value of `NextPageMarker` from the previous response, and submit another request that includes the value of `NextPageMarker` in the `Marker` element.

Constraints: The marker must match the value of `NextPageMarker` that was returned in the previous response.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

**MaxItems**

The number of billing records to be returned.

Default: 20

Type: Integer

Valid Range: Maximum value of 100.

Required: No

**Start**

The beginning date and time for the time period for which you want a list of billing records. Specify the date and time in Unix time format and Coordinated Universal time (UTC).

Type: Timestamp

Required: No

## Response Syntax

```
{
   "BillingRecords": [
      {
         "BillDate": number,
         "DomainName": "string",
         "InvoiceId": "string",
         "Operation": "string",
         "Price": number
      }
   ],
   "NextPageMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**BillingRecords**

A summary of billing records.

Type: Array of BillingRecord objects

**NextPageMarker**

If there are more billing records than you specified for `MaxItems` in the request, submit another request and include the value of `NextPageMarker` in the value of `Marker`.

Type: String

Length Constraints: Maximum length of 4096.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InvalidInput**

The requested item is not acceptable. For example, for APIs that accept a domain name, the request might specify a domain name that doesn't belong to the account that submitted the request. For `AcceptDomainTransferFromAnotherAwsAccount`, the password might be invalid.

**message**

The requested item is not acceptable. For example, for an OperationId it might refer to the ID of an operation that is already completed. For a domain name, it might not be a valid domain name or belong to the requester account.

HTTP Status Code: 400

## Examples

### ViewBilling Example

This example illustrates one usage of ViewBilling.

## Sample Request

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:20140711T205230Z
authorization:AWS4-HMAC-SHA256
              Credential=AKIAIOSFODNN7EXAMPLE/20140711/us-east-1/route53domains/
aws4_request,
              SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-
amz-target,
              Signature=[calculated-signature]
x-amz-target:Route53Domains_v20140515.ViewBilling
user-agent:aws-sdk-java/1.8.3 Linux/2.6.18-164.el5PAE Java_HotSpot
 (TM )_Server_VM/24.60-b09/1.7.0_60
content-type:application/x-amz-json-1.1
content-length:[number of characters in the JSON string]
{
    "Start": 1461006299,
    "End": 1463598304,
    "MaxItems": 20
}
```

## Sample Response

```
HTTP/1.1 200
Content-Length:[number of characters in the JSON string]
{
    "BillingRecords": [
        {
            "BillDate": 1431211111,
            "DomainName": "example.net",
            "InvoiceId": "1111111111",
            "Operation": "REGISTER_DOMAIN",
            "Price": 12
        }, {
            "BillDate": 1431222222,
            "DomainName": "example.com",
            "InvoiceId": "2222222222",
            "Operation": "TRANSFER_IN_DOMAIN",
            "Price": 12
        }, {
            "BillDate": 1431233333,
            "DomainName": "example.org",
```

```
            "InvoiceId": "3333333333",
            "Operation": "RENEW_DOMAIN",
            "Price": 12
        }
    ]
}
```

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

## Amazon Route 53 Global Resolver

The following actions are supported by Amazon Route 53 Global Resolver:

- AssociateHostedZone
- BatchCreateFirewallRule
- BatchDeleteFirewallRule
- BatchUpdateFirewallRule
- CreateAccessSource
- CreateAccessToken
- CreateDNSView
- CreateFirewallDomainList

- CreateFirewallRule
- CreateGlobalResolver
- DeleteAccessSource
- DeleteAccessToken
- DeleteDNSView
- DeleteFirewallDomainList
- DeleteFirewallRule
- DeleteGlobalResolver
- DisableDNSView
- DisassociateHostedZone
- EnableDNSView
- GetAccessSource
- GetAccessToken
- GetDNSView
- GetFirewallDomainList
- GetFirewallRule
- GetGlobalResolver
- GetHostedZoneAssociation
- GetManagedFirewallDomainList
- ImportFirewallDomains
- ListAccessSources
- ListAccessTokens
- ListDNSViews
- ListFirewallDomainLists
- ListFirewallDomains
- ListFirewallRules
- ListGlobalResolvers
- ListHostedZoneAssociations
- ListManagedFirewallDomainLists
- ListTagsForResource

- TagResource
- UntagResource
- UpdateAccessSource
- UpdateAccessToken
- UpdateDNSView
- UpdateFirewallDomains
- UpdateFirewallRule
- UpdateGlobalResolver
- UpdateHostedZoneAssociation

# AssociateHostedZone

Service: Amazon Route 53 Global Resolver

Associates a Route 53 private hosted zone with a Route 53 Global Resolver resource. This allows the resolver to resolve DNS queries for the private hosted zone from anywhere globally.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /hosted-zone-associations/hostedZoneId HTTP/1.1
Content-type: application/json

{
   "name": "string",
   "resourceArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### hostedZoneId

The ID of the Route 53 private hosted zone to associate with the Route 53 Global Resolver resource.

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**name**

Name for the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**resourceArn**

An Amazon Resource Name (ARN) of the Route 53 Global Resolver the private hosted zone will be associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "createdAt": "string",
   "hostedZoneId": "string",
   "hostedZoneName": "string",
   "id": "string",
   "name": "string",
   "resourceArn": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**createdAt**

The date and time the private hosted zone association was created.

Type: Timestamp

**hostedZoneId**

ID of the private hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

**hostedZoneName**

Name of the hosted zone (also the domain associated with the hosted zone).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

**id**

ID of the association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name for the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**resourceArn**

An Amazon Resource Name (ARN) of the Route 53 Global Resolver the private hosted zone is associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**status**

Aggregate status for all the AWS Regions in which the Route 53 Global Resolver exists.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

**updatedAt**

The date and time the private hosted zone association was modified.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# BatchCreateFirewallRule

Service: Amazon Route 53 Global Resolver

Creates multiple DNS firewall rules in a single operation. This is more efficient than creating rules individually when you need to set up multiple rules at once.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /firewall-rules/batch-create HTTP/1.1
Content-type: application/json

{
   "firewallRules": [
      {
         "action": "string",
         "blockOverrideDnsType": "string",
         "blockOverrideDomain": "string",
         "blockOverrideTtl": number,
         "blockResponse": "string",
         "clientToken": "string",
         "confidenceThreshold": "string",
         "description": "string",
         "dnsAdvancedProtection": "string",
         "dnsViewId": "string",
         "firewallDomainListId": "string",
         "name": "string",
         "priority": number,
         "qType": "string"
      }
   ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**firewallRules**

The `BatchCreateFirewallRuleInputItem` objects contain the information for each Firewall rule.

Type: Array of BatchCreateFirewallRuleInputItem objects

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "failures": [
      {
         "code": number,
         "firewallRule": {
            "action": "string",
            "blockOverrideDnsType": "string",
            "blockOverrideDomain": "string",
            "blockOverrideTtl": number,
            "blockResponse": "string",
            "clientToken": "string",
            "confidenceThreshold": "string",
            "createdAt": "string",
            "description": "string",
            "dnsAdvancedProtection": "string",
            "dnsViewId": "string",
            "firewallDomainListId": "string",
            "id": "string",
            "managedDomainListName": "string",
            "name": "string",
```

```
            "priority": number,
            "queryType": "string",
            "status": "string",
            "updatedAt": "string"
         },
         "message": "string"
      }
   ],
   "successes": [
      {
         "code": number,
         "firewallRule": {
            "action": "string",
            "blockOverrideDnsType": "string",
            "blockOverrideDomain": "string",
            "blockOverrideTtl": number,
            "blockResponse": "string",
            "clientToken": "string",
            "confidenceThreshold": "string",
            "createdAt": "string",
            "description": "string",
            "dnsAdvancedProtection": "string",
            "dnsViewId": "string",
            "firewallDomainListId": "string",
            "id": "string",
            "managedDomainListName": "string",
            "name": "string",
            "priority": number,
            "queryType": "string",
            "status": "string",
            "updatedAt": "string"
         },
         "message": "string"
      }
   ]
}
```


## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**failures**

High level information about the DNS Firewall rules that failed to create.

Type: Array of BatchCreateFirewallRuleOutputItem objects

**successes**

High level information about the DNS Firewall rules that were created.

Type: Array of BatchCreateFirewallRuleOutputItem objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# BatchDeleteFirewallRule

Service: Amazon Route 53 Global Resolver

Deletes multiple DNS firewall rules in a single operation. This is more efficient than deleting rules individually.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /firewall-rules/batch-delete HTTP/1.1
Content-type: application/json

{
   "firewallRules": [
      {
         "firewallRuleId": "string"
      }
   ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### firewallRules

An array of the DNS Firewall IDs to be deleted.

Type: Array of BatchDeleteFirewallRuleInputItem objects

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "failures": [
      {
         "code": number,
         "firewallRule": {
            "clientToken": "string",
            "id": "string",
            "name": "string",
            "status": "string"
         },
         "message": "string"
      }
   ],
   "successes": [
      {
         "code": number,
         "firewallRule": {
            "clientToken": "string",
            "id": "string",
            "name": "string",
            "status": "string"
         },
         "message": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### failures

High level information about the DNS Firewall rules that failed to delete.

Type: Array of BatchDeleteFirewallRuleOutputItem objects

**successes**

High level information about the DNS Firewall rules that were deleted successfully.

Type: Array of BatchDeleteFirewallRuleOutputItem objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# BatchUpdateFirewallRule

Service: Amazon Route 53 Global Resolver

Updates multiple DNS firewall rules in a single operation. This is more efficient than updating rules individually.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /firewall-rules/batch-update HTTP/1.1
Content-type: application/json

{
   "firewallRules": [
      {
         "action": "string",
         "blockOverrideDnsType": "string",
         "blockOverrideDomain": "string",
         "blockOverrideTtl": number,
         "blockResponse": "string",
         "confidenceThreshold": "string",
         "description": "string",
         "dnsAdvancedProtection": "string",
         "firewallRuleId": "string",
         "name": "string",
         "priority": number
      }
   ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### firewallRules

The DNS Firewall rule IDs to be updated.

Type: Array of BatchUpdateFirewallRuleInputItem objects

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "failures": [
      {
         "code": number,
         "firewallRule": {
            "action": "string",
            "blockOverrideDnsType": "string",
            "blockOverrideDomain": "string",
            "blockOverrideTtl": number,
            "blockResponse": "string",
            "clientToken": "string",
            "confidenceThreshold": "string",
            "createdAt": "string",
            "description": "string",
            "dnsAdvancedProtection": "string",
            "dnsViewId": "string",
            "firewallDomainListId": "string",
            "id": "string",
            "name": "string",
            "priority": number,
            "queryType": "string",
            "status": "string",
            "updatedAt": "string"
         },
         "message": "string"
      }
```

```
   ],
   "successes": [
      {
         "code": number,
         "firewallRule": {
            "action": "string",
            "blockOverrideDnsType": "string",
            "blockOverrideDomain": "string",
            "blockOverrideTtl": number,
            "blockResponse": "string",
            "clientToken": "string",
            "confidenceThreshold": "string",
            "createdAt": "string",
            "description": "string",
            "dnsAdvancedProtection": "string",
            "dnsViewId": "string",
            "firewallDomainListId": "string",
            "id": "string",
            "name": "string",
            "priority": number,
            "queryType": "string",
            "status": "string",
            "updatedAt": "string"
         },
         "message": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**failures**

High level information about the DNS Firewall rules that failed to update.

Type: Array of BatchUpdateFirewallRuleOutputItem objects

**successes**

High level information about the DNS Firewall rules that were successfully updated.

Type: Array of BatchUpdateFirewallRuleOutputItem objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateAccessSource

Service: Amazon Route 53 Global Resolver

Creates an access source for a DNS view. Access sources define IP addresses or CIDR ranges that are allowed to send DNS queries to the Route 53 Global Resolver, along with the permitted DNS protocols.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /access-sources HTTP/1.1
Content-type: application/json

{
   "cidr": "string",
   "clientToken": "string",
   "dnsViewId": "string",
   "ipAddressType": "string",
   "name": "string",
   "protocol": "string",
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### cidr

The IP address or CIDR range that is allowed to send DNS queries to the Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

Required: Yes

### clientToken

A unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

### dnsViewId

The ID of the DNS view to associate with this access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

### ipAddressType

The IP address type for this access source. Valid values are IPv4 and IPv6 (if the Route 53 Global Resolver supports dual-stack).

Type: String

Valid Values: `IPV4 | IPV6`

Required: No

### name

A descriptive name for the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**protocol**

The DNS protocol that is permitted for this access source. Valid values are Do53 (DNS over port 53), DoT (DNS over TLS), and DoH (DNS over HTTPS).

Type: String

Valid Values: `DO53 | DOH | DOT`

Required: Yes

**tags**

Tags to associate with the access source.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "cidr": "string",
```

```
    "createdAt": "string",
    "dnsViewId": "string",
    "id": "string",
    "ipAddressType": "string",
    "name": "string",
    "protocol": "string",
    "status": "string",
    "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**cidr**

The IP address or CIDR range that is allowed to send DNS queries to the Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

**createdAt**

The date and time when the access source was created.

Type: Timestamp

**dnsViewId**

The ID of the DNS view associated with this access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier for the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**ipAddressType**

The IP address type for this access source (IPv4 or IPv6).

Type: String

Valid Values: `IPV4 | IPV6`

**name**

The descriptive name of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**protocol**

The DNS protocol that is permitted for this access source (Do53, DoT, or DoH).

Type: String

Valid Values: `DO53 | DOH | DOT`

**status**

The operational status of the access source.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the access source was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateAccessToken

Service: Amazon Route 53 Global Resolver

Creates an access token for a DNS view. Access tokens provide token-based authentication for DNS-over-HTTPS (DoH) and DNS-over-TLS (DoT) connections to the Route 53 Global Resolver.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /tokens/dnsViewId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "expiresAt": "string",
   "name": "string",
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### dnsViewId

The ID of the DNS view to associate with this token.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**expiresAt**

The date and time when the token expires. Tokens can have a minimum expiration of 30 days and maximum of 365 days from creation.

Type: Timestamp

Required: No

**name**

A descriptive name for the access token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**tags**

An array of user-defined keys and optional values. These tags can be used for categorization and organization.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "dnsViewId": "string",
   "expiresAt": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "value": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

The Amazon Resource Name (ARN) of the access token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time when the access token was created.

Type: Timestamp

**dnsViewId**

The ID of the DNS view associated with this access token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**expiresAt**

The date and time when the access token expires.

Type: Timestamp

**id**

The unique identifier for the access token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the access token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The operational status of the access token.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

**value**

The access token value. This token should be included in DoH and DoT requests for authentication. Keep this value secure as it provides access to your Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 100.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateDNSView

Service: Amazon Route 53 Global Resolver

Creates a DNS view within a Route 53 Global Resolver. A DNS view models end users, user groups, networks, and devices, and serves as a parent resource that holds configurations controlling access, authorization, DNS firewall rules, and forwarding rules.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /dns-views/globalResolverId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "name": "string",
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### globalResolverId

The ID of the Route 53 Global Resolver to associate with this DNS view.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**clientToken**

A unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**description**

An optional description for the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnssecValidation**

Whether to enable DNSSEC validation for DNS queries in this DNS view. When enabled, the resolver verifies the authenticity and integrity of DNS responses from public name servers for DNSSEC-signed domains.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**ednsClientSubnet**

Whether to enable EDNS Client Subnet injection for DNS queries in this DNS view. When enabled, client subnet information is forwarded to provide more accurate geographic-based DNS responses.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**firewallRulesFailOpen**

Determines the behavior when Route 53 Global Resolver cannot apply DNS firewall rules due to service impairment. When enabled, DNS queries are allowed through; when disabled, queries are blocked.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**name**

A descriptive name for the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**tags**

Tags to associate with the DNS view.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

The Amazon Resource Name (ARN) of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

### clientToken

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time when the DNS view was created.

Type: Timestamp

**description**

The description of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnssecValidation**

Whether DNSSEC validation is enabled for DNS queries in this DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**ednsClientSubnet**

Whether EDNS Client Subnet injection is enabled for DNS queries in this DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**firewallRulesFailOpen**

The behavior when Route 53 Global Resolver cannot apply DNS firewall rules due to service impairment.

Type: String

Valid Values: `ENABLED | DISABLED`

**globalResolverId**

The ID of the Route 53 Global Resolver instance the DNS view is created for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier for the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The descriptive name of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The operational status of the DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

**updatedAt**

The date and time when the DNS view was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateFirewallDomainList

Service: Amazon Route 53 Global Resolver

Creates a firewall domain list. Domain lists are reusable sets of domain specifications that you use in DNS firewall rules to allow, block, or alert on DNS queries to specific domains.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /firewall-domain-lists/globalResolverId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "description": "string",
   "name": "string",
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### globalResolverId

The ID of the Route 53 Global Resolver that the domain list will be associated with.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**description**

An optional description for the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**name**

A descriptive name for the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**tags**

An array of user-defined keys and optional values. These tags can be used for categorization and organization.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "createdAt": "string",
   "description": "string",
   "domainCount": number,
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

An Amazon Resource Name (ARN) for the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**createdAt**

The time and date the domain list was created on.

Type: Timestamp

**description**

Description for the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**domainCount**

Number of domains in the domain list.

Type: Integer

**globalResolverId**

The ID of the Route 53 Global Resolver that the domain list is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

ID of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

Creation status of the domain list.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The time and date the domain list was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateFirewallRule

Service: Amazon Route 53 Global Resolver

Creates a DNS firewall rule. Firewall rules define actions (ALLOW, BLOCK, or ALERT) to take on DNS queries that match specified domain lists, managed domain lists, or advanced threat protections.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /firewall-rules HTTP/1.1
Content-type: application/json

{
   "action": "string",
   "blockOverrideDnsType": "string",
   "blockOverrideDomain": "string",
   "blockOverrideTtl": number,
   "blockResponse": "string",
   "clientToken": "string",
   "confidenceThreshold": "string",
   "description": "string",
   "dnsAdvancedProtection": "string",
   "dnsViewId": "string",
   "firewallDomainListId": "string",
   "name": "string",
   "priority": number,
   "qType": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**action**

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list:

- `ALLOW` - Permit the request to go through.
- `ALERT` - Permit the request and send metrics and logs to CloudWatch.
- `BLOCK` - Disallow the request. This option requires additional details in the rule's `BlockResponse`.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: Yes

**blockOverrideDnsType**

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

This setting is required if the `BlockResponse` setting is `OVERRIDE`.

Type: String

Valid Values: `CNAME`

Required: No

**blockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

This setting is required if the `BlockResponse` setting is `OVERRIDE`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: No

**blockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

This setting is required if the `BlockResponse` setting is `OVERRIDE`.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**blockResponse**

The response to return when the action is BLOCK. Valid values are NXDOMAIN (domain does not exist), NODATA (domain exists but no records), or OVERRIDE (return custom response).

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**confidenceThreshold**

The confidence threshold for advanced threat detection. Valid values are HIGH, MEDIUM, or LOW, indicating the accuracy level required for threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**description**

An optional description for the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnsAdvancedProtection**

Whether to enable advanced DNS threat protection for this rule. Advanced protection can detect and block DNS tunneling and Domain Generation Algorithm (DGA) threats.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**dnsViewId**

The ID of the DNS view to associate with this firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**firewallDomainListId**

The ID of the firewall domain list to use in this rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**name**

A descriptive name for the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**priority**

The priority of this rule. Rules are evaluated in priority order, with lower numbers having higher priority. When a DNS query matches multiple rules, the rule with the highest priority (lowest number) is applied.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

**qType**

The DNS query type to match for this rule. Examples include A (IPv4 address), AAAA (IPv6 address), MX (mail exchange), or TXT (text record).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "action": "string",
```

```
    "blockOverrideDnsType": "string",
    "blockOverrideDomain": "string",
    "blockOverrideTtl": number,
    "blockResponse": "string",
    "confidenceThreshold": "string",
    "createdAt": "string",
    "description": "string",
    "dnsAdvancedProtection": "string",
    "dnsViewId": "string",
    "firewallDomainListId": "string",
    "id": "string",
    "name": "string",
    "priority": number,
    "queryType": "string",
    "status": "string",
    "updatedAt": "string"
}
```


## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### action

The action that DNS Firewall takes on DNS queries that match this rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

### blockOverrideDnsType

The DNS record type for the custom response when blockResponse is OVERRIDE.

Type: String

Valid Values: `CNAME`

### blockOverrideDomain

The custom domain to return when the action is BLOCK and blockResponse is OVERRIDE.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

**blockOverrideTtl**

The time-to-live (TTL) value for the custom response when blockResponse is OVERRIDE.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

**blockResponse**

The response to return when the action is BLOCK.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

**confidenceThreshold**

The confidence threshold for advanced threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

**createdAt**

The date and time when the firewall rule was created.

Type: Timestamp

**description**

The description of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnsAdvancedProtection**

Whether advanced DNS threat protection is enabled for this rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

**dnsViewId**

The ID of the DNS view associated with this firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**firewallDomainListId**

The ID of the firewall domain list used in this rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier for the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**priority**

The priority of the firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

**queryType**

The DNS query type that this rule matches.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

**status**

The operational status of the firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the firewall rule was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateGlobalResolver

Service: Amazon Route 53 Global Resolver

Creates a new Route 53 Global Resolver instance. A Route 53 Global Resolver is a global, internet-accessible DNS resolver that provides secure DNS resolution for both public and private domains through global anycast IP addresses.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /global-resolver HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "description": "string",
   "ipAddressType": "string",
   "name": "string",
   "observabilityRegion": "string",
   "regions": [ "string" ],
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### clientToken

A unique string that identifies the request and ensures idempotency. If you make multiple requests with the same client token, only one Route 53 Global Resolver is created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

### description

An optional description for the Route 53 Global Resolver instance. Maximum length of 1024 characters.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

### ipAddressType

The IP address type for the Route 53 Global Resolver. Valid values are IPV4 (default) or DUAL_STACK for both IPv4 and IPv6 support.

Type: String

Valid Values: `IPV4 | DUAL_STACK`

Required: No

### name

A descriptive name for the Route 53 Global Resolver instance. Maximum length of 64 characters.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**observabilityRegion**

The AWS Region where query resolution logs and metrics will be aggregated and delivered. If not specified, logging is not enabled.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

Required: No

**regions**

List of AWS Regions where the Route 53 Global Resolver will operate. The resolver will be distributed across these Regions to provide global availability and low-latency DNS resolution.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

Required: Yes

**tags**

Tags to associate with the Route 53 Global Resolver. Tags are key-value pairs that help you organize and identify your resources.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: No

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnsName": "string",
   "id": "string",
   "ipAddressType": "string",
   "ipv4Addresses": [ "string" ],
   "ipv6Addresses": [ "string" ],
   "name": "string",
   "observabilityRegion": "string",
   "regions": [ "string" ],
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### createdAt

The date and time when the Route 53 Global Resolver was created.

Type: Timestamp

### description

The description of the Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### dnsName

The hostname that DNS clients should use for TLS certificate validation when connecting to the Route 53 Global Resolver. This value resolves to the global anycast IP addresses for the resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

### id

The unique identifier for the Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

### ipAddressType

The IP address type configured for the Route 53 Global Resolver (IPV4 or DUAL_STACK).

Type: String

Valid Values: `IPV4 | DUAL_STACK`

### ipv4Addresses

The global anycast IPv4 addresses associated with the Route 53 Global Resolver. DNS clients can send queries to these addresses from anywhere on the internet.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 15.

Pattern: `((25[0-5]|(2[0-4]|1\d|[1-9]|)\d)\.?\b){4}`

**ipv6Addresses**

The global anycast IPv6 addresses associated with the Route 53 Global Resolver. This field is only populated when ipAddressType is DUAL_STACK. DNS clients can send queries to these addresses from anywhere on the internet.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 39.

Pattern: `(?:[A-Fa-f0-9]{0,4}:){2,7}[A-Fa-f0-9]{1,4}`

**name**

The name of the Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**observabilityRegion**

The AWS Region where observability data for the Route 53 Global Resolver is stored.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

**regions**

The AWS Regions where the Route 53 Global Resolver is deployed and operational.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

**status**

The current status of the Route 53 Global Resolver. Possible values are CREATING (being provisioned), UPDATING (being modified), OPERATIONAL (ready to serve queries), or DELETING (being removed).

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the Route 53 Global Resolver was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteAccessSource

Service: Amazon Route 53 Global Resolver

Deletes an access source. This operation cannot be undone.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /access-sources/accessSourceId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**accessSourceId**

The unique identifier of the access source to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "cidr": "string",
   "createdAt": "string",
   "dnsViewId": "string",
   "id": "string",
   "ipAddressType": "string",
   "name": "string",
   "protocol": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the deleted access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**cidr**

The IP address or CIDR range of the deleted access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

**createdAt**

The date and time when the access source was originally created.

Type: Timestamp

**dnsViewId**

The ID of the DNS view that was associated with the deleted access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the deleted access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**ipAddressType**

The IP address type of the deleted access source (IPv4 or IPv6).

Type: String

Valid Values: `IPV4 | IPV6`

**name**

The name of the deleted access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**protocol**

The DNS protocol that was permitted for the deleted access source.

Type: String

Valid Values: `DO53 | DOH | DOT`

**status**

The final status of the deleted access source.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the access source was last updated before deletion.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteAccessToken

Service: Amazon Route 53 Global Resolver

Deletes an access token. This operation cannot be undone.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /tokens/accessTokenId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**accessTokenId**

The unique identifier of the access token to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "deletedAt": "string",
   "id": "string",
   "status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**deletedAt**

The date and time when the access token was deleted.

Type: Timestamp

**id**

The unique identifier of the deleted access token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**status**

The final status of the deleted access token.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteDNSView

Service: Amazon Route 53 Global Resolver

Deletes a DNS view. This operation cannot be undone.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /dns-views/dnsViewId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### dnsViewId

The unique identifier of the DNS view to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the deleted DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time when the DNS view was originally created.

Type: Timestamp

**description**

The description of the deleted DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnssecValidation**

Whether DNSSEC validation was enabled for the deleted DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**ednsClientSubnet**

Whether EDNS Client Subnet injection was enabled for the deleted DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**firewallRulesFailOpen**

The firewall rules fail-open behavior that was configured for the deleted DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**globalResolverId**

The ID of the Route 53 Global Resolver that the deleted DNS view was associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the deleted DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the deleted DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The final status of the deleted DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

**updatedAt**

The date and time when the DNS view was last updated before deletion.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteFirewallDomainList

Service: Amazon Route 53 Global Resolver

Deletes a firewall domain list. This operation cannot be undone.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /firewall-domain-lists/firewallDomainListId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### firewallDomainListId

The unique identifier of the firewall domain list to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "id": "string",
   "name": "string",
   "status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the deleted firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**id**

The unique identifier of the deleted firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the deleted firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The final status of the deleted firewall domain list.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteFirewallRule

Service: Amazon Route 53 Global Resolver

Deletes a DNS firewall rule. This operation cannot be undone.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /firewall-rules/firewallRuleId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### firewallRuleId

The unique identifier of the firewall rule to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "action": "string",
   "blockOverrideDnsType": "string",
   "blockOverrideDomain": "string",
   "blockOverrideTtl": number,
   "blockResponse": "string",
   "confidenceThreshold": "string",
   "createdAt": "string",
   "description": "string",
   "dnsAdvancedProtection": "string",
   "dnsViewId": "string",
   "firewallDomainListId": "string",
   "id": "string",
   "name": "string",
   "priority": number,
   "queryType": "string",
   "status": "string",
   "updatedAt": "string"
}
```


## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### action

The action that was configured for the deleted firewall rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

### blockOverrideDnsType

The DNS record type that was configured for the deleted firewall rule's custom response.

Type: String

Valid Values: `CNAME`

### blockOverrideDomain

The custom domain that was configured for the deleted firewall rule's BLOCK response.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

**blockOverrideTtl**

The TTL value that was configured for the deleted firewall rule's custom response.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

**blockResponse**

The block response type that was configured for the deleted firewall rule.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

**confidenceThreshold**

The confidence threshold that was configured for the deleted firewall rule's advanced threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

**createdAt**

The date and time when the firewall rule was originally created.

Type: Timestamp

**description**

The description of the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnsAdvancedProtection**

Whether advanced DNS threat protection was enabled for the deleted firewall rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

**dnsViewId**

The ID of the DNS view that was associated with the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**firewallDomainListId**

The ID of the firewall domain list that was associated with the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**priority**

The priority that was configured for the deleted firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

**queryType**

The DNS query type that the deleted firewall rule was configured to match.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

**status**

The final status of the deleted firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the firewall rule was last updated before deletion.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteGlobalResolver

Service: Amazon Route 53 Global Resolver

Deletes a Route 53 Global Resolver instance. This operation cannot be undone. All associated DNS views, access sources, tokens, and firewall rules are also deleted.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /global-resolver/globalResolverId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### globalResolverId

The unique identifier of the Route 53 Global Resolver to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnsName": "string",
   "id": "string",
   "ipAddressType": "string",
   "ipv4Addresses": [ "string" ],
   "ipv6Addresses": [ "string" ],
   "name": "string",
   "observabilityRegion": "string",
   "regions": [ "string" ],
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

The Amazon Resource Name (ARN) of the deleted Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

### clientToken

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### createdAt

The date and time when the Route 53 Global Resolver was originally created.

Type: Timestamp

### description

The description of the deleted Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### dnsName

The hostname that DNS clients used for TLS certificate validation when connecting to the deleted Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

### id

The unique identifier of the deleted Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

### ipAddressType

The IP address type that was configured for the deleted Route 53 Global Resolver.

Type: String

Valid Values: `IPV4 | DUAL_STACK`

### ipv4Addresses

The global anycast IPv4 addresses that were associated with the deleted Route 53 Global Resolver.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 15.

Pattern: `((25[0-5]|(2[0-4]|1\d|[1-9]|)\d)\.?\b){4}`

**ipv6Addresses**

The global anycast IPv6 addresses that were associated with the deleted Route 53 Global Resolver.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 39.

Pattern: `(?:[A-Fa-f0-9]{0,4}:){2,7}[A-Fa-f0-9]{1,4}`

**name**

The name of the deleted Route 53 Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**observabilityRegion**

The AWS Region where observability data for the deleted Route 53 Global Resolver was stored.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

**regions**

The AWS Regions where the deleted Route 53 Global Resolver was deployed and operational.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

**status**

The final status of the deleted Route 53 Global Resolver.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the Route 53 Global Resolver was last updated before deletion.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisableDNSView

Service: Amazon Route 53 Global Resolver

Disables a DNS view, preventing it from serving DNS queries.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /dns-views/dnsViewId/disable HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**dnsViewId**

The unique identifier of the DNS view to disable.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the disabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time when the DNS view was originally created.

Type: Timestamp

**description**

The description of the disabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnssecValidation**

Whether DNSSEC validation is enabled for the disabled DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**ednsClientSubnet**

Whether EDNS Client Subnet injection is enabled for the disabled DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**firewallRulesFailOpen**

The firewall rules fail-open behavior configured for the disabled DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**globalResolverId**

The ID of the Route 53 Global Resolver that the disabled DNS view is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the disabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the disabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The current status of the disabled DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

**updatedAt**

The date and time when the DNS view was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateHostedZone

Service: Amazon Route 53 Global Resolver

Disassociates a Route 53 private hosted zone from a Route 53 Global Resolver resource.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
DELETE /hosted-zone-associations/hosted-zone/hostedZoneId/resource-arn/resourceArn+
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### hostedZoneId

The ID of the Route 53 private hosted zone to disassociate.

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: Yes

### resourceArn

The Amazon Resource Name (ARN) of the Route 53 Global Resolver resource to disassociate the hosted zone from.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "createdAt": "string",
   "hostedZoneId": "string",
   "hostedZoneName": "string",
   "id": "string",
   "name": "string",
   "resourceArn": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**createdAt**

The date and time when the association was originally created.

Type: Timestamp

**hostedZoneId**

The ID of the Route 53 private hosted zone that was disassociated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

**hostedZoneName**

The name of the Route 53 private hosted zone that was disassociated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

**id**

The unique identifier of the disassociation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the association that was removed.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**resourceArn**

The Amazon Resource Name (ARN) of the Route 53 Global Resolver resource that the hosted zone was disassociated from.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**status**

The final status of the disassociation.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

**updatedAt**

The date and time when the association was last updated before disassociation.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# EnableDNSView

Service: Amazon Route 53 Global Resolver

Enables a disabled DNS view, allowing it to serve DNS queries again.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /dns-views/dnsViewId/enable HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### dnsViewId

The unique identifier of the DNS view to enable.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the enabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time when the DNS view was originally created.

Type: Timestamp

**description**

The description of the enabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnssecValidation**

Whether DNSSEC validation is enabled for the enabled DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**ednsClientSubnet**

Whether EDNS Client Subnet injection is enabled for the enabled DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**firewallRulesFailOpen**

The firewall rules fail-open behavior configured for the enabled DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**globalResolverId**

The ID of the Route 53 Global Resolver that the enabled DNS view is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the enabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the enabled DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The current status of the enabled DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

**updatedAt**

The date and time when the DNS view was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetAccessSource

Service: Amazon Route 53 Global Resolver

Retrieves information about an access source.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /access-sources/accessSourceId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**accessSourceId**

The unique identifier of the access source to retrieve.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "cidr": "string",
   "createdAt": "string",
   "dnsViewId": "string",
   "id": "string",
   "ipAddressType": "string",
   "name": "string",
   "protocol": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**cidr**

The IP range for the rule's parameters in CIDR notation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

**createdAt**

The time and date the rule was created.

Type: Timestamp

**dnsViewId**

ID for the DNS view that the rule is associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

ID for the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**ipAddressType**

The IP address type.

Type: String

Valid Values: `IPV4 | IPV6`

**name**

Name for the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**protocol**

The protocol determines how data is transmitted to a Global Resolver instance.

Type: String

Valid Values: `DO53 | DOH | DOT`

**status**

Information about the status of the rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The time and date the access source was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetAccessToken

Service: Amazon Route 53 Global Resolver

Retrieves information about an access token.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /tokens/accessTokenId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**accessTokenId**

ID of the token.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "dnsViewId": "string",
   "expiresAt": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string",
   "value": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The time and date the token was created.

Type: Timestamp

**dnsViewId**

ID of the DNS view the token is associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**expiresAt**

The token's expiration time and date.

Type: Timestamp

**globalResolverId**

ID of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

ID of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The operational status of the token.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

**updatedAt**

The time and date the token was created.

Type: Timestamp

**value**

The value of the token.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 100.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetDNSView

Service: Amazon Route 53 Global Resolver

Retrieves information about a DNS view.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /dns-views/dnsViewId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### dnsViewId

The ID of the DNS view to retrieve information about.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

Amazon Resource Name (ARN) of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The time and date the DNS view was creates on.

Type: Timestamp

**description**

Description of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnssecValidation**

Specifies whether DNSSEC is enabled or disabled for the DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**ednsClientSubnet**

Specifies whether edns0 client subnet is enabled.

Type: String

Valid Values: `ENABLED | DISABLED`

**firewallRulesFailOpen**

Specifies the DNS Firewall failure mode configuration. When enabled, the DNS Firewall allows DNS queries to proceed if it's unable to properly evaluate them. When disabled, the DNS Firewall blocks DNS queries it's unable to evaluate.

Type: String

Valid Values: `ENABLED | DISABLED`

**globalResolverId**

ID of the Global Resolver the DNS view is associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

ID of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

Operational status of the DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

**updatedAt**

The time and date the DNS view was updated on.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallDomainList

Service: Amazon Route 53 Global Resolver

Retrieves information about a firewall domain list.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /firewall-domain-lists/firewallDomainListId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### firewallDomainListId

ID of the domain list.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "domainCount": number,
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "statusMessage": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

Amazon Resource Name (ARN) of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The time and date the domain list was created.

Type: Timestamp

**description**

The description of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**domainCount**

Number of domains in the domain list.

Type: Integer

**globalResolverId**

ID of the Global Resolver that the domain list is associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

ID of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

Operational status of the domain list.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**statusMessage**

Additional information about the status of the domain list.

Type: String

**updatedAt**

The date and time the domain list was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallRule

Service: Amazon Route 53 Global Resolver

Retrieves information about a DNS firewall rule.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /firewall-rules/firewallRuleId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**firewallRuleId**

ID of the DNS Firewall rule.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "action": "string",
   "blockOverrideDnsType": "string",
   "blockOverrideDomain": "string",
   "blockOverrideTtl": number,
   "blockResponse": "string",
   "confidenceThreshold": "string",
   "createdAt": "string",
   "description": "string",
   "dnsAdvancedProtection": "string",
   "dnsViewId": "string",
   "firewallDomainListId": "string",
   "id": "string",
   "name": "string",
   "priority": number,
   "queryType": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

### blockOverrideDnsType

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: CNAME

**blockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: *?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+

**blockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

**blockResponse**

The way that you want DNS Firewall to block the request. Used for the rule action setting BLOCK.

Type: String

Valid Values: NODATA | NXDOMAIN | OVERRIDE

**confidenceThreshold**

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create a DNS Firewall Advanced rule.

Type: String

Valid Values: LOW | MEDIUM | HIGH

**createdAt**

The time and date the DNS Firewall rule was created.

Type: Timestamp

### description

The description of the DNS Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### dnsAdvancedProtection

The type of the DNS Firewall Advanced rule. Valid values are DGA, DNS_TUNNELING, and DICTIONARY_DGA.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

### dnsViewId

The DNS view ID the DNS Firewall is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

### firewallDomainListId

The ID of a DNS Firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

### id

ID of the DNS Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the DNS Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**priority**

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

**queryType**

The DNS query type you want the rule to evaluate.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

**status**

The operational status of the DNS Firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time the DNS Firewall rule was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetGlobalResolver

Service: Amazon Route 53 Global Resolver

Retrieves information about a Route 53 Global Resolver instance.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /global-resolver/globalResolverId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**globalResolverId**

The ID of the Route 53 Global Resolver to retrieve information about.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnsName": "string",
   "id": "string",
   "ipAddressType": "string",
   "ipv4Addresses": [ "string" ],
   "ipv6Addresses": [ "string" ],
   "name": "string",
   "observabilityRegion": "string",
   "regions": [ "string" ],
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time the Global Resolver was created.

Type: Timestamp

**description**

The description of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnsName**

The hostname used by the customers' DNS clients for certification validation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

**id**

The ID of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**ipAddressType**

The IP address type configured for the Global Resolver.

Type: String

Valid Values: `IPV4 | DUAL_STACK`

**ipv4Addresses**

List of anycast IPv4 addresses associated with the Global Resolver instance.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 15.

Pattern: `((25[0-5]|(2[0-4]|1\d|[1-9]|)\d)\.?\b){4}`

**ipv6Addresses**

List of anycast IPv6 addresses associated with the Global Resolver instance. This field is only populated when ipAddressType is DUAL_STACK.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 39.

Pattern: `(?:[A-Fa-f0-9]{0,4}:){2,7}[A-Fa-f0-9]{1,4}`

**name**

The name of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**observabilityRegion**

The AWS Regions in which the users' Global Resolver query resolution logs will be propagated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

**regions**

The AWS Regions in which the Global Resolver operate.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

**status**

The operational status of the Global Resolver.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time the Global Resolver was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetHostedZoneAssociation

Service: Amazon Route 53 Global Resolver

Retrieves information about a hosted zone association.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /hosted-zone-associations/hostedZoneAssociationId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**hostedZoneAssociationId**

ID of the private hosted zone association.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "createdAt": "string",
   "hostedZoneId": "string",
   "hostedZoneName": "string",
   "id": "string",
   "name": "string",
   "resourceArn": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**createdAt**

The time and date the private hosted zone association was created.

Type: Timestamp

**hostedZoneId**

ID of the hosted zone associated to the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

**hostedZoneName**

Name of the domain associated with the private hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

**id**

ID of the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name of the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**resourceArn**

Amazon Resource Name (ARN) of the DNS view the private hosted zone is associated to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**status**

The operational status of the private hosted zone association.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

**updatedAt**

The time and date the private hosted zone association was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetManagedFirewallDomainList

Service: Amazon Route 53 Global Resolver

Retrieves information about an AWS-managed firewall domain list. Managed domain lists contain domains associated with malicious activity, content categories, or specific threats.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /managed-firewall-domain-lists/managedFirewallDomainListId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**managedFirewallDomainListId**

ID of the Managed Domain List.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "description": "string",
   "id": "string",
   "managedListType": "string",
   "name": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**description**

Description of the Managed Domain List.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**id**

ID of the Managed Domain List.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**managedListType**

Type of the managed category. This is either `THREAT` or `CONTENT`.

Type: String

**name**

Name of the Managed Domain List.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ImportFirewallDomains

Service: Amazon Route 53 Global Resolver

Imports a list of domains from an Amazon S3 file into a firewall domain list. The file should contain one domain per line.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /firewall-domain-lists/firewallDomainListId/domains/s3_file_url HTTP/1.1
Content-type: application/json

{
   "domainFileUrl": "string",
   "operation": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### firewallDomainListId

ID of the DNS Firewall domain list that you want to import the domain list to.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**domainFileUrl**

The fully qualified URL of the file in Amazon S3 that contains the list of domains to import. The file should contain one domain per line.

Type: String

Required: Yes

**operation**

This value is REPLACE, and it updates the domain list to match the list of domains in the imported file.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "id": "string",
   "name": "string",
   "status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**id**

ID of the DNS Firewall domain list that you imported the domain list to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

Name of the DNS Firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

Operational status of the DNS Firewall domain list.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# ListAccessSources

Service: Amazon Route 53 Global Resolver

Lists all access sources with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /access-sources?filters&max_results=maxResults&next_token=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**filters**

Values to filter the results.

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "accessSources": [
      {
         "arn": "string",
         "cidr": "string",
         "createdAt": "string",
         "dnsViewId": "string",
         "id": "string",
         "ipAddressType": "string",
         "name": "string",
         "protocol": "string",
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**accessSources**

An array containing information about the access sources, such as the ID, CIDR etc.

Type: Array of AccessSourcesItem objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListAccessTokens

Service: Amazon Route 53 Global Resolver

Lists all access tokens for a DNS view with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /tokens/dns-view/dnsViewId?filters&max_results=maxResults&next_token=nextToken
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**dnsViewId**

The ID of the DNS view to list the tokens for.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**filters**

Filtering parameters.

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "accessTokens": [
      {
         "arn": "string",
         "createdAt": "string",
         "dnsViewId": "string",
         "expiresAt": "string",
         "globalResolverId": "string",
         "id": "string",
         "name": "string",
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**accessTokens**

List of the tokens.

Type: Array of AccessTokenItem objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListDNSViews

Service: Amazon Route 53 Global Resolver

Lists all DNS views for a Route 53 Global Resolver with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /dns-views/resolver/globalResolverId?max_results=maxResults&next_token=nextToken
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**globalResolverId**

The Global Resolver ID.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "dnsViews": [
      {
         "arn": "string",
         "clientToken": "string",
         "createdAt": "string",
         "description": "string",
         "dnssecValidation": "string",
         "ednsClientSubnet": "string",
         "firewallRulesFailOpen": "string",
         "globalResolverId": "string",
         "id": "string",
         "name": "string",
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### dnsViews

An array of information about the DNS views, such as whether DNSSEC is enabled, creation time, etc.

Type: Array of DNSViewSummary objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallDomainLists

Service: Amazon Route 53 Global Resolver

Lists all firewall domain lists for a Route 53 Global Resolver with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /firewall-domain-lists?
global_resolver_id=globalResolverId&max_results=maxResults&next_token=nextToken
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**globalResolverId**

The ID of the Global Resolver that contains the DNS view the domain lists are associated to.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "firewallDomainLists": [
      {
         "arn": "string",
         "createdAt": "string",
         "description": "string",
         "globalResolverId": "string",
         "id": "string",
         "name": "string",
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**firewallDomainLists**

List of the DNS Firewall domain lists.

Type: Array of FirewallDomainListsItem objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallDomains

Service: Amazon Route 53 Global Resolver

Lists all the domains in DNS Firewall domain list you have created.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /firewall-domain-lists/firewallDomainListId/domains?
max_results=maxResults&next_token=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**firewallDomainListId**

ID of the DNS Firewall domain list.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "domains": [ "string" ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**domains**

List of domains in the specified domain list.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallRules

Service: Amazon Route 53 Global Resolver

Lists all DNS firewall rules for a DNS view with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /firewall-
rules?filters&dnsview_id=dnsViewId&max_results=maxResults&next_token=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**dnsViewId**

ID of the DNS view.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**filters**

Values to filter the results.

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "firewallRules": [
      {
         "action": "string",
         "blockOverrideDnsType": "string",
         "blockOverrideDomain": "string",
         "blockOverrideTtl": number,
         "blockResponse": "string",
         "confidenceThreshold": "string",
         "createdAt": "string",
         "description": "string",
         "dnsAdvancedProtection": "string",
         "dnsViewId": "string",
         "firewallDomainListId": "string",
         "id": "string",
         "name": "string",
         "priority": number,
         "queryType": "string",
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### firewallRules

List of the firewall rules and information about them.

Type: Array of FirewallRulesItem objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# ListGlobalResolvers

Service: Amazon Route 53 Global Resolver

Lists all Route 53 Global Resolver instances in your account with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /global-resolver?max_results=maxResults&next_token=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of Route 53 Global Resolver instances to return in the response. Valid range is 1-100.

**nextToken**

The token for the next page of results. This value is returned in the response if there are more results to retrieve.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "globalResolvers": [
      {
         "arn": "string",
         "clientToken": "string",
         "createdAt": "string",
         "description": "string",
         "dnsName": "string",
         "id": "string",
         "ipAddressType": "string",
         "ipv4Addresses": [ "string" ],
         "ipv6Addresses": [ "string" ],
         "name": "string",
         "observabilityRegion": "string",
         "regions": [ "string" ],
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**globalResolvers**

Paginated list of Global Resolvers.

Type: Array of GlobalResolversItem objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListHostedZoneAssociations

Service: Amazon Route 53 Global Resolver

Lists all hosted zone associations for a Route 53 Global Resolver resource with pagination support.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /hosted-zone-associations/resource-arn/resourceArn+?
max_results=maxResults&next_token=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

**resourceArn**

Amazon Resource Name (ARN) of the DNS view.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "hostedZoneAssociations": [
      {
         "createdAt": "string",
         "hostedZoneId": "string",
         "hostedZoneName": "string",
         "id": "string",
         "name": "string",
         "resourceArn": "string",
         "status": "string",
         "updatedAt": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**hostedZoneAssociations**

List of the private hosted zone associations.

Type: Array of HostedZoneAssociationSummary objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListManagedFirewallDomainLists

Service: Amazon Route 53 Global Resolver

Returns a paginated list of the AWS Managed DNS Lists and the categories for DNS Firewall. The categories are either `THREAT` or `CONTENT`.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
GET /list-managed-firewall-domain-lists/managedFirewallDomainListType?
max_results=maxResults&next_token=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**managedFirewallDomainListType**

The category of the Manage DNS list either `THREAT` or `CONTENT`.

Required: Yes

**maxResults**

The maximum number of results to retrieve in a single call.

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "managedFirewallDomainLists": [
      {
         "description": "string",
         "id": "string",
         "managedListType": "string",
         "name": "string"
      }
   ],
   "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**managedFirewallDomainLists**

List of the Managed Domain Lists.

Type: Array of ManagedFirewallDomainListsItem objects

**nextToken**

A pagination token used for large sets of results that can't be returned in a single response. Provide this token in the next call to get the results not returned in this call.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTagsForResource

Service: Amazon Route 53 Global Resolver

Lists the tags associated with a Route 53 Global Resolver resource.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /get-all-tags HTTP/1.1
Content-type: application/json

{
   "resourceArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**resourceArn**

Amazon Resource Name (ARN) for the resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "tags": {
      "string" : "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**tags**

An array of user-defined keys and optional values. These tags can be used for categorization and organization.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# TagResource

Service: Amazon Route 53 Global Resolver

Adds or updates tags for a Route 53 Global Resolver resource. Tags are key-value pairs that help you organize and identify your resources.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /tag-resource HTTP/1.1
Content-type: application/json

{
   "resourceArn": "string",
   "tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

**resourceArn**

Amazon Resource Name (ARN) of the resource to be tagged.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**tags**

An array of user-defined keys and optional values. These tags can be used for categorization and organization.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UntagResource

Service: Amazon Route 53 Global Resolver

Removes tags from a Route 53 Global Resolver resource.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
POST /untag-resource HTTP/1.1
Content-type: application/json

{
   "resourceArn": "string",
   "tagKeys": [ "string" ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### resourceArn

Amazon Resource Name (ARN) of the resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**tagKeys**

The tag keys associated with the resource.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `([\p{L}\p{Z}\p{N}_.:/=+\-@]*)`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateAccessSource

Service: Amazon Route 53 Global Resolver

Updates the configuration of an access source.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /access-sources/accessSourceId HTTP/1.1
Content-type: application/json

{
   "cidr": "string",
   "ipAddressType": "string",
   "name": "string",
   "protocol": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### accessSourceId

The unique identifier of the access source to update.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**cidr**

The CIDR block for the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

Required: No

**ipAddressType**

The IP address type for the access source.

Type: String

Valid Values: `IPV4 | IPV6`

Required: No

**name**

The name of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**protocol**

The protocol for the access source.

Type: String

Valid Values: `DO53 | DOH | DOT`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "cidr": "string",
   "createdAt": "string",
   "dnsViewId": "string",
   "id": "string",
   "ipAddressType": "string",
   "name": "string",
   "protocol": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the updated access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**cidr**

The CIDR block of the updated access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

**createdAt**

The date and time when the access source was originally created.

Type: Timestamp

**dnsViewId**

The ID of the DNS view associated with the updated access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the updated access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**ipAddressType**

The IP address type of the updated access source.

Type: String

Valid Values: `IPV4 | IPV6`

**name**

The name of the updated access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**protocol**

The protocol of the updated access source.

Type: String

Valid Values: `DO53 | DOH | DOT`

**status**

The current status of the updated access source.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The date and time when the access source was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateAccessToken

Service: Amazon Route 53 Global Resolver

Updates the configuration of an access token.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /tokens/accessTokenId HTTP/1.1
Content-type: application/json

{
   "name": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### accessTokenId

The ID of the token.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**name**

The new name of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "id": "string",
   "name": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**id**

The ID of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateDNSView

Service: Amazon Route 53 Global Resolver

Updates the configuration of a DNS view.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /dns-views/dnsViewId HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "name": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### dnsViewId

The unique identifier of the DNS view to update.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**description**

A description of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnssecValidation**

Whether to enable DNSSEC validation for the DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**ednsClientSubnet**

Whether to enable EDNS Client Subnet injection for the DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**firewallRulesFailOpen**

Whether firewall rules should fail open when they cannot be evaluated.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**name**

The name of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnssecValidation": "string",
   "ednsClientSubnet": "string",
   "firewallRulesFailOpen": "string",
   "globalResolverId": "string",
   "id": "string",
   "name": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the updated DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The date and time when the DNS view was originally created.

Type: Timestamp

**description**

The description of the updated DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnssecValidation**

Whether DNSSEC validation is enabled for the updated DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**ednsClientSubnet**

Whether EDNS Client Subnet injection is enabled for the updated DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**firewallRulesFailOpen**

Whether firewall rules fail open when they cannot be evaluated for the updated DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

**globalResolverId**

The ID of the global resolver associated with the updated DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**id**

The unique identifier of the updated DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the updated DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The current status of the updated DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

**updatedAt**

The date and time when the DNS view was last updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateFirewallDomains

Service: Amazon Route 53 Global Resolver

Updates a DNS Firewall domain list from an array of specified domains.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /firewall-domain-lists/firewallDomainListId/domains HTTP/1.1
Content-type: application/json

{
   "domains": [ "string" ],
   "operation": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### firewallDomainListId

The ID of the DNS Firewall domain list to which you want to add the domains.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### domains

A list of the domains. You can add up to 1000 domains per request.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: Yes

### operation

The operation for updating the domain list. The allowed values are ADD, REMOVE, and REPLACE.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "id": "string",
   "name": "string",
   "status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### id

The ID of the DNS Firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**status**

The operational status of the domain list.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# UpdateFirewallRule

Service: Amazon Route 53 Global Resolver

Updates the configuration of a DNS firewall rule.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /firewall-rules/firewallRuleId HTTP/1.1
Content-type: application/json

{
   "action": "string",
   "blockOverrideDnsType": "string",
   "blockOverrideDomain": "string",
   "blockOverrideTtl": number,
   "blockResponse": "string",
   "clientToken": "string",
   "confidenceThreshold": "string",
   "description": "string",
   "dnsAdvancedProtection": "string",
   "name": "string",
   "priority": number
}
```

## URI Request Parameters

The request uses the following URI parameters.

### firewallRuleId

The ID of the DNS Firewall rule.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**action**

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: No

**blockOverrideDnsType**

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: `CNAME`

Required: No

**blockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: No

### blockOverrideTtl

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

### blockResponse

The way that you want DNS Firewall to block the request. Used for the rule action setting `BLOCK`.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

### clientToken

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

### confidenceThreshold

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create a DNS Firewall Advanced rule.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

### description

The description for the Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

### dnsAdvancedProtection

The type of the DNS Firewall Advanced rule. Valid values are DGA, DNS_TUNNELING, and DICTIONARY_DGA.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

### name

The name of the DNS Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

### priority

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "action": "string",
   "blockOverrideDnsType": "string",
   "blockOverrideDomain": "string",
   "blockOverrideTtl": number,
   "blockResponse": "string",
   "confidenceThreshold": "string",
   "createdAt": "string",
   "description": "string",
   "dnsAdvancedProtection": "string",
   "dnsViewId": "string",
   "firewallDomainListId": "string",
   "id": "string",
   "name": "string",
   "priority": number,
   "queryType": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

### blockOverrideDnsType

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: CNAME

**blockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: *?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+

**blockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

**blockResponse**

The way that you want DNS Firewall to block the request. Used for the rule action setting BLOCK.

Type: String

Valid Values: NODATA | NXDOMAIN | OVERRIDE

**confidenceThreshold**

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create a DNS Firewall Advanced rule.

Type: String

Valid Values: LOW | MEDIUM | HIGH

**createdAt**

The time and date the Firewall rule was created.

Type: Timestamp

### description

The description of the Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### dnsAdvancedProtection

The type of the DNS Firewall Advanced rule. Valid values are DGA, DNS_TUNNELING, and DICTIONARY_DGA.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

### dnsViewId

The ID of the DNS view the Firewall rule is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

### firewallDomainListId

The ID of the domain list associated with the Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

### id

The ID of the Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the Firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**priority**

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

**queryType**

The DNS query type you want the rule to evaluate.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

**status**

The operational status of the firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The time and date the rule was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateGlobalResolver

Service: Amazon Route 53 Global Resolver

Updates the configuration of a Route 53 Global Resolver instance. You can modify the name, description, and observability Region.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /global-resolver/globalResolverId HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "ipAddressType": "string",
   "name": "string",
   "observabilityRegion": "string",
   "regions": [ "string" ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### globalResolverId

The ID of the Global Resolver.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**description**

The description of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**ipAddressType**

The IP address type for the Global Resolver. Valid values are IPV4 or DUAL_STACK for both IPv4 and IPv6 support.

Type: String

Valid Values: `IPV4 | DUAL_STACK`

Required: No

**name**

The name of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**observabilityRegion**

The AWS Regions in which the users' Global Resolver query resolution logs will be propagated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

Required: No

**regions**

The list of AWS Regions where the Global Resolver will operate. The resolver will be distributed across these Regions to provide global availability and low-latency DNS resolution.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "arn": "string",
   "clientToken": "string",
   "createdAt": "string",
   "description": "string",
   "dnsName": "string",
   "id": "string",
   "ipAddressType": "string",
   "ipv4Addresses": [ "string" ],
   "ipv6Addresses": [ "string" ],
   "name": "string",
   "observabilityRegion": "string",
   "regions": [ "string" ],
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**arn**

The Amazon Resource Name (ARN) of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**clientToken**

A unique, case-sensitive identifier to ensure idempotency. This means that making the same request multiple times with the same `clientToken` has the same result every time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**createdAt**

The time and date the Global Resolverwas created.

Type: Timestamp

**description**

Description of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

**dnsName**

The hostname to be used by the customers' DNS clients for certification validation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

**id**

The ID of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**ipAddressType**

The IP address type configured for the updated Global Resolver.

Type: String

Valid Values: `IPV4 | DUAL_STACK`

**ipv4Addresses**

List of anycast IPv4 addresses associated with the Global Resolver instance.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 15.

Pattern: `((25[0-5]|(2[0-4]|1\d|[1-9]|)\d)\.?\b){4}`

**ipv6Addresses**

List of anycast IPv6 addresses associated with the updated Global Resolver instance. This field is only populated when ipAddressType is DUAL_STACK.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 39.

Pattern: `(?:[A-Fa-f0-9]{0,4}:){2,7}[A-Fa-f0-9]{1,4}`

**name**

Name of the Global Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**observabilityRegion**

The AWS Regions in which the users' Global Resolver query resolution logs will be propagated.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

**regions**

The AWS Regions in which the Global Resolver will operate.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

**status**

The operational status of the Global Resolver.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

**updatedAt**

The time and date the Global Resolver was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# UpdateHostedZoneAssociation

Service: Amazon Route 53 Global Resolver

Updates the configuration of a hosted zone association.

> **Important**
>
> Route 53 Global Resolver is a global service that supports resolvers in multiple AWS Regions but you must specify the US East (Ohio) Region to create, update, or otherwise work with Route 53 Global Resolver resources. That is, for example, specify `--region us-east-2` on AWS CLI commands.

## Request Syntax

```
PATCH /hosted-zone-associations/hostedZoneAssociationId HTTP/1.1
Content-type: application/json

{
   "name": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### hostedZoneAssociationId

The ID of the private hosted zone association.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

**name**

The name you want to update the hosted zone association to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "createdAt": "string",
   "hostedZoneId": "string",
   "hostedZoneName": "string",
   "id": "string",
   "name": "string",
   "resourceArn": "string",
   "status": "string",
   "updatedAt": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**createdAt**

The time and date the private hosted zone association was created.

Type: Timestamp

**hostedZoneId**

The ID of the private hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

**hostedZoneName**

The name of the domain associated with the private hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

**id**

The ID of the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

**name**

The name of the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

**resourceArn**

The Amazon Resource Name (ARN) of the private hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

**status**

The operational status of the private hosted zone association.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

**updatedAt**

The time and date the private hosted zone association was updated.

Type: Timestamp

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

You don't have permission to perform this operation. Check your IAM permissions and try again.

HTTP Status Code: 403

**ConflictException**

The request conflicts with the current state of the resource. This can occur when trying to modify a resource that is not in a valid state for the requested operation.

**resourceId**

The ID of the conflicting resource.

**resourceType**

The type of the conflicting resource.

HTTP Status Code: 409

**InternalServerException**

An internal server error occurred. Try again later.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

HTTP Status Code: 500

**ResourceNotFoundException**

The specified resource was not found. Verify the resource ID and try again.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

HTTP Status Code: 404

**ServiceQuotaExceededException**

The request would exceed one or more service quotas. Check your current usage and quotas, then try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**resourceId**

The unique ID of the resource referenced in the failed request.

**resourceType**

The resource type of the resource referenced in the failed request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 402

**ThrottlingException**

The request was throttled due to too many requests. Wait a moment and try again.

**quotaCode**

The quota code recognized by the AWS Service Quotas service.

**retryAfterSeconds**

Number of seconds in which the caller can retry the request.

**serviceCode**

The code for the AWS service that owns the quota.

HTTP Status Code: 429

**ValidationException**

The input parameters are invalid. Check the parameter values and try again.

**fieldList**

The list of fields that aren't valid.

**reason**

Reason the request failed validation.

HTTP Status Code: 400

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

## Route 53 Profiles

The following actions are supported by Route 53 Profiles:

- AssociateProfile
- AssociateResourceToProfile
- CreateProfile

- DeleteProfile
- DisassociateProfile
- DisassociateResourceFromProfile
- GetProfile
- GetProfileAssociation
- GetProfileResourceAssociation
- ListProfileAssociations
- ListProfileResourceAssociations
- ListProfiles
- ListTagsForResource
- TagResource
- UntagResource
- UpdateProfileAssociation
- UpdateProfileResourceAssociation

# AssociateProfile

Service: Route 53 Profiles

Associates a Route 53 Profiles profile with a VPC. A VPC can have up to two Profile associations. A Profile can be associated with up to 1,000 VPCs, and you can request a higher quota for the number of VPCs. For more information, see Quotas on Route 53 Profiles.

Route 53 VPC Resolver evaluates the Profile associations for a VPC in priority order, starting with the lowest `Priority` value. If the VPC has no other Profile associations, you can omit `Priority`, and the association gets priority 100. When the VPC already has a Profile association, you must specify a `Priority`, and each Profile association for the VPC must have a unique priority. To change the priority of an existing association, use `UpdateProfileAssociation`.

The request fails with a `ValidationException` in these cases:

- You omit `Priority`, and the VPC already has a Profile association.
- Another Profile association for the VPC already uses the priority that you specify.
- The priority is outside the range 100–9900.
- The Profile is already associated with the VPC, and you specify a different `Name` or `Priority`. To change the priority, use UpdateProfileAssociation.

The request fails with a `LimitExceededException` if the VPC already has the maximum number of Profile associations.

## Request Syntax

```
POST /profileassociation HTTP/1.1
Content-type: application/json

{
   "Name": "string",
   "Priority": number,
   "ProfileId": "string",
   "ResourceId": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
```

```
    ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### Name

A name for the association.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

### Priority

The priority of the Profile association. Route 53 VPC Resolver evaluates the Profile associations for a VPC in priority order, starting with the lowest value.

When the VPC already has a Profile association, you must specify a priority that no other Profile association for the VPC uses. If you omit the priority for the first association with a VPC, the association gets priority 100.

Type: Integer

Valid Range: Minimum value of 100. Maximum value of 9900.

Required: No

### ProfileId

ID of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResourceId**

The ID of the VPC.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**Tags**

A list of the tag keys and values that you want to identify the Profile association.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "Priority": number,
      "ProfileId": "string",
      "ResourceId": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileAssociation**

The association that you just created. The association has an ID that you can use to identify it in other requests, such as update and delete.

Type: ProfileAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ResourceExistsException**

The resource you are trying to associate, has already been associated.

**ResourceType**

The resource type that caused the resource exists exception.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### AssociateProfile Example

This example illustrates one usage of AssociateProfile.

### Sample Request

```
POST /profileassociation HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 103
```

```
X-Amz-Date:20240319T222051Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20191101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{
    "Name": "test-association",
    "ProfileId": "rp-4987774726example",
    "ResourceId": "vpc-0af3b96b3example"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 22:20:51 GMT
Content-Type: application/json
Content-Length: 322
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-sdds-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a32afsdfd3example
{
    "ProfileAssociation": {
        "CreationTime": 1710886843.849,
        "Id": "rpassoc-489ce212fexample",
        "ModificationTime": 1710886843.849,
        "Name": "test-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceId": "vpc-0af3b96b3example",
        "Priority": 100,
        "Status": "CREATING",
        "StatusMessage": "Creating Profile Association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# AssociateResourceToProfile

Service: Route 53 Profiles

Associates a DNS resource configuration to a Route 53 Profile.

## Request Syntax

```
POST /profileresourceassociation HTTP/1.1
Content-type: application/json

{
   "Name": "string",
   "ProfileId": "string",
   "ResourceArn": "string",
   "ResourceProperties": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### Name

Name for the resource association.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

### ProfileId

ID of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResourceArn**

Amazon resource number, ARN, of the resource to associate. Either a private hosted zone, DNS Firewall rule group, Resolver rule, or an interface VPC endpoint.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**ResourceProperties**

If you are adding a DNS Firewall rule group, include also a priority. The priority indicates the processing order for the rule groups, starting with the priority assinged the lowest value.

The allowed values for priority are between 100 and 9900.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileResourceAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "ProfileId": "string",
      "ResourceArn": "string",
      "ResourceProperties": "string",
      "ResourceType": "string",
      "Status": "string",
      "StatusMessage": "string"
```

```
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileResourceAssociation**

Infromation about the `AssociateResourceToProfile`, including a status message.

Type: ProfileResourceAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**InternalServiceErrorException**

An internal server error occured. Retry your request.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### AssociateResourceToProfile Example

This example illustrates one usage of AssociateResourceToProfile.

### Sample Request

```
POST /profileresourceassociation HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
```

```
Content-Length: 508
X-Amz-Date:20240319T223820Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{
    "Name": "test-resource-association",
    "ProfileId": "rp-4987774726example",
    "ResourceArn": "arn:aws:route53resolver:us-east-1:123456789012:firewall-rule-group/
rslvr-frg-cfe7f72example",
    "ResourceProperties": "{\\"priority\\": 102}"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 22:38:21 GMT
Content-Type: application/json
Content-Length: 508
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a32afdfsd3example
{
    "ProfileResourceAssociation": {
        "CreationTime": 1710887901.139,
        "Id": "rpr-001913120a7example",
        "ModificationTime": 1710887901.139,
        "Name": "test-resource-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceArn": "arn:aws:route53resolver:us-east-1:123456789012:firewall-rule-
group/rslvr-frg-cfe7f72example",
        "ResourceProperties": "{\"priority\":102}",
        "ResourceType": "FIREWALL_RULE_GROUP",
        "Status": "UPDATING",
        "StatusMessage": "Updating the Profile to DNS Firewall rule group association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateProfile

Service: Route 53 Profiles

Creates an empty Route 53 Profile.

## Request Syntax

```
POST /profile HTTP/1.1
Content-type: application/json

{
   "ClientToken": "string",
   "Name": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### ClientToken

`ClientToken` is an idempotency token that ensures a call to `CreateProfile` completes only once. You choose the value to pass. For example, an issue might prevent you from getting a response from `CreateProfile`. In this case, safely retry your call to `CreateProfile` by using the same `CreateProfile` parameter value.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### Name

A name for the Profile.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

### Tags

A list of the tag keys and values that you want to associate with the Route 53 Profile.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "Profile": {
      "Arn": "string",
      "ClientToken": "string",
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "ShareStatus": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Profile**

The Profile that you just created.

Type: Profile object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### CreateProfile Example

This example illustrates one usage of CreateProfile.

### Sample Request

```
POST /profile HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 71
X-Amz-Date:20240319T214228Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{
    "Name": "test",
    "ClientToken": "c60a235a-e786-40bc-a5a4-f12EXAMPLE"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 21:53:14 GMT
Content-Type: application/json
Content-Length: 371
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a32afdfsd3example
```

```
{
    "Profile": {
        "Arn": "arn:aws:route53profiles:us-east-1:123456789012:profile/
rp-6ffe47d5example",
        "ClientToken": "c60a235a-e786-40bc-a5a4-f12EXAMPLE",
        "CreationTime": 1710885194.55,
        "Id": "rp-6ffe47d5example",
        "ModificationTime": 1710885194.55,
        "Name": "test",
        "OwnerId": "123456789012",
        "ShareStatus": "NOT_SHARED",
        "Status": "COMPLETE",
        "StatusMessage": "Created Profile"
    }
}
```


## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteProfile

Service: Route 53 Profiles

Deletes the specified Route 53 Profile. Before you can delete a profile, you must first disassociate it from all VPCs.

## Request Syntax

```
DELETE /profile/ProfileId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileId

The ID of the Profile that you want to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "Profile": {
      "Arn": "string",
      "ClientToken": "string",
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "ShareStatus": "string",
```

```
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Profile**

Information about the `DeleteProfile` request, including the status of the request.

Type: Profile object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### DeleteProfile Example

This example illustrates one usage of DeleteProfile.

### Sample Request

```
DELETE /profile/rp-6ffe47d5example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 0
X-Amz-Date:20240319T234733Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:47:33 GMT
Content-Type: application/json
Content-Length: 374
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
```

```
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a32afdfsd3example
{
    "Profile": {
        "Arn": "arn:aws:route53profiles:us-east-1:123456789012:profile/
rp-6ffe47d5example",
        "ClientToken": "0a15fec0-05d9-4f78-bec0-EXAMPLE11111",
        "CreationTime": 1710850903.578,
        "Id": "rp-6ffe47d5example",
        "ModificationTime": 1710892012.553,
        "Name": "test",
        "OwnerId": "123456789012",
        "ShareStatus": "NOT_SHARED",
        "Status": "DELETED",
        "StatusMessage": "Deleted Profile"
    }
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateProfile

Service: Route 53 Profiles

Dissociates a specified Route 53 Profile from the specified VPC.

## Request Syntax

```
DELETE /profileassociation/Profileid/ProfileId/resourceid/ResourceId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileId

ID of the Profile.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### ResourceId

The ID of the VPC.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileAssociation": {
      "CreationTime": number,
      "Id": "string",
```

```
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "Priority": number,
      "ProfileId": "string",
      "ResourceId": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileAssociation**

Information about the `DisassociateProfile` request.

Type: ProfileAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### DissociateProfile Example

This example illustrates one usage of DisassociateProfile.

### Sample Request

```
DELETE /profileassociation/Profileid/rp-4987774726example/resourceid/
vpc-0af3b96b3example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 0
```

```
X-Amz-Date:20240319T234136Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:41:36 GMT
Content-Type: application/json
Content-Length: 322
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a32afdfsd3example

{
    "ProfileAssociation": {
        "CreationTime": 1710886843.849,
        "Id": "rpassoc-489ce212fexample",
        "ModificationTime": 1710891696.208,
        "Name": "test-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceId": "vpc-0af3b96b3example",
        "Status": "DELETING",
        "StatusMessage": "Deleting Profile Association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateResourceFromProfile

Service: Route 53 Profiles

Dissoaciated a specified resource, from the Route 53 Profile.

## Request Syntax

```
DELETE /profileresourceassociation/profileid/ProfileId/resourcearn/ResourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**ProfileId**

The ID of the Profile.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResourceArn**

The Amazon Resource Name (ARN) of the resource.

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileResourceAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
```

```
      "Name": "string",
      "OwnerId": "string",
      "ProfileId": "string",
      "ResourceArn": "string",
      "ResourceProperties": "string",
      "ResourceType": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileResourceAssociation**

Information about the `DisassociateResourceFromProfile` request, including the status of the request.

Type: ProfileResourceAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**InternalServiceErrorException**

An internal server error occured. Retry your request.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### DissociateProfile Example

This example illustrates one usage of DisassociateResourceFromProfile.

## Sample Request

```
DELETE /profileresourceassociation/profileid/rp-4987774726example/resourcearn/arn
%3Aaws%3Aroute53resolver%3Aus-east-1%123456789012%3Afirewall-rule-group%2Frslvr-frg-
cfe7f72example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 0
X-Amz-Date:20240319T222606Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
# RequestBody is empty
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 22:26:06 GMT
Content-Type: application/json
Content-Length: 508
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example

{
    "ProfileResourceAssociation": {
        "CreationTime": 1710887120.062,
        "Id": "rpr-001913120a7example",
        "ModificationTime": 1710887166.643,
        "Name": "test-resource-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceArn": "arn:aws:route53resolver:us-east-1:123456789012:firewall-rule-
group/rslvr-frg-cfe7f72example",
        "ResourceProperties": "{\"priority\":105}",
        "ResourceType": "FIREWALL_RULE_GROUP",
        "Status": "DELETING",
        "StatusMessage": "Deleting the Profile to DNS Firewall rule group association"
    }
```

```
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetProfile

Service: Route 53 Profiles

Returns information about a specified Route 53 Profile, such as whether whether the Profile is shared, and the current status of the Profile.

## Request Syntax

```
GET /profile/ProfileId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileId

ID of the Profile.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "Profile": {
      "Arn": "string",
      "ClientToken": "string",
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "ShareStatus": "string",
```

```
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Profile**

Information about the Profile, including the status of the Profile.

Type: Profile object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

### ValidationException

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### GetProfile Example

This example illustrates one usage of GetProfile.

### Sample Request

```
GET /profile/rp-4987774726example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T224652Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 22:46:52 GMT
Content-Type: application/json
Content-Length: 373
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example

{
    "Profile": {
        "Arn": "arn:aws:route53profiles:us-east-1:123456789012:profile/
rp-4987774726example",
        "ClientToken": "0cbc5ae7-4921-4204-bea9-EXAMPLE11111",
```

```
        "CreationTime": 1710851044.288,
        "Id": "rp-4987774726example",
        "ModificationTime": 1710851044.288,
        "Name": "test",
        "OwnerId": "123456789012",
        "ShareStatus": "NOT_SHARED",
        "Status": "COMPLETE",
        "StatusMessage": "Created Profile"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetProfileAssociation

Service: Route 53 Profiles

Retrieves a Route 53 Profile association for a VPC. A VPC can have up to two Profile associations, and a Profile can be associated with up to 1,000 VPCs.

## Request Syntax

```
GET /profileassociation/ProfileAssociationId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileAssociationId

The identifier of the association you want to get information about.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "Priority": number,
      "ProfileId": "string",
      "ResourceId": "string",
```

```
        "Status": "string",
        "StatusMessage": "string"
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileAssociation**

Information about the Profile association that you specified in a `GetProfileAssociation` request.

Type: ProfileAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

### ValidationException

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### GetProfileAssociation Example

This example illustrates one usage of GetProfileAssociation.

### Sample Request

```
GET /profileassociation/rpassoc-489ce212fexample HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T230136Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:01:36 GMT
Content-Type: application/json
Content-Length: 321
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileAssociation": {
        "CreationTime": 1710886843.849,
        "Id": "rpassoc-489ce212fexample",
        "ModificationTime": 1710886989.178,
        "Name": "test-association",
```

```
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceId": "vpc-0af3b96b3example",
        "Priority": 100,
        "Status": "COMPLETE",
        "StatusMessage": "Created Profile Association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetProfileResourceAssociation

Service: Route 53 Profiles

Returns information about a specified Route 53 Profile resource association.

## Request Syntax

```
GET /profileresourceassociation/ProfileResourceAssociationId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileResourceAssociationId

The ID of the profile resource association that you want to get information about.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileResourceAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "ProfileId": "string",
      "ResourceArn": "string",
      "ResourceProperties": "string",
```

```
      "ResourceType": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileResourceAssociation**

Information about the Profile resource association that you specified in a `GetProfileResourceAssociation` request.

Type: ProfileResourceAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### GetProfileResourceAssociation Example

This example illustrates one usage of GetProfileResourceAssociation.

### Sample Request

```
GET /profileresourceassociation/rpr-001913120a7example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T231134Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:11:34 GMT
Content-Type: application/json
Content-Length: 517
Connection: keep-alive
```

```
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileResourceAssociation": {
        "CreationTime": 1710887901.139,
        "Id": "rpr-001913120a7example",
        "ModificationTime": 1710887901.139,
        "Name": "test-resource-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceArn": "arn:aws:route53resolver:us-east-1:123456789012:firewall-rule-
group/rslvr-frg-cfe7f72example",
        "ResourceProperties": "{\"priority\":105}",
        "ResourceType": "FIREWALL_RULE_GROUP",
        "Status": "COMPLETE",
        "StatusMessage": "Completed creation of Profile to DNS Firewall rule group
 association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListProfileAssociations

Service: Route 53 Profiles

Lists all the VPCs that the specified Route 53 Profile is associated with.

## Request Syntax

```
GET /profileassociations?
maxResults=MaxResults&nextToken=NextToken&profileId=ProfileId&resourceId=ResourceId
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**MaxResults**

The maximum number of objects that you want to return for this request. If more objects are available, in the response, a `NextToken` value, which you can use in a subsequent call to get the next batch of objects, is provided.

If you don't specify a value for `MaxResults`, up to 100 objects are returned.

Valid Range: Minimum value of 1. Maximum value of 100.

**NextToken**

For the first call to this list request, omit this value.

When you request a list of objects, at most the number of objects specified by `MaxResults` is returned. If more objects are available for retrieval, a `NextToken` value is returned in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

**ProfileId**

ID of the Profile.

Length Constraints: Minimum length of 1. Maximum length of 64.

**ResourceId**

ID of the VPC.

Length Constraints: Minimum length of 1. Maximum length of 64.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "NextToken": "string",
   "ProfileAssociations": [
      {
         "CreationTime": number,
         "Id": "string",
         "ModificationTime": number,
         "Name": "string",
         "OwnerId": "string",
         "Priority": number,
         "ProfileId": "string",
         "ResourceId": "string",
         "Status": "string",
         "StatusMessage": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If more than `MaxResults` profile associations match the specified criteria, you can submit another `ListProfileAssociations` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**ProfileAssociations**

A complex type that containts settings information about the profile's VPC associations.

Type: Array of ProfileAssociation objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**InvalidNextTokenException**

The `NextToken` you provided isn;t valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### ListProfileAssociations Example

This example illustrates one usage of ListProfileAssociations.

### Sample Request

```
GET /profileassociations HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T231359Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:14:00 GMT
Content-Type: application/json
Content-Length: 552
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileAssociations": [
        {
            "CreationTime": 1710887901.139,
            "Id": "rpassoc-489ce212fexample",
            "ModificationTime": 1710887901.139,
            "Name": "test-association",
            "OwnerId": "123456789012",
            "ProfileId": "rp-4987774726example",
            "ResourceId": "vpc-0af3b96b3example",
            "Priority": 100,
            "Status": "COMPLETE",
            "StatusMessage": "Created Profile Association"
```

```
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListProfileResourceAssociations

Service: Route 53 Profiles

Lists all the resource associations for the specified Route 53 Profile.

## Request Syntax

```
GET /profileresourceassociations/profileid/ProfileId?
maxResults=MaxResults&nextToken=NextToken&resourceArn=ResourceArn&resourceType=ResourceType
 HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### MaxResults

The maximum number of objects that you want to return for this request. If more objects are available, in the response, a `NextToken` value, which you can use in a subsequent call to get the next batch of objects, is provided.

If you don't specify a value for `MaxResults`, up to 100 objects are returned.

Valid Range: Minimum value of 1. Maximum value of 100.

### NextToken

For the first call to this list request, omit this value.

When you request a list of objects, at most the number of objects specified by `MaxResults` is returned. If more objects are available for retrieval, a `NextToken` value is returned in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

### ProfileId

The ID of the Profile.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResourceArn**

The Amazon Resource Name (ARN) of the resource. When you specify this optional parameter, the list is filtered to return only the resource associations for the specified resource.

Length Constraints: Minimum length of 1. Maximum length of 255.

**ResourceType**

ID of a resource if you want information on only one type.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "NextToken": "string",
   "ProfileResourceAssociations": [
      {
         "CreationTime": number,
         "Id": "string",
         "ModificationTime": number,
         "Name": "string",
         "OwnerId": "string",
         "ProfileId": "string",
         "ResourceArn": "string",
         "ResourceProperties": "string",
         "ResourceType": "string",
         "Status": "string",
         "StatusMessage": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**NextToken**

If more than `MaxResults` resource associations match the specified criteria, you can submit another `ListProfileResourceAssociations` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**ProfileResourceAssociations**

Information about the profile resource association that you specified in a `GetProfileResourceAssociation` request.

Type: Array of ProfileResourceAssociation objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**InternalServiceErrorException**

An internal server error occured. Retry your request.

HTTP Status Code: 400

**InvalidNextTokenException**

The `NextToken` you provided isn;t valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### ListProfileResourceAssociations Example

This example illustrates one usage of ListProfileResourceAssociations.

### Sample Request

```
GET /profileresourceassociations/profileid/rp-4987774726example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T231834Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token
```

```
    Signature=[calculated-signature]
{} # RequestBody is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:18:34 GMT
Content-Type: application/json
Content-Length: 520
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileResourceAssociations": [
        {
            "CreationTime": 1710851216.613,
            "Id": "rpr-001913120a7example",
            "ModificationTime": 1710851216.613,
            "Name": "test-resource-association",
            "OwnerId": "123456789012",
            "ProfileId": "rp-4987774726example",
            "ResourceArn": "arn:aws:route53resolver:us-east-1:123456789012:firewall-
rule-group/rslvr-frg-cfe7f72example",
            "ResourceProperties": "{\"priority\":102}",
            "ResourceType": "FIREWALL_RULE_GROUP",
            "Status": "COMPLETE",
            "StatusMessage": "Completed creation of Profile to DNS Firewall rule group
 association"
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListProfiles

Service: Route 53 Profiles

Lists all the Route 53 Profiles associated with your AWS account.

## Request Syntax

```
GET /profiles?maxResults=MaxResults&nextToken=NextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### MaxResults

The maximum number of objects that you want to return for this request. If more objects are available, in the response, a `NextToken` value, which you can use in a subsequent call to get the next batch of objects, is provided.

If you don't specify a value for `MaxResults`, up to 100 objects are returned.

Valid Range: Minimum value of 1. Maximum value of 100.

### NextToken

For the first call to this list request, omit this value.

When you request a list of objects, at most the number of objects specified by `MaxResults` is returned. If more objects are available for retrieval, a `NextToken` value is returned in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
   "NextToken": "string",
   "ProfileSummaries": [
      {
         "Arn": "string",
         "Id": "string",
         "Name": "string",
         "ShareStatus": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**NextToken**

If more than `MaxResults` resource associations match the specified criteria, you can submit another `ListProfiles` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**ProfileSummaries**

Summary information about the Profiles.

Type: Array of ProfileSummary objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**InvalidNextTokenException**

The `NextToken` you provided isn;t valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### ListProfiles Example

This example illustrates one usage of ListProfiles.

### Sample Request

```
GET /profiles HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T213047Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token,
    Signature=[calculated-signature]
```

```
# Request body is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 21:30:47 GMT
Content-Type: application/json
Content-Length: 373
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileSummaries": [
        {
            "Arn": "arn:aws:route53profiles:us-east-1:123456789012:profile/
rp-4987774726example",
            "Id": "rp-4987774726example",
            "Name": "test",
            "ShareStatus": "NOT_SHARED"
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# ListTagsForResource

Service: Route 53 Profiles

Lists the tags that you associated with the specified resource.

## Request Syntax

```
GET /tags/ResourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ResourceArn

The Amazon Resource Name (ARN) for the resource that you want to list the tags for.

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "Tags": {
      "string" : "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Tags**

The tags that are associated with the resource that you specified in the `ListTagsForResource` request.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

### ValidationException

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### ListTagsForResource Example

This example illustrates one usage of ListTagsForResource.

### Sample Request

```
GET /tags/arn%3Aaws%3Aroute53profiles%3Aus-east-1%3A123456789012%3Aprofile
%2Frp-4987774726example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T232315Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token,
    Signature=[calculated-signature]
{} # Request body is empty
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:23:20 GMT
Content-Type: application/json
Content-Length: 35
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
Access-Control-Expose-Headers: x-amzn-ErrorType, x-amzn-RequestId, x-amzn-ErrorMessage,
 x-amzn-Trace-Id, x-amz-apigw-id, Date
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "Tags": {
        "my-key-2": "my-value-2",
```

```
        "my-key-1": "my-value-1"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# TagResource

Service: Route 53 Profiles

Adds one or more tags to a specified resource.

## Request Syntax

```
POST /tags/ResourceArn HTTP/1.1
Content-type: application/json

{
   "Tags": {
      "string" : "string"
   }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### ResourceArn

The Amazon Resource Name (ARN) for the resource that you want to add tags to.

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### Tags

The tags that you want to add to the specified resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: Yes

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### TagResource Example

This example illustrates one usage of TagResource.

### Sample Request

```
POST /tags/arn%3Aaws%3Aroute53profiles%3Aus-east-1%3A123456789012%3Aprofile
%2Frp-4987774726example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T232315Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type:application/json
Content-Length: 62
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token,
    Signature=[calculated-signature]
{
    "Tags": {
        "my-key-2": "my-value-2",
        "my-key-1": "my-value-1"
    }
}
```

### Sample Response

```
HTTP/1.1 204 OK
Date: Tue, 19 Mar 2024 23:25:38 GMT
Content-Type: application/json
Content-Length: 0
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
Access-Control-Expose-Headers: x-amzn-ErrorType, x-amzn-RequestId, x-amzn-ErrorMessage,
 x-amzn-Trace-Id, x-amz-apigw-id, Date
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
```

```
# Response body is empty
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UntagResource

Service: Route 53 Profiles

Removes one or more tags from a specified resource.

## Request Syntax

```
DELETE /tags/ResourceArn?tagKeys=TagKeys HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

**ResourceArn**

The Amazon Resource Name (ARN) for the resource that you want to remove tags from.

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**TagKeys**

The tags that you want to remove to the specified resource.

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### UntagResource Example

This example illustrates one usage of UntagResource.

### Sample Request

```
DELETE /tags/arn%3Aaws%3Aroute53profiles%3Aus-east-1%3A123456789012%3Aprofile
%2Frp-4987774726example?tagKeys=my-key-1&tagKeys=my-key-2 HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T233258Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Length: 0
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=host;x-amz-date;x-amz-security-token,
    Signature=[calculated-signature]
# Request body is empty
```

### Sample Response

```
HTTP/1.1 204 OK
Date: Tue, 19 Mar 2024 23:33:04 GMT
Content-Type: application/json
Content-Length: 0
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
Access-Control-Expose-Headers: x-amzn-ErrorType, x-amzn-RequestId, x-amzn-ErrorMessage,
 x-amzn-Trace-Id, x-amz-apigw-id, Date
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
# Response body is empty
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateProfileAssociation

Service: Route 53 Profiles

Updates the name or priority of the specified Route 53 Profile association with a VPC. Route 53 VPC Resolver evaluates the Profile associations for a VPC in priority order, starting with the lowest value. Only the account that created the association can update it.

When you change the priority, the association status is `UPDATING` until the change propagates, and then `COMPLETE`. While the status is `UPDATING`, Route 53 VPC Resolver might still use the previous priority for some queries. When the status is `COMPLETE`, the new priority applies to all queries from the VPC.

The request fails with a `ValidationException` if another Profile association for the VPC already uses the priority that you specify, or if the priority is outside the range 100–9900.

You can update an association whose status is `CREATING`, `UPDATING`, or `COMPLETE`. The request fails with a `ConflictException` if the association status is `DELETING`, `DELETED`, or `FAILED`, or if the account that owns the association is inactive.

## Request Syntax

```
PATCH /profileassociation/ProfileAssociationId HTTP/1.1
Content-type: application/json

{
   "Name": "string",
   "Priority": number
}
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileAssociationId

The ID of the Profile association to update.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### Name

The name of the Profile association.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

### Priority

The new priority of the Profile association. Route 53 VPC Resolver evaluates the Profile associations for a VPC in priority order, starting with the lowest value.

The priority must be unique among the Profile associations for the VPC.

Type: Integer

Valid Range: Minimum value of 100. Maximum value of 9900.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "Priority": number,
      "ProfileId": "string",
```

```
      "ResourceId": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileAssociation**

Information about the `UpdateProfileAssociation` request, including a status message.

Type: ProfileAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**InternalServiceErrorException**

An internal server error occured. Retry your request.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### UpdateProfileAssociation Example

This example illustrates one usage of UpdateProfileAssociation.

### Sample Request

```
PATCH /profileassociation/rpassoc-489ce212fexample HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
```

```
Accept-Encoding: identity
Content-Length: 23
X-Amz-Date:20240319T231512Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token
    Signature=[calculated-signature]
{
    "Priority": 150
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:15:12 GMT
Content-Type: application/json
Content-Length: 324
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileAssociation": {
        "CreationTime": 1710886843.849,
        "Id": "rpassoc-489ce212fexample",
        "ModificationTime": 1710890112.402,
        "Name": "test-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceId": "vpc-0af3b96b3example",
        "Priority": 150,
        "Status": "UPDATING",
        "StatusMessage": "Updating Profile Association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateProfileResourceAssociation

Service: Route 53 Profiles

Updates the specified Route 53 Profile resourse association.

## Request Syntax

```
PATCH /profileresourceassociation/ProfileResourceAssociationId HTTP/1.1
Content-type: application/json

{
   "Name": "string",
   "ResourceProperties": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### ProfileResourceAssociationId

ID of the resource association.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### Name

Name of the resource association.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**ResourceProperties**

If you are adding a DNS Firewall rule group, include also a priority. The priority indicates the processing order for the rule groups, starting with the priority assinged the lowest value.

The allowed values for priority are between 100 and 9900.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ProfileResourceAssociation": {
      "CreationTime": number,
      "Id": "string",
      "ModificationTime": number,
      "Name": "string",
      "OwnerId": "string",
      "ProfileId": "string",
      "ResourceArn": "string",
      "ResourceProperties": "string",
      "ResourceType": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProfileResourceAssociation**

Information about the `UpdateProfileResourceAssociation` request, including a status message.

Type: ProfileResourceAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified operation.

HTTP Status Code: 400

**ConflictException**

The request you submitted conflicts with an existing request.

HTTP Status Code: 400

**InternalServiceErrorException**

An internal server error occured. Retry your request.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

The parameter field name for the invalid parameter exception.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

The resource type that caused the limits to be exceeded.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource you are associating is not found.

**ResourceType**

The resource type that caused the resource not found exception.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command.

HTTP Status Code: 400

## Examples

### UpdateProfileResourceAssociation Example

This example illustrates one usage of UpdateProfileResourceAssociation.

### Sample Request

```
Request:
PATCH /profileresourceassociation/rpr-001913120a7example HTTP/1.1
host:route53profiles.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Date:20240319T233609Z
User-Agent: aws-cli/1.32.63 botocore/1.34.63 Python/3.8.18
Content-Type: application/json
Content-Length: 45
Authorization: AWS4-HMAC-SHA256
    Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-1/route53profiles/aws4_request,
    SignedHeaders=content-type;host;x-amz-date;x-amz-security-token,
    Signature=[calculated-signature]
{
    "ResourceProperties": "{\\"priority\\": 105}"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 19 Mar 2024 23:36:09 GMT
Content-Type: application/json
Content-Length: 508
Connection: keep-alive
x-amzn-RequestId: dcd9d91e-1a5a-481f-82b7-bafe7dexample
Access-Control-Allow-Origin: *
x-amz-apigw-id: U5eX0FdmIexample=
X-Amzn-Trace-Id: Root=1-65fa10fe-6e5a93a56a325ab8example
{
    "ProfileResourceAssociation": {
        "CreationTime": 1710887901.139,
        "Id": "rpr-001913120a7example",
        "ModificationTime": 1710891369.579,
        "Name": "test-resource-association",
        "OwnerId": "123456789012",
        "ProfileId": "rp-4987774726example",
        "ResourceArn": "arn:aws:route53resolver:us-east-1:123456789012:firewall-rule-
group/rslvr-frg-cfe7f72example",
        "ResourceProperties": "{\"priority\":105}",
        "ResourceType": "FIREWALL_RULE_GROUP",
        "Status": "UPDATING",
        "StatusMessage": "Updating the Profile to DNS Firewall rule group association"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# Amazon Route 53 Resolver

The following actions are supported by Amazon Route 53 Resolver:

- AssociateFirewallRuleGroup
- AssociateResolverEndpointIpAddress
- AssociateResolverQueryLogConfig
- AssociateResolverRule
- BatchCreateFirewallRule
- BatchDeleteFirewallRule
- BatchUpdateFirewallRule
- CreateFirewallDomainList
- CreateFirewallRule
- CreateFirewallRuleGroup
- CreateOutpostResolver
- CreateResolverEndpoint
- CreateResolverQueryLogConfig
- CreateResolverRule
- DeleteFirewallDomainList
- DeleteFirewallRule
- DeleteFirewallRuleGroup
- DeleteOutpostResolver
- DeleteResolverEndpoint
- DeleteResolverQueryLogConfig
- DeleteResolverRule
- DisassociateFirewallRuleGroup
- DisassociateResolverEndpointIpAddress

- DisassociateResolverQueryLogConfig
- DisassociateResolverRule
- GetFirewallConfig
- GetFirewallDomainList
- GetFirewallRuleGroup
- GetFirewallRuleGroupAssociation
- GetFirewallRuleGroupPolicy
- GetOutpostResolver
- GetResolverConfig
- GetResolverDnssecConfig
- GetResolverEndpoint
- GetResolverQueryLogConfig
- GetResolverQueryLogConfigAssociation
- GetResolverQueryLogConfigPolicy
- GetResolverRule
- GetResolverRuleAssociation
- GetResolverRulePolicy
- ImportFirewallDomains
- ListFirewallConfigs
- ListFirewallDomainLists
- ListFirewallDomains
- ListFirewallRuleGroupAssociations
- ListFirewallRuleGroups
- ListFirewallRules
- ListFirewallRuleTypes
- ListOutpostResolvers
- ListResolverConfigs
- ListResolverDnssecConfigs
- ListResolverEndpointIpAddresses
- ListResolverEndpoints

- ListResolverQueryLogConfigAssociations
- ListResolverQueryLogConfigs
- ListResolverRuleAssociations
- ListResolverRules
- ListTagsForResource
- PutFirewallRuleGroupPolicy
- PutResolverQueryLogConfigPolicy
- PutResolverRulePolicy
- TagResource
- UntagResource
- UpdateFirewallConfig
- UpdateFirewallDomains
- UpdateFirewallRule
- UpdateFirewallRuleGroupAssociation
- UpdateOutpostResolver
- UpdateResolverConfig
- UpdateResolverDnssecConfig
- UpdateResolverEndpoint
- UpdateResolverRule

# AssociateFirewallRuleGroup

Service: Amazon Route 53 Resolver

Associates a FirewallRuleGroup with a VPC, to provide DNS filtering for the VPC.

If the rule group contains any rule configured with the `PartnerThreatProtection` rule type, the calling account must hold an active AWS Marketplace subscription to the named partner. If the subscription is missing, the association request is rejected.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "FirewallRuleGroupId": "string",
   "MutationProtection": "string",
   "Name": "string",
   "Priority": number,
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "VpcId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of running the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### FirewallRuleGroupId

The unique identifier of the firewall rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### MutationProtection

If enabled, this setting disallows modification or removal of the association, to help prevent against accidentally altering DNS firewall protections. When you create the association, the default setting is `DISABLED`.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

### Name

A name that lets you identify the association, to manage and use it.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

### Priority

The setting that determines the processing order of the rule group among the rule groups that you associate with the specified VPC. DNS Firewall filters VPC traffic starting from the rule group with the lowest numeric priority setting.

You must specify a unique priority for each rule group that you associate with a single VPC. To make it easier to insert rule groups later, leave space between the numbers, for example, use 101, 200, and so on. You can change the priority setting for a rule group association after you create it.

The allowed values for `Priority` are between 100 and 9900.

Type: Integer

Required: Yes

**Tags**

A list of the tag keys and values that you want to associate with the rule group association.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

**VpcId**

The unique identifier of the VPC that you want to associate with the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallRuleGroupAssociation": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "FirewallRuleGroupId": "string",
      "Id": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "MutationProtection": "string",
      "Name": "string",
      "Priority": number,
      "Status": "string",
      "StatusMessage": "string",
      "VpcId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroupAssociation**

The association that you just created. The association has an ID that you can use to identify it in other requests, like update and delete.

Type: FirewallRuleGroupAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### AssociateFirewallRuleGroup Example

This example illustrates one usage of AssociateFirewallRuleGroup.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 220
X-Amz-Target: Route53Resolver.AssociateFirewallRuleGroup
X-Amz-Date: 20260420T120000Z
```

```
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "CreatorRequestId": "associate-frg-1",
    "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
    "VpcId": "vpc-0fa1b2c3d4e5f6a7b",
    "Priority": 101,
    "Name": "primary-firewall"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 480
x-amzn-RequestId: 1f2e3d4c-5b6a-7980-1234-5e6f7example
Connection: keep-alive

{
    "FirewallRuleGroupAssociation": {
        "Id": "rslvr-frgassoc-9a8b7c6d5example",
        "Arn": "arn:aws:route53resolver:us-east-1:111122223333:firewall-rule-group-
association/rslvr-frgassoc-9a8b7c6d5example",
        "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
        "VpcId": "vpc-0fa1b2c3d4e5f6a7b",
        "Name": "primary-firewall",
        "Priority": 101,
        "MutationProtection": "DISABLED",
        "ManagedOwnerName": "111122223333",
        "Status": "UPDATING",
        "StatusMessage": "Creating Firewall Rule Group Association",
        "CreatorRequestId": "associate-frg-1",
        "CreationTime": "2026-04-20T12:00:00.000Z",
        "ModificationTime": "2026-04-20T12:00:00.000Z"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# AssociateResolverEndpointIpAddress

Service: Amazon Route 53 Resolver

Adds IP addresses to an inbound or an outbound Resolver endpoint. If you want to add more than one IP address, submit one `AssociateResolverEndpointIpAddress` request for each IP address.

To remove an IP address from an endpoint, see DisassociateResolverEndpointIpAddress.

## Request Syntax

```
{
   "IpAddress": {
      "Ip": "string",
      "IpId": "string",
      "Ipv6": "string",
      "SubnetId": "string"
   },
   "ResolverEndpointId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### IpAddress

Either the IPv4 address that you want to add to a Resolver endpoint or a subnet ID. If you specify a subnet ID, Resolver chooses an IP address for you from the available IPs in the specified subnet.

Type: IpAddressUpdate object

Required: Yes

### ResolverEndpointId

The ID of the Resolver endpoint that you want to associate IP addresses with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverEndpoint": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Direction": "string",
      "Dns64Enabled": boolean,
      "HostVPCId": "string",
      "Id": "string",
      "IpAddressCount": number,
      "Ipv6InternetAccessEnabled": boolean,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Protocols": [ "string" ],
      "ResolverEndpointType": "string",
      "RniEnhancedMetricsEnabled": boolean,
      "SecurityGroupIds": [ "string" ],
      "Status": "string",
      "StatusMessage": "string",
      "TargetNameServerMetricsEnabled": boolean
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverEndpoint

The response to an `AssociateResolverEndpointIpAddress` request.

Type: ResolverEndpoint object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### AssociateResolverEndpointIpAddress Example

This example illustrates one usage of AssociateResolverEndpointIpAddress.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 107
X-Amz-Target: Route53Resolver.AssociateResolverEndpointIpAddress
X-Amz-Date: 20181101T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "IpAddress": {
        "SubnetId": "subnet-02f91e0e98example"
    },
    "ResolverEndpointId": "rslvr-in-60b9fd8fdbexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 479
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{
    "ResolverEndpoint":{
        "Arn":"arn:aws:route53resolver:us-east-2:0123456789012:resolver-endpoint/rslvr-
in-60b9fd8fdbexample",
        "CreationTime":"2018-11-01T18:44:50.372Z",
        "CreatorRequestId":"1234",
        "Direction":"INBOUND",
        "HostVPCId":"vpc-03cf94c75cexample",
        "Id":"rslvr-in-60b9fd8fdbexample",
        "IpAddressCount":3,
        "ModificationTime":"2018-11-01T18:44:50.372Z",
        "Name":"MyInbound",
        "Protocols": [
            "DoH"
        ],
        "ResolverEndpointType": "IPV4",
        "RniEnhancedMetricsEnabled": false,
        "SecurityGroupIds":[
            "sg-020a3554aexample"
        ],
        "Status":"UPDATING",
        "StatusMessage":"Updating the Resolver Endpoint"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# AssociateResolverQueryLogConfig

Service: Amazon Route 53 Resolver

Associates an Amazon VPC with a specified query logging configuration. Route 53 Resolver logs DNS queries that originate in all of the Amazon VPCs that are associated with a specified query logging configuration. To associate more than one VPC with a configuration, submit one `AssociateResolverQueryLogConfig` request for each VPC.

> **Note**
>
> The VPCs that you associate with a query logging configuration must be in the same Region as the configuration.

To remove a VPC from a query logging configuration, see DisassociateResolverQueryLogConfig.

## Request Syntax

```
{
   "ResolverQueryLogConfigId": "string",
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverQueryLogConfigId**

The ID of the query logging configuration that you want to associate a VPC with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResourceId**

The ID of an Amazon VPC that you want this query logging configuration to log queries for.

> **Note**
>
> The VPCs and the query logging configuration must be in the same Region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverQueryLogConfigAssociation": {
      "CreationTime": "string",
      "Error": "string",
      "ErrorMessage": "string",
      "Id": "string",
      "ResolverQueryLogConfigId": "string",
      "ResourceId": "string",
      "Status": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverQueryLogConfigAssociation

A complex type that contains settings for a specified association between an Amazon VPC and a query logging configuration.

Type: ResolverQueryLogConfigAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### AssociateResolverQueryLogConfig Example

This example illustrates one usage of AssociateResolverQueryLogConfig.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 107
X-Amz-Target: Route53Resolver.AssociateResolverQueryLogConfig
X-Amz-Date: 20200415T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20200415/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]
```

```
{
    "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample",
    "Resource": {
        "VpcId": "vpc-03cf94c75cexample"
    }
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 479
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{
    "ResolverQueryLogConfigAssociation":{
        "CreationTime": "2020-04-15T18:52:23.30Z",
        "Error": "",
        "ErrorMessage": "",
        "Id": "rqlca-ff85e1ffexample",
        "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample",
        "Resource": "vpc-03cf94c75cexample",
        "Status": "CREATED"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# AssociateResolverRule

Service: Amazon Route 53 Resolver

Associates a Resolver rule with a VPC. When you associate a rule with a VPC, Resolver forwards all DNS queries for the domain name that is specified in the rule and that originate in the VPC. The queries are forwarded to the IP addresses for the DNS resolvers that are specified in the rule. For more information about rules, see CreateResolverRule.

## Request Syntax

```
{
   "Name": "string",
   "ResolverRuleId": "string",
   "VPCId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Name

A name for the association that you're creating between a Resolver rule and a VPC.

The name can be up to 64 characters long and can contain letters (a-z, A-Z), numbers (0-9), hyphens (-), underscores (_), and spaces. The name cannot consist of only numbers.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

### ResolverRuleId

The ID of the Resolver rule that you want to associate with the VPC. To list the existing Resolver rules, use ListResolverRules.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**VPCId**

The ID of the VPC that you want to associate the Resolver rule with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverRuleAssociation": {
      "Id": "string",
      "Name": "string",
      "ResolverRuleId": "string",
      "Status": "string",
      "StatusMessage": "string",
      "VPCId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRuleAssociation**

Information about the `AssociateResolverRule` request, including the status of the request.

Type: ResolverRuleAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ResourceUnavailableException**

The specified resource isn't available.

**ResourceType**

For a `ResourceUnavailableException` error, the type of resource that isn't available.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### AssociateResolverRule Example

This example illustrates one usage of AssociateResolverRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 82
X-Amz-Target: Route53Resolver.AssociateResolverRule
X-Amz-Date: 20181101T192826Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
   "VPCId": "vpc-03cf94c75cexample",
   "ResolverRuleId": "rslvr-rr-5328a0899aexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:28:27 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 258
x-amzn-RequestId: 9827eb40-87e6-44d6-bee7-a1116example
Connection: keep-alive

{
    "ResolverRuleAssociation":{
        "Id":"rslvr-rrassoc-97242eaf88example",
        "Name":"forward example.com for gamma VPC",
        "ResolverRuleId":"rslvr-rr-5328a0899example",
        "Status":"CREATING",
        "StatusMessage":"[Trace id: 1-5bdb53db-75f3852c8384ad30fexample], Creating the
 association.",
        "VPCId":"vpc-03cf94c75cexample"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# BatchCreateFirewallRule

Service: Amazon Route 53 Resolver

Creates multiple DNS Firewall rules in the specified rule group.

## Request Syntax

```
{
   "CreateFirewallRuleEntries": [
      {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "CreatorRequestId": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
               "Partner": "string"
            }
         },
         "Name": "string",
         "Priority": number,
         "Qtype": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreateFirewallRuleEntries

The list of firewall rules to create.

Type: Array of CreateFirewallRuleEntry objects

Required: Yes

## Response Syntax

```
{
   "CreatedFirewallRules": [
      {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
```

```
            "Partner": "string"
         }
      },
      "FirewallThreatProtectionId": "string",
      "ModificationTime": "string",
      "Name": "string",
      "Priority": number,
      "Qtype": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
],
"CreateErrors": [
   {
      "Code": "string",
      "FirewallRule": {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "CreatorRequestId": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
               "Partner": "string"
            }
         },
         "Name": "string",
         "Priority": number,
```

```
            "Qtype": "string"
         },
         "Message": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**CreatedFirewallRules**

The firewall rules that were successfully created by the request.

Type: Array of FirewallRule objects

**CreateErrors**

A list of errors that occurred while creating the firewall rules.

Type: Array of BatchCreateFirewallRuleError objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### BatchCreateFirewallRule Example

This example illustrates one usage of BatchCreateFirewallRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 502
X-Amz-Target: Route53Resolver.BatchCreateFirewallRule
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
```

```
               Signature=[calculated-signature]

{
    "CreateFirewallRuleEntries": [
        {
            "CreatorRequestId": "batch-create-rule-1",
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
            "Priority": 101,
            "Action": "BLOCK",
            "BlockResponse": "NODATA",
            "Name": "block-bad-domains"
        },
        {
            "CreatorRequestId": "batch-create-rule-2",
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-3b5a094aexample",
            "Priority": 102,
            "Action": "ALLOW",
            "Name": "allow-safe-domains"
        }
    ]
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:01 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 890
x-amzn-RequestId: 4b2a1c3d-5e6f-7a8b-9c0d-1e2f3example
Connection: keep-alive

{
    "CreatedFirewallRules": [
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
            "Name": "block-bad-domains",
            "Priority": 101,
            "Action": "BLOCK",
            "BlockResponse": "NODATA",
            "CreatorRequestId": "batch-create-rule-1",
```

```
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:01.000Z"
        },
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-3b5a094aexample",
            "Name": "allow-safe-domains",
            "Priority": 102,
            "Action": "ALLOW",
            "CreatorRequestId": "batch-create-rule-2",
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:01.000Z"
        }
    ],
    "CreateErrors": []
}
```


## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# BatchDeleteFirewallRule

Service: Amazon Route 53 Resolver

Deletes multiple DNS Firewall rules from the specified rule group.

## Request Syntax

```
{
   "DeleteFirewallRuleEntries": [
      {
         "FirewallDomainListId": "string",
         "FirewallRuleGroupId": "string",
         "FirewallThreatProtectionId": "string",
         "Qtype": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DeleteFirewallRuleEntries

The list of firewall rules to delete.

Type: Array of DeleteFirewallRuleEntry objects

Required: Yes

## Response Syntax

```
{
   "DeletedFirewallRules": [
      {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
```

```
         "ConfidenceThreshold": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
               "Partner": "string"
            }
         },
         "FirewallThreatProtectionId": "string",
         "ModificationTime": "string",
         "Name": "string",
         "Priority": number,
         "Qtype": "string",
         "Status": "string",
         "StatusMessage": "string"
      }
   ],
   "DeleteErrors": [
      {
         "Code": "string",
         "FirewallRule": {
            "FirewallDomainListId": "string",
            "FirewallRuleGroupId": "string",
            "FirewallThreatProtectionId": "string",
            "Qtype": "string"
         },
         "Message": "string"
      }
   ]
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**DeletedFirewallRules**

The firewall rules that were successfully deleted by the request.

Type: Array of FirewallRule objects

**DeleteErrors**

A list of errors that occurred while deleting the firewall rules.

Type: Array of BatchDeleteFirewallRuleError objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### BatchDeleteFirewallRule Example

This example illustrates one usage of BatchDeleteFirewallRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 280
X-Amz-Target: Route53Resolver.BatchDeleteFirewallRule
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "DeleteFirewallRuleEntries": [
```

```
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample"
        },
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-3b5a094aexample"
        }
    ]
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:03 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 780
x-amzn-RequestId: 6d4c3e5f-7a8b-9c0d-1e2f-3a4b5example
Connection: keep-alive

{
    "DeletedFirewallRules": [
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
            "Name": "block-bad-domains-updated",
            "Priority": 150,
            "Action": "BLOCK",
            "BlockResponse": "NXDOMAIN",
            "CreatorRequestId": "batch-create-rule-1",
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:02.000Z"
        },
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-3b5a094aexample",
            "Name": "allow-safe-domains",
            "Priority": 102,
            "Action": "ALLOW",
            "CreatorRequestId": "batch-create-rule-2",
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:01.000Z"
        }
```

```
    ],
    "DeleteErrors": []
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# BatchUpdateFirewallRule

Service: Amazon Route 53 Resolver

Updates multiple DNS Firewall rules in the specified rule group.

## Request Syntax

```
{
   "UpdateFirewallRuleEntries": [
      {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
               "Partner": "string"
            }
         },
         "FirewallThreatProtectionId": "string",
         "Name": "string",
         "Priority": number,
         "Qtype": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### UpdateFirewallRuleEntries

The list of firewall rules to update.

Type: Array of UpdateFirewallRuleEntry objects

Required: Yes

## Response Syntax

```
{
   "UpdatedFirewallRules": [
      {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
```

```
            "Partner": "string"
         }
      },
      "FirewallThreatProtectionId": "string",
      "ModificationTime": "string",
      "Name": "string",
      "Priority": number,
      "Qtype": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
],
"UpdateErrors": [
   {
      "Code": "string",
      "FirewallRule": {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
               "Partner": "string"
            }
         },
         "FirewallThreatProtectionId": "string",
         "Name": "string",
         "Priority": number,
```

```
            "Qtype": "string"
         },
         "Message": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**UpdatedFirewallRules**

The firewall rules that were successfully updated by the request.

Type: Array of FirewallRule objects

**UpdateErrors**

A list of errors that occurred while updating the firewall rules.

Type: Array of BatchUpdateFirewallRuleError objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### BatchUpdateFirewallRule Example

This example illustrates one usage of BatchUpdateFirewallRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 312
X-Amz-Target: Route53Resolver.BatchUpdateFirewallRule
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
```

```
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "UpdateFirewallRuleEntries": [
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
            "Priority": 150,
            "Action": "BLOCK",
            "BlockResponse": "NXDOMAIN",
            "Name": "block-bad-domains-updated"
        }
    ]
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:02 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 520
x-amzn-RequestId: 5c3b2d4e-6f7a-8b9c-0d1e-2f3a4example
Connection: keep-alive

{
    "UpdatedFirewallRules": [
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
            "Name": "block-bad-domains-updated",
            "Priority": 150,
            "Action": "BLOCK",
            "BlockResponse": "NXDOMAIN",
            "CreatorRequestId": "batch-create-rule-1",
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:02.000Z"
        }
    ],
    "UpdateErrors": []
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateFirewallDomainList

Service: Amazon Route 53 Resolver

Creates an empty firewall domain list for use in DNS Firewall rules. You can populate the domains for the new list with a file, using ImportFirewallDomains, or with domain strings, using UpdateFirewallDomains.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "Name": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string that identifies the request and that allows you to retry failed requests without the risk of running the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### Name

A name that lets you identify the domain list to manage and use it.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

**Tags**

A list of the tag keys and values that you want to associate with the domain list.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

## Response Syntax

```
{
   "FirewallDomainList": {
      "Arn": "string",
      "Category": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DomainCount": number,
      "Id": "string",
      "ManagedListType": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "Name": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallDomainList**

The domain list that you just created.

Type: FirewallDomainList object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateFirewallRule

Service: Amazon Route 53 Resolver

Creates a single DNS Firewall rule in the specified rule group. The rule can use any one of the following match sources, and the chosen source must be supplied through the matching request field — they are mutually exclusive:

- `FirewallDomainListId` — match a customer-managed or AWS-managed domain list.
- `DnsThreatProtection` — match a built-in DNS Firewall Advanced threat detector (`DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`).
- `FirewallRuleType` — match one of the rule-type variants returned by ListFirewallRuleTypes: `FirewallAdvancedContentCategory`, `FirewallAdvancedThreatCategory`, `DnsThreatProtection`, or `PartnerThreatProtection`. The `PartnerThreatProtection` variant requires an active AWS Marketplace subscription to the named partner product.

For rules that require asynchronous provisioning (today, the `PartnerThreatProtection` rule type), the rule's `Status` begins at `CREATING` and transitions to `COMPLETE` once the rule is provisioned and the marketplace entitlement is verified. If provisioning fails, `Status` becomes `CREATION_FAILED` and `StatusMessage` contains a human-readable reason; the rule is then immutable and must be removed with DeleteFirewallRule.

## Request Syntax

```
{
   "Action": "string",
   "BlockOverrideDnsType": "string",
   "BlockOverrideDomain": "string",
   "BlockOverrideTtl": number,
   "BlockResponse": "string",
   "ConfidenceThreshold": "string",
   "CreatorRequestId": "string",
   "DnsThreatProtection": "string",
   "FirewallDomainListId": "string",
   "FirewallDomainRedirectionAction": "string",
   "FirewallRuleGroupId": "string",
   "FirewallRuleType": {
      "DnsThreatProtection": {
         "ConfidenceThreshold": "string",
         "Value": "string"
```

```
      },
      "FirewallAdvancedContentCategory": {
         "Category": "string"
      },
      "FirewallAdvancedThreatCategory": {
         "Category": "string"
      },
      "PartnerThreatProtection": {
         "Partner": "string"
      }
   },
   "Name": "string",
   "Priority": number,
   "Qtype": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule:

- `ALLOW` - Permit the request to go through. Not available for DNS Firewall Advanced rules.
- `ALERT` - Permit the request and send metrics and logs to Cloud Watch.
- `BLOCK` - Disallow the request. This option requires additional details in the rule's `BlockResponse`.

Type: String

Valid Values: `ALLOW | BLOCK | ALERT`

Required: Yes

### BlockOverrideDnsType

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

This setting is required if the BlockResponse setting is OVERRIDE.

Type: String

Valid Values: CNAME

Required: No

**BlockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

This setting is required if the BlockResponse setting is OVERRIDE.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**BlockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

This setting is required if the BlockResponse setting is OVERRIDE.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**BlockResponse**

The way that you want DNS Firewall to block the request, used with the rule action setting BLOCK.

- NODATA - Respond indicating that the query was successful, but no response is available for it.
- NXDOMAIN - Respond indicating that the domain name that's in the query doesn't exist.
- OVERRIDE - Provide a custom override in the response. This option requires custom handling details in the rule's BlockOverride* settings.

This setting is required if the rule action setting is BLOCK.

Type: String

Valid Values: NODATA | NXDOMAIN | OVERRIDE

Required: No

### ConfidenceThreshold

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create a DNS Firewall Advanced rule. The confidence level values mean:

- LOW: Provides the highest detection rate for threats, but also increases false positives.
- MEDIUM: Provides a balance between detecting threats and false positives.
- HIGH: Detects only the most well corroborated threats with a low rate of false positives.

Type: String

Valid Values: LOW | MEDIUM | HIGH

Required: No

### CreatorRequestId

A unique string that identifies the request and that allows you to retry failed requests without the risk of running the operation twice. CreatorRequestId can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### DnsThreatProtection

The type of the DNS Firewall Advanced rule. This setting is mutually exclusive with FirewallDomainListId and FirewallRuleType. Valid values are:

- DGA: Domain generation algorithms detection. DGAs are used by attackers to generate a large number of domains to launch malware attacks.
- DNS_TUNNELING: DNS tunneling detection. DNS tunneling is used by attackers to exfiltrate data from the client by using the DNS tunnel without making a network connection to the client.

- `DICTIONARY_DGA`: Dictionary-based domain generation algorithms detection. Dictionary DGAs use wordlists to generate domains that appear more legitimate, making them harder to detect than traditional DGAs.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**FirewallDomainListId**

The ID of the domain list that you want to use in the rule. Can't be used together with `DnsThreatProtecton`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallDomainRedirectionAction**

How you want the the rule to evaluate DNS redirection in the DNS redirection chain, such as CNAME or DNAME.

`INSPECT_REDIRECTION_DOMAIN`: (Default) inspects all domains in the redirection chain. The individual domains in the redirection chain must be added to the domain list.

`TRUST_REDIRECTION_DOMAIN`: Inspects only the first domain in the redirection chain. You don't need to add the subsequent domains in the domain in the redirection list to the domain list.

Type: String

Valid Values: `INSPECT_REDIRECTION_DOMAIN | TRUST_REDIRECTION_DOMAIN`

Required: No

**FirewallRuleGroupId**

The unique identifier of the firewall rule group where you want to create the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**FirewallRuleType**

The rule type configuration for the firewall rule. This is a tagged union — set exactly one of its members. This setting is mutually exclusive with the top-level `FirewallDomainListId` and `DnsThreatProtection` fields. Use one of:

- `FirewallAdvancedContentCategory` — match an AWS-managed content category (for example, `VIOLENCE_AND_HATE_SPEECH`).
- `FirewallAdvancedThreatCategory` — match an AWS-managed advanced threat category (for example, `PHISHING`).
- `DnsThreatProtection` — match a built-in DNS Firewall Advanced threat detector (`DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`).
- `PartnerThreatProtection` — match a third-party threat feed delivered through AWS Marketplace. The selected partner must be an active subscription on the calling account.

To enumerate the values supported in your account, call ListFirewallRuleTypes.

Type: FirewallRuleType object

Required: No

**Name**

A name that lets you identify the rule in the rule group.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

**Priority**

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

You must specify a unique priority for each rule in a rule group. To make it easier to insert rules later, leave space between the numbers, for example, use 100, 200, and so on. You can change the priority setting for the rules in a rule group at any time.

Type: Integer

Required: Yes

### Qtype

The DNS query type you want the rule to evaluate. Allowed values are;

- A: Returns an IPv4 address.
- AAAA: Returns an Ipv6 address.
- CAA: Restricts CAs that can create SSL/TLS certifications for the domain.
- CNAME: Returns another domain name.
- DS: Record that identifies the DNSSEC signing key of a delegated zone.
- MX: Specifies mail servers.
- NAPTR: Regular-expression-based rewriting of domain names.
- NS: Authoritative name servers.
- PTR: Maps an IP address to a domain name.
- SOA: Start of authority record for the zone.
- SPF: Lists the servers authorized to send emails from a domain.
- SRV: Application specific values that identify servers.
- TXT: Verifies email senders and application-specific values.
- A query type you define by using the DNS type ID, for example 28 for AAAA. The values must be defined as TYPENUMBER, where the NUMBER can be 1-65534, for example, TYPE28. For more information, see List of DNS record types.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

## Response Syntax

```
{
   "FirewallRule": {
      "Action": "string",
      "BlockOverrideDnsType": "string",
```

```
      "BlockOverrideDomain": "string",
      "BlockOverrideTtl": number,
      "BlockResponse": "string",
      "ConfidenceThreshold": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DnsThreatProtection": "string",
      "FirewallDomainListId": "string",
      "FirewallDomainRedirectionAction": "string",
      "FirewallRuleGroupId": "string",
      "FirewallRuleType": {
         "DnsThreatProtection": {
            "ConfidenceThreshold": "string",
            "Value": "string"
         },
         "FirewallAdvancedContentCategory": {
            "Category": "string"
         },
         "FirewallAdvancedThreatCategory": {
            "Category": "string"
         },
         "PartnerThreatProtection": {
            "Partner": "string"
         }
      },
      "FirewallThreatProtectionId": "string",
      "ModificationTime": "string",
      "Name": "string",
      "Priority": number,
      "Qtype": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### FirewallRule

The firewall rule that you just created.

Type: FirewallRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### CreateFirewallRule Example - PartnerThreatProtection rule type

This example illustrates one usage of CreateFirewallRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 312
X-Amz-Target: Route53Resolver.CreateFirewallRule
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "CreatorRequestId": "create-partner-rule-1",
    "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
    "Priority": 200,
    "Action": "BLOCK",
    "BlockResponse": "NODATA",
    "Name": "panw-advanced-threat",
    "FirewallRuleType": {
        "PartnerThreatProtection": {
            "Partner": "PANW_MALWARE_DOMAINS"
        }
    }
```

```
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:01 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 612
x-amzn-RequestId: 8a9b0c1d-2e3f-4a5b-6c7d-8e9f0example
Connection: keep-alive

{
    "FirewallRule": {
        "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
        "FirewallThreatProtectionId": "rslvr-ftp-1a2b3c4d5example",
        "Name": "panw-advanced-threat",
        "Priority": 200,
        "Action": "BLOCK",
        "BlockResponse": "NODATA",
        "CreatorRequestId": "create-partner-rule-1",
        "CreationTime": "2026-04-20T12:00:01.000Z",
        "ModificationTime": "2026-04-20T12:00:01.000Z",
        "Status": "CREATING",
        "FirewallRuleType": {
            "PartnerThreatProtection": {
                "Partner": "PANW_MALWARE_DOMAINS"
            }
        }
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateFirewallRuleGroup

Service: Amazon Route 53 Resolver

Creates an empty DNS Firewall rule group for filtering DNS network traffic in a VPC. You can add rules to the new rule group by calling CreateFirewallRule.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "Name": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of running the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### Name

A name that lets you identify the rule group, to manage and use it.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

### Tags

A list of the tag keys and values that you want to associate with the rule group.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

## Response Syntax

```
{
   "FirewallRuleGroup": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
      "OwnerId": "string",
      "RuleCount": number,
      "ShareStatus": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### FirewallRuleGroup

A collection of rules used to filter DNS network traffic.

Type: FirewallRuleGroup object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateOutpostResolver

Service: Amazon Route 53 Resolver

Creates a Amazon Route 53 Resolver on an Outpost.

> **Note**
>
> This operation applies to first-generation AWS Outposts only. On second-generation AWS Outposts, Resolver is enabled by default and managed automatically by AWS, so you don't need to create it.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "InstanceCount": number,
   "Name": "string",
   "OutpostArn": "string",
   "PreferredInstanceType": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of running the operation twice.

`CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### InstanceCount

Number of Amazon EC2 instances for the Resolver on Outpost. The default and minimal value is 4.

Type: Integer

Required: No

### Name

A friendly name that lets you easily find a configuration in the Resolver dashboard in the Route 53 console.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### OutpostArn

The Amazon Resource Name (ARN) of the Outpost. If you specify this, you must also specify a value for the `PreferredInstanceType`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^arn:aws([a-z-]+)?:outposts:[a-z\d-]+:\d{12}:outpost/op-[a-f0-9]{17}$`

Required: Yes

### PreferredInstanceType

The Amazon EC2 instance type. If you specify this, you must also specify a value for the `OutpostArn`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**Tags**

A string that helps identify the Route 53 Resolvers on Outpost.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

## Response Syntax

```
{
   "OutpostResolver": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Id": "string",
      "InstanceCount": number,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OutpostResolver**

Information about the `CreateOutpostResolver` request, including the status of the request.

Type: OutpostResolver object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ServiceQuotaExceededException**

Fulfilling the request would cause one or more quotas to be exceeded.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### CreateOutpostResolver Example

This example illustrates one usage of CreateOutpostResolver.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 214
X-Amz-Target: Route53Resolver.CreateOutpostResolver
X-Amz-Date: 20230718T192937Z
User-Agent: aws-cli/2.11.9 Python/3.11.2 Darwin/22.5.0 exe/x86_64 prompt/off command/
route53resolver.create-outpost-resolver
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20230718/us-west-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-security-token;x-amz-
target,
               Signature=[calculated-signature]

{
    "CreatorRequestId": "my-first-outpost-resolver",
    "Name": "ResolverForOp0123example456op7",
    "PreferredInstanceType": "m5.large",
    "OutpostArn": "arn:aws:outposts:us-west-2:123456789012:outpost/
op-0123example456op7"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 18 Jul 2023 19:29:39 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 559
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive
```

```
{
    "OutpostResolver": {
        "Arn": "arn:aws:route53resolver:us-west-2:123456789012:outpost-resolver/rslvr-
op-b12345example678",
        "CreationTime": "2023-07-18T19:29:39.697440Z",
        "ModificationTime": "2023-07-18T19:29:39.697440Z",
        "CreatorRequestId": "my-first-outpost-resolver",
        "Id": "rslvr-op-b12345example678",
        "InstanceCount": 4,
        "PreferredInstanceType": "m5.large",
        "Name": "ResolverForOp0123example456op7",
        "Status": "CREATING",
        "StatusMessage": "Creating the Resolver might take up to 90 minutes.",
        "OutpostArn": "arn:aws:outposts:us-west-2:123456789012:outpost/
op-0123example456op7"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateResolverEndpoint

Service: Amazon Route 53 Resolver

Creates a Resolver endpoint. There are two types of Resolver endpoints, inbound and outbound:

- An *inbound Resolver endpoint* forwards DNS queries to the DNS service for a VPC from your network.
- An *outbound Resolver endpoint* forwards DNS queries from the DNS service for a VPC to your network.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "Direction": "string",
   "Dns64Enabled": boolean,
   "IpAddresses": [
      {
         "Ip": "string",
         "Ipv6": "string",
         "SubnetId": "string"
      }
   ],
   "Ipv6InternetAccessEnabled": boolean,
   "Name": "string",
   "OutpostArn": "string",
   "PreferredInstanceType": "string",
   "Protocols": [ "string" ],
   "ResolverEndpointType": "string",
   "RniEnhancedMetricsEnabled": boolean,
   "SecurityGroupIds": [ "string" ],
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "TargetNameServerMetricsEnabled": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of running the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### Direction

Specify the applicable value:

- `INBOUND`: Resolver forwards DNS queries to the DNS service for a VPC from your network.
- `OUTBOUND`: Resolver forwards DNS queries from the DNS service for a VPC to your network.
- `INBOUND_DELEGATION`: Resolver delegates queries to Route 53 private hosted zones from your network.

Type: String

Valid Values: `INBOUND | OUTBOUND | INBOUND_DELEGATION`

Required: Yes

### Dns64Enabled

Specifies whether DNS64 is enabled for the inbound Resolver endpoint. When set to `true`, Route 53 Resolver synthesizes AAAA (IPv6) records for IPv4-only services by prepending the `64:ff9b::/96` prefix to the IPv4 address. This enables IPv6-only clients that send queries through the inbound endpoint to reach IPv4-only services. DNS64 works with NAT64 to provide complete IPv6-to-IPv4 translation. Default is false.

Type: Boolean

Required: No

### IpAddresses

The subnets and IP addresses in your VPC that DNS queries originate from (for outbound endpoints) or that you forward DNS queries to (for inbound endpoints). The subnet ID uniquely identifies a VPC.

> **Note**
>
> Even though the minimum is 1, Route 53 requires that you create at least two.

We recommend using VPC Resolver on AWS Outposts to create endpoints on AWS Outposts Racks.

> **Important**
>
> Outposts subnets with Local Network Interface (LNI) enabled are not compatible with Route 53 Resolver endpoints. If you enable LNI on a subnet that contains Route 53 Resolver endpoint elastic network interfaces (ENIs), those ENIs will stop functioning. For more information, see Subnet compatibility for Resolver endpoints in the *Amazon Route 53 Developer Guide*.

Type: Array of IpAddressRequest objects

Array Members: Minimum number of 2 items. Maximum number of 20 items.

Required: Yes

### Ipv6InternetAccessEnabled

Specifies whether IPv6 internet access is enabled for the outbound Resolver endpoint. When set to `true`, the endpoint elastic network interfaces (ENIs) can forward DNS queries to public IPv6 targets through an internet gateway. Default is false.

> **Important**
>
> When you enable IPv6 internet access, use network controls like security groups, NACLs, or egress-only internet gateways to protect the endpoint ENIs from unsolicited ingress

traffic. Be aware that some network controls can affect DNS query throughput due to connection tracking. For more information, see Amazon EC2 security group connection tracking and Resolver endpoint scaling.

Type: Boolean

Required: No

**Name**

A friendly name that lets you easily find a configuration in the Resolver dashboard in the Route 53 console.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OutpostArn**

The Amazon Resource Name (ARN) of the Outpost. If you specify this, you must also specify a value for the `PreferredInstanceType`.

**Note**

Resolver endpoints on Outposts are supported on first-generation AWS Outposts only. Inbound and outbound Resolver endpoints aren't supported on second-generation AWS Outposts.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^arn:aws([a-z-]+)?:outposts:[a-z\d-]+:\d{12}:outpost/op-[a-f0-9]{17}$`

Required: No

### PreferredInstanceType

The instance type. If you specify this, you must also specify a value for the `OutpostArn`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

### Protocols

The protocols you want to use for the endpoint. DoH-FIPS is applicable for default inbound endpoints only.

For a default inbound endpoint you can apply the protocols as follows:

- Do53 and DoH in combination.
- Do53 and DoH-FIPS in combination.
- Do53 alone.
- DoH alone.
- DoH-FIPS alone.
- None, which is treated as Do53.

For a delegation inbound endpoint you can use Do53 only.

For an outbound endpoint you can apply the protocols as follows:

- Do53 and DoH in combination.
- Do53 alone.
- DoH alone.
- None, which is treated as Do53.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: `DoH | Do53 | DoH-FIPS`

Required: No

### ResolverEndpointType

For the endpoint type you can choose either IPv4, IPv6, or dual-stack. A dual-stack endpoint means that it will resolve via both IPv4 and IPv6. This endpoint type is applied to all IP addresses.

Type: String

Valid Values: `IPV6 | IPV4 | DUALSTACK`

Required: No

### RniEnhancedMetricsEnabled

Specifies whether RNI enhanced metrics are enabled for the Resolver endpoints. When set to true, one-minute granular metrics are published in CloudWatch for each RNI associated with this endpoint. When set to false, metrics are not published. Default is false.

> **Note**
>
> Standard CloudWatch pricing and charges are applied for using the Route 53 Resolver endpoint RNI enhanced metrics. For more information, see Detailed metrics.

Type: Boolean

Required: No

### SecurityGroupIds

The ID of one or more security groups that you want to use to control access to this VPC. The security group that you specify must include one or more inbound rules (for inbound Resolver endpoints) or outbound rules (for outbound Resolver endpoints). Inbound and outbound rules must allow TCP and UDP access. For inbound access, open port 53. For outbound access, open the port that you're using for DNS queries on your network.

Some security group rules will cause your connection to be tracked. For outbound resolver endpoint, it can potentially impact the maximum queries per second from outbound endpoint to your target name server. For inbound resolver endpoint, it can bring down the overall maximum queries per second per IP address to as low as 1500. To avoid connection tracking caused by security group, see Untracked connections.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**Tags**

A list of the tag keys and values that you want to associate with the endpoint.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

**TargetNameServerMetricsEnabled**

Specifies whether target name server metrics are enabled for the outbound Resolver endpoints. When set to true, one-minute granular metrics are published in CloudWatch for each target name server associated with this endpoint. When set to false, metrics are not published. Default is false. This is not supported for inbound Resolver endpoints.

> **Note**
>
> Standard CloudWatch pricing and charges are applied for using the Route 53 Resolver endpoint target name server metrics. For more information, see Detailed metrics.

Type: Boolean

Required: No

## Response Syntax

```
{
   "ResolverEndpoint": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Direction": "string",
      "Dns64Enabled": boolean,
```

```
      "HostVPCId": "string",
      "Id": "string",
      "IpAddressCount": number,
      "Ipv6InternetAccessEnabled": boolean,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Protocols": [ "string" ],
      "ResolverEndpointType": "string",
      "RniEnhancedMetricsEnabled": boolean,
      "SecurityGroupIds": [ "string" ],
      "Status": "string",
      "StatusMessage": "string",
      "TargetNameServerMetricsEnabled": boolean
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverEndpoint

Information about the `CreateResolverEndpoint` request, including the status of the request.

Type: ResolverEndpoint object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### AccessDeniedException

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### CreateResolverEndpoint Example

This example illustrates one usage of CreateResolverEndpoint.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 283
X-Amz-Target: Route53Resolver.CreateResolverEndpoint
X-Amz-Date: 20181101T191344Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Direction": "OUTBOUND",
    "Name": "MyOutbound",
    "Tags": [
        {
            "Key": "LineOfBusiness",
            "Value": "Engineering"
        }
    ],
```

```
    "CreatorRequestId": "5678",
    "SecurityGroupIds": [
        "sg-071b99f42example"
    ],
    "IpAddresses": [
        {
            "SubnetId": "subnet-0bca4d363dexample"
        },
        {
            "SubnetId": "subnet-0bca4d363dexample"
        }
    ],
    "RniEnhancedMetricsEnabled": false,
    "TargetNameServerMetricsEnabled": true
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:13:44 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 531
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive

{
    "ResolverEndpoint": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-endpoint/rslvr-
out-fdc049932dexample",
        "CreationTime": "2018-11-01T19:13:44.830Z",
        "CreatorRequestId": "5678",
        "Direction": "OUTBOUND",
        "HostVPCId": "vpc-0dd415a0edexample",
        "Id": "rslvr-out-fdc049932dexample",
        "IpAddressCount": 2,
        "ModificationTime": "2018-11-01T19:13:44.830Z",
        "Name": "MyOutbound",
        "Protocols": [
            "DoH"
        ],
        "ResolverEndpointType": "IPV4",
        "Ipv6InternetAccessEnabled": false,
        "RniEnhancedMetricsEnabled": false,
```

```
        "SecurityGroupIds": [
            "sg-071b99f42example"
        ],
        "Status": "CREATING",
        "StatusMessage": "[Trace id: 1-5bdb5068-e0bdc4d232b1a3fe9c344c10] Creating the
 Resolver Endpoint",
        "TargetNameServerMetricsEnabled": true
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateResolverQueryLogConfig

Service: Amazon Route 53 Resolver

Creates a Resolver query logging configuration, which defines where you want Resolver to save DNS query logs that originate in your VPCs. Resolver can log queries only for VPCs that are in the same Region as the query logging configuration.

To specify which VPCs you want to log queries for, you use `AssociateResolverQueryLogConfig`. For more information, see AssociateResolverQueryLogConfig.

You can optionally use AWS Resource Access Manager (AWS RAM) to share a query logging configuration with other AWS accounts. The other accounts can then associate VPCs with the configuration. The query logs that Resolver creates for a configuration include all DNS queries that originate in all VPCs that are associated with the configuration.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "DestinationArn": "string",
   "Name": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of running the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## DestinationArn

The ARN of the resource that you want Resolver to send query logs. You can send query logs to an S3 bucket, a CloudWatch Logs log group, or a Kinesis Data Firehose delivery stream. Examples of valid values include the following:

- **S3 bucket**:

  ```
  arn:aws:s3:::amzn-s3-demo-bucket
  ```

  You can optionally append a file prefix to the end of the ARN.

  ```
  arn:aws:s3:::amzn-s3-demo-bucket/development/
  ```

- **CloudWatch Logs log group**:

  ```
  arn:aws:logs:us-west-1:123456789012:log-group:/mystack-
  testgroup-12ABC1AB12A1:*
  ```

- **Kinesis Data Firehose delivery stream**:

  ```
  arn:aws:kinesis:us-east-2:0123456789:stream/my_stream_name
  ```

Type: String

Length Constraints: Minimum length of 1. Maximum length of 600.

Required: Yes

## Name

The name that you want to give the query logging configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

### Tags

A list of the tag keys and values that you want to associate with the query logging configuration.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

## Response Syntax

```
{
   "ResolverQueryLogConfig": {
      "Arn": "string",
      "AssociationCount": number,
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DestinationArn": "string",
      "Id": "string",
      "Name": "string",
      "OwnerId": "string",
      "ShareStatus": "string",
      "Status": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverQueryLogConfig

Information about the `CreateResolverQueryLogConfig` request, including the status of the request.

Type: ResolverQueryLogConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### CreateResolverQueryLogConfig Example

This example illustrates one usage of CreateResolverQueryLogConfig.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 283
X-Amz-Target: Route53Resolver.CreateResolverQueryLogConfig
X-Amz-Date: 20200415T191344Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
```

```
               Signature=[calculated-signature]

{
    "CreatorRequestId": "ramirezd-20200415T191001Z",
    "DestinationArn": "arn:aws:s3:::amzn-s3-demo-bucket/development/",
    "Name": "MyQueryLog",
    "Tags": [
        {
            "Key": "LineOfBusiness",
            "Value": "Engineering"
        }
    ]
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:13:44 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 531
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive

{
    "ResolverQueryLogConfig": {
        "Arn": "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-
config/rqlc-8ca61fe7cexample",
        "AssociationCount": "1",
        "CreationTime": "20200415T191604Z",
        "CreatorRequestId": "ramirezd-20200415T191001Z",
        "DestinationArn": "arn:aws:s3:::amzn-s3-demo-bucket/development/",
        "Id": "rqlc-8ca61fe7cexample",
        "Name": "MyQueryLog",
        "OwnerId": "111122223333",
        "ShareStatus": "NOT_SHARED",
        "Status": "CREATING"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# CreateResolverRule

Service: Amazon Route 53 Resolver

For DNS queries that originate in your VPCs, specifies which Resolver endpoint the queries pass through, one domain name that you want to forward to your network, and the IP addresses of the DNS resolvers in your network.

## Request Syntax

```
{
   "CreatorRequestId": "string",
   "DelegationRecord": "string",
   "DomainName": "string",
   "Name": "string",
   "ResolverEndpointId": "string",
   "RuleType": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "TargetIps": [
      {
         "Ip": "string",
         "Ipv6": "string",
         "Port": number,
         "Protocol": "string",
         "ServerNameIndication": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of running the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### DelegationRecord

DNS queries with the delegation records that match this domain name are forwarded to the resolvers on your network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

### DomainName

DNS queries for this domain name are forwarded to the IP addresses that you specify in `TargetIps`. If a query matches multiple Resolver rules (example.com and www.example.com), outbound DNS queries are routed using the Resolver rule that contains the most specific domain name (www.example.com).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

### Name

A friendly name that lets you easily find a rule in the Resolver dashboard in the Route 53 console.

The name can be up to 64 characters long and can contain letters (a-z, A-Z), numbers (0-9), hyphens (-), underscores (_), and spaces. The name cannot consist of only numbers.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**ResolverEndpointId**

The ID of the outbound Resolver endpoint that you want to use to route DNS queries to the IP addresses that you specify in `TargetIps`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**RuleType**

When you want to forward DNS queries for specified domain name to resolvers on your network, specify `FORWARD` or `DELEGATE`.

When you have a forwarding rule to forward DNS queries for a domain to your network and you want Resolver to process queries for a subdomain of that domain, specify `SYSTEM`.

For example, to forward DNS queries for example.com to resolvers on your network, you create a rule and specify `FORWARD` for `RuleType`. To then have Resolver process queries for apex.example.com, you create a rule and specify `SYSTEM` for `RuleType`.

Currently, only Resolver can create rules that have a value of `RECURSIVE` for `RuleType`.

Type: String

Valid Values: `FORWARD | SYSTEM | RECURSIVE | DELEGATE`

Required: Yes

**Tags**

A list of the tag keys and values that you want to associate with the endpoint.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: No

### TargetIps

The IPs that you want Resolver to forward DNS queries to. You can specify either Ipv4 or Ipv6 addresses but not both in the same rule. Separate IP addresses with a space.

`TargetIps` is available only when the value of `Rule type` is `FORWARD`. You should not provide TargetIps when the Rule type is `DELEGATE`.

> **Note**
>
> when creating a DELEGATE rule, you must not provide the `TargetIps` parameter. If you provide the `TargetIps`, you may receive an ERROR message similar to "Delegate resolver rules need to specify a nameserver name". This error means you should not provide `TargetIps`.

Type: Array of TargetAddress objects

Array Members: Minimum number of 1 item.

Required: No

## Response Syntax

```
{
   "ResolverRule": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DelegationRecord": "string",
      "DomainName": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
      "OwnerId": "string",
      "ResolverEndpointId": "string",
      "RuleType": "string",
      "ShareStatus": "string",
      "Status": "string",
      "StatusMessage": "string",
      "TargetIps": [
```

```
         {
            "Ip": "string",
            "Ipv6": "string",
            "Port": number,
            "Protocol": "string",
            "ServerNameIndication": "string"
         }
      ]
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRule**

Information about the `CreateResolverRule` request, including the status of the request.

Type: ResolverRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ResourceUnavailableException**

The specified resource isn't available.

**ResourceType**

For a `ResourceUnavailableException` error, the type of resource that isn't available.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### CreateResolverRule Example

This example illustrates one usage of CreateResolverRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 170
X-Amz-Target: Route53Resolver.CreateResolverRule
X-Amz-Date: 20181101T192331Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "CreatorRequestId": "999",
    "DomainName": "example.com",
    "Name": "MyRule",
    "ResolverEndpointId": "rslvr-out-fdc049932dexample",
    "RuleType": "FORWARD",
    "TargetIps": [
        {
            "Ip": "192.0.2.6"
```

```
        }
    ]
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:23:31 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 464
x-amzn-RequestId: f51a7bc8-e9c6-4399-b408-086ecexample
Connection: keep-alive

{
    "ResolverRule": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
        "CreatorRequestId": "999",
        "DomainName": "example.com",
        "Id": "rslvr-rr-5328a0899aexample",
        "Name": "MyRule",
        "OwnerId": "123456789012",
        "ResolverEndpointId": "rslvr-out-fdc049932dexample",
        "RuleType": "FORWARD",
        "ShareStatus": "NOT_SHARED",
        "Status": "COMPLETE",
        "StatusMessage": "[Trace id: 1-5bdb52b3-68082ffc336d18153example] Successfully
 created Resolver Rule.",
        "TargetIps": [
            {
                "Ip": "192.0.2.6",
                "Port": 53
            }
        ]
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteFirewallDomainList

Service: Amazon Route 53 Resolver

Deletes the specified domain list.

## Request Syntax

```
{
   "FirewallDomainListId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallDomainListId

The ID of the domain list that you want to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallDomainList": {
      "Arn": "string",
      "Category": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DomainCount": number,
      "Id": "string",
      "ManagedListType": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "Name": "string",
```

```
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallDomainList**

The domain list that you just deleted.

Type: FirewallDomainList object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteFirewallRule

Service: Amazon Route 53 Resolver

Deletes the specified firewall rule. Identify the rule using either `FirewallDomainListId` (for domain-list and DNS Firewall Advanced rules) or `FirewallThreatProtectionId` (for partner-managed and DNS Firewall Advanced rules) — together with `FirewallRuleGroupId`.

`DeleteFirewallRule` is the only operation that succeeds against a rule whose `Status` is `CREATION_FAILED`.

## Request Syntax

```
{
   "FirewallDomainListId": "string",
   "FirewallRuleGroupId": "string",
   "FirewallThreatProtectionId": "string",
   "Qtype": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**FirewallDomainListId**

The ID of the domain list that's used in the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallRuleGroupId**

The unique identifier of the firewall rule group that you want to delete the rule from.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### FirewallThreatProtectionId

The ID that is created for a DNS Firewall Advanced rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### Qtype

The DNS query type that the rule you are deleting evaluates. Allowed values are;

- A: Returns an IPv4 address.
- AAAA: Returns an Ipv6 address.
- CAA: Restricts CAs that can create SSL/TLS certifications for the domain.
- CNAME: Returns another domain name.
- DS: Record that identifies the DNSSEC signing key of a delegated zone.
- MX: Specifies mail servers.
- NAPTR: Regular-expression-based rewriting of domain names.
- NS: Authoritative name servers.
- PTR: Maps an IP address to a domain name.
- SOA: Start of authority record for the zone.
- SPF: Lists the servers authorized to send emails from a domain.
- SRV: Application specific values that identify servers.
- TXT: Verifies email senders and application-specific values.
- A query type you define by using the DNS type ID, for example 28 for AAAA. The values must be defined as TYPENUMBER, where the NUMBER can be 1-65534, for example, TYPE28. For more information, see List of DNS record types.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

## Response Syntax

```
{
   "FirewallRule": {
      "Action": "string",
      "BlockOverrideDnsType": "string",
      "BlockOverrideDomain": "string",
      "BlockOverrideTtl": number,
      "BlockResponse": "string",
      "ConfidenceThreshold": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DnsThreatProtection": "string",
      "FirewallDomainListId": "string",
      "FirewallDomainRedirectionAction": "string",
      "FirewallRuleGroupId": "string",
      "FirewallRuleType": {
         "DnsThreatProtection": {
            "ConfidenceThreshold": "string",
            "Value": "string"
         },
         "FirewallAdvancedContentCategory": {
            "Category": "string"
         },
         "FirewallAdvancedThreatCategory": {
            "Category": "string"
         },
         "PartnerThreatProtection": {
            "Partner": "string"
         }
      },
      "FirewallThreatProtectionId": "string",
      "ModificationTime": "string",
      "Name": "string",
      "Priority": number,
      "Qtype": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRule**

The specification for the firewall rule that you just deleted.

Type: FirewallRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### DeleteFirewallRule Example - delete a partner rule by FirewallThreatProtectionId

This example illustrates one usage of DeleteFirewallRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 138
X-Amz-Target: Route53Resolver.DeleteFirewallRule
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
    "FirewallThreatProtectionId": "rslvr-ftp-1a2b3c4d5example"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:05 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 540
x-amzn-RequestId: 9f0a1b2c-3d4e-5f6a-7b8c-9d0e1example
```

```
Connection: keep-alive

{
    "FirewallRule": {
        "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
        "FirewallThreatProtectionId": "rslvr-ftp-1a2b3c4d5example",
        "Name": "panw-advanced-threat",
        "Priority": 200,
        "Action": "BLOCK",
        "BlockResponse": "NODATA",
        "CreatorRequestId": "create-partner-rule-1",
        "CreationTime": "2026-04-20T12:00:01.000Z",
        "ModificationTime": "2026-04-20T12:00:05.000Z",
        "Status": "CREATION_FAILED",
        "StatusMessage": "Account is not subscribed to the requested AWS Marketplace
 product.",
        "FirewallRuleType": {
            "PartnerThreatProtection": {
                "Partner": "PANW_MALWARE_DOMAINS"
            }
        }
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteFirewallRuleGroup

Service: Amazon Route 53 Resolver

Deletes the specified firewall rule group.

## Request Syntax

```
{
   "FirewallRuleGroupId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallRuleGroupId

The unique identifier of the firewall rule group that you want to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallRuleGroup": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
      "OwnerId": "string",
      "RuleCount": number,
      "ShareStatus": "string",
      "Status": "string",
```

```
        "StatusMessage": "string"
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroup**

A collection of rules used to filter DNS network traffic.

Type: FirewallRuleGroup object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteOutpostResolver

Service: Amazon Route 53 Resolver

Deletes a Resolver on the Outpost.

> **Note**
>
> This operation applies to first-generation AWS Outposts only. On second-generation AWS Outposts, Resolver is managed automatically by AWS and can't be deleted directly. To opt out of Resolver on second-generation AWS Outposts, contact AWS Support.

## Request Syntax

```
{
   "Id": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Id

A unique string that identifies the Resolver on the Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "OutpostResolver": {
      "Arn": "string",
      "CreationTime": "string",
```

```
      "CreatorRequestId": "string",
      "Id": "string",
      "InstanceCount": number,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### OutpostResolver

Information about the `DeleteOutpostResolver` request, including the status of the request.

Type: OutpostResolver object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteResolverEndpoint

Service: Amazon Route 53 Resolver

Deletes a Resolver endpoint. The effect of deleting a Resolver endpoint depends on whether it's an inbound or an outbound Resolver endpoint:

- **Inbound**: DNS queries from your network are no longer routed to the DNS service for the specified VPC.
- **Outbound**: DNS queries from a VPC are no longer routed to your network.

## Request Syntax

```
{
   "ResolverEndpointId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResolverEndpointId

The ID of the Resolver endpoint that you want to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverEndpoint": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Direction": "string",
      "Dns64Enabled": boolean,
```

```
      "HostVPCId": "string",
      "Id": "string",
      "IpAddressCount": number,
      "Ipv6InternetAccessEnabled": boolean,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Protocols": [ "string" ],
      "ResolverEndpointType": "string",
      "RniEnhancedMetricsEnabled": boolean,
      "SecurityGroupIds": [ "string" ],
      "Status": "string",
      "StatusMessage": "string",
      "TargetNameServerMetricsEnabled": boolean
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverEndpoint

Information about the `DeleteResolverEndpoint` request, including the status of the request.

Type: ResolverEndpoint object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### InternalServiceErrorException

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

### InvalidParameterException

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### DeleteResolverEndpoint Example

This example illustrates one usage of DeleteResolverEndpoint.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 283
X-Amz-Target: Route53Resolver.DeleteResolverEndpoint
X-Amz-Date: 20181101T191344Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
```

```
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResolverEndpointId": "rslvr-out-fdc049932dexample"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:13:44 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 531
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive

{
    "ResolverEndpoint": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-endpoint/rslvr-
out-fdc049932dexample",
        "CreationTime": "2018-11-01T19:13:44.830Z",
        "CreatorRequestId": "5678",
        "Direction": "OUTBOUND",
        "HostVPCId": "vpc-0dd415a0edexample",
        "Id": "rslvr-out-fdc049932dexample",
        "IpAddressCount": 2,
        "ModificationTime": "2018-11-01T19:13:44.830Z",
        "Name": "MyOutbound",
        "Protocols": [
            "DoH"
        ],
        "ResolverEndpointType": "IPV4",
        "Ipv6InternetAccessEnabled": false,
        "RniEnhancedMetricsEnabled": false,
        "SecurityGroupIds": [
            "sg-071b99f42example"
        ],
        "Status": "DELETING",
        "StatusMessage": "[Trace id: 1-5bdb5068-e0bdc4d232b1a3fe9c344c10] Successfully
 deleted Resolver Endpoint",
        "TargetNameServerMetricsEnabled": true
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteResolverQueryLogConfig

Service: Amazon Route 53 Resolver

Deletes a query logging configuration. When you delete a configuration, Resolver stops logging DNS queries for all of the Amazon VPCs that are associated with the configuration. This also applies if the query logging configuration is shared with other AWS accounts, and the other accounts have associated VPCs with the shared configuration.

Before you can delete a query logging configuration, you must first disassociate all VPCs from the configuration. See DisassociateResolverQueryLogConfig.

If you used Resource Access Manager (RAM) to share a query logging configuration with other accounts, you must stop sharing the configuration before you can delete a configuration. The accounts that you shared the configuration with can first disassociate VPCs that they associated with the configuration, but that's not necessary. If you stop sharing the configuration, those VPCs are automatically disassociated from the configuration.

## Request Syntax

```
{
   "ResolverQueryLogConfigId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverQueryLogConfigId**

The ID of the query logging configuration that you want to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverQueryLogConfig": {
      "Arn": "string",
      "AssociationCount": number,
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DestinationArn": "string",
      "Id": "string",
      "Name": "string",
      "OwnerId": "string",
      "ShareStatus": "string",
      "Status": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverQueryLogConfig**

Information about the query logging configuration that you deleted, including the status of the request.

Type: ResolverQueryLogConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### DeleteResolverQueryLogConfig Example

This example illustrates one usage of DeleteResolverQueryLogConfig.

## Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 283
X-Amz-Target: Route53Resolver.DeleteResolverQueryLogConfig
X-Amz-Date: 20200415T191344Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:13:44 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 493
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive

{
    "ResolverQueryLogConfig": {
        "Arn": "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-
config/rqlc-8ca61fe7cexample",
        "AssociationCount": "1",
        "CreationTime": "20200415T191604Z",
        "CreatorRequestId": "ramirezd-20200415T191001Z",
        "DestinationArn": "arn:aws:s3:::amzn-s3-demo-bucket/development/",
        "Id": "rqlc-8ca61fe7cexample",
        "Name": "MyQueryLog",
        "OwnerId": "111122223333",
        "ShareStatus": "NOT_SHARED",
        "Status": "DELETING"
    }
```

```
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DeleteResolverRule

Service: Amazon Route 53 Resolver

Deletes a Resolver rule. Before you can delete a Resolver rule, you must disassociate it from all the VPCs that you associated the Resolver rule with. For more information, see DisassociateResolverRule.

## Request Syntax

```
{
   "ResolverRuleId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverRuleId**

The ID of the Resolver rule that you want to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverRule": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DelegationRecord": "string",
      "DomainName": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
```

```
      "OwnerId": "string",
      "ResolverEndpointId": "string",
      "RuleType": "string",
      "ShareStatus": "string",
      "Status": "string",
      "StatusMessage": "string",
      "TargetIps": [
         {
            "Ip": "string",
            "Ipv6": "string",
            "Port": number,
            "Protocol": "string",
            "ServerNameIndication": "string"
         }
      ]
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRule**

Information about the `DeleteResolverRule` request, including the status of the request.

Type: ResolverRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceInUseException**

The resource that you tried to update or delete is currently in use.

**ResourceType**

For a `ResourceInUseException` error, the type of resource that is currently in use.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### DeleteResolverRule Example

This example illustrates one usage of DeleteResolverRule.

### Sample Request

```
POST / HTTP/1.1
```

```
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 170
X-Amz-Target: Route53Resolver.DeleteResolverRule
X-Amz-Date: 20181101T192331Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResolverRuleId": "rslvr-rr-5328a0899aexample"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:23:31 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 464
x-amzn-RequestId: f51a7bc8-e9c6-4399-b408-086ecexample
Connection: keep-alive

{
    "ResolverRule": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
        "CreatorRequestId": "999",
        "DomainName": "example.com",
        "Id": "rslvr-rr-5328a0899aexample",
        "OwnerId": "123456789012",
        "ResolverEndpointId": "rslvr-out-fdc049932dexample",
        "RuleType": "FORWARD",
        "Status": "COMPLETE",
        "StatusMessage": "[Trace id: 1-5bdb52b3-68082ffc336d18153example] Successfully
 deleted Resolver Rule.",
        "TargetIps": [
            {
                "Ip": "192.0.2.6",
                "Port": 53
```

```
            }
        ]
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateFirewallRuleGroup

Service: Amazon Route 53 Resolver

Disassociates a FirewallRuleGroup from a VPC, to remove DNS filtering from the VPC.

## Request Syntax

```
{
   "FirewallRuleGroupAssociationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallRuleGroupAssociationId

The identifier of the FirewallRuleGroupAssociation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallRuleGroupAssociation": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "FirewallRuleGroupId": "string",
      "Id": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "MutationProtection": "string",
      "Name": "string",
      "Priority": number,
```

```
      "Status": "string",
      "StatusMessage": "string",
      "VpcId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroupAssociation**

The firewall rule group association that you just removed.

Type: FirewallRuleGroupAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateResolverEndpointIpAddress

Service: Amazon Route 53 Resolver

Removes IP addresses from an inbound or an outbound Resolver endpoint. If you want to remove more than one IP address, submit one `DisassociateResolverEndpointIpAddress` request for each IP address.

To add an IP address to an endpoint, see AssociateResolverEndpointIpAddress.

## Request Syntax

```
{
   "IpAddress": {
      "Ip": "string",
      "IpId": "string",
      "Ipv6": "string",
      "SubnetId": "string"
   },
   "ResolverEndpointId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### IpAddress

The IPv4 address that you want to remove from a Resolver endpoint.

Type: IpAddressUpdate object

Required: Yes

### ResolverEndpointId

The ID of the Resolver endpoint that you want to disassociate an IP address from.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverEndpoint": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Direction": "string",
      "Dns64Enabled": boolean,
      "HostVPCId": "string",
      "Id": "string",
      "IpAddressCount": number,
      "Ipv6InternetAccessEnabled": boolean,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Protocols": [ "string" ],
      "ResolverEndpointType": "string",
      "RniEnhancedMetricsEnabled": boolean,
      "SecurityGroupIds": [ "string" ],
      "Status": "string",
      "StatusMessage": "string",
      "TargetNameServerMetricsEnabled": boolean
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverEndpoint

The response to an `DisassociateResolverEndpointIpAddress` request.

Type: ResolverEndpoint object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceExistsException**

The resource that you tried to create already exists.

**ResourceType**

For a `ResourceExistsException` error, the type of resource that the error applies to.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### DisassociateResolverEndpointIpAddress Example

This example illustrates one usage of DisassociateResolverEndpointIpAddress.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 107
X-Amz-Target: Route53Resolver.DisassociateResolverEndpointIpAddress
X-Amz-Date: 20181101T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "IpAddress": {
        "SubnetId": "subnet-02f91e0e98example"
    }
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 479
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{
    "ResolverEndpoint":{
        "Arn":"arn:aws:route53resolver:us-east-2:0123456789012:resolver-endpoint/rslvr-
in-60b9fd8fdbexample",
        "CreationTime":"2018-11-01T18:44:50.372Z",
        "CreatorRequestId":"1234",
```

```
        "Direction":"INBOUND",
        "HostVPCId":"vpc-03cf94c75cexample",
        "Id":"rslvr-in-60b9fd8fdbexample",
        "IpAddressCount":3,
        "ModificationTime":"2018-11-01T18:44:50.372Z",
        "Name":"MyInbound",
        "Protocols": [
            "DoH"
        ],
        "ResolverEndpointType": "IPV4",
        "RniEnhancedMetricsEnabled": false,
        "SecurityGroupIds":[
            "sg-020a3554aexample"
        ],
        "Status":"UPDATING",
        "StatusMessage":"Disassociating a Resolver endpoint IP address"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateResolverQueryLogConfig

Service: Amazon Route 53 Resolver

Disassociates a VPC from a query logging configuration.

> **Note**
>
> Before you can delete a query logging configuration, you must first disassociate all VPCs from the configuration. If you used AWS Resource Access Manager (AWS RAM) to share a query logging configuration with other accounts, VPCs can be disassociated from the configuration in the following ways:
>
> - The accounts that you shared the configuration with can disassociate VPCs from the configuration.
> - You can stop sharing the configuration.

## Request Syntax

```
{
   "ResolverQueryLogConfigId": "string",
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResolverQueryLogConfigId

The ID of the query logging configuration that you want to disassociate a specified VPC from.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResourceId**

The ID of the Amazon VPC that you want to disassociate from a specified query logging configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverQueryLogConfigAssociation": {
      "CreationTime": "string",
      "Error": "string",
      "ErrorMessage": "string",
      "Id": "string",
      "ResolverQueryLogConfigId": "string",
      "ResourceId": "string",
      "Status": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverQueryLogConfigAssociation**

A complex type that contains settings for the association that you deleted between an Amazon VPC and a query logging configuration.

Type: ResolverQueryLogConfigAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### DisassociateResolverQueryLogConfig Example

This example illustrates one usage of DisassociateResolverQueryLogConfig.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 107
X-Amz-Target: Route53Resolver.DisassociateResolverQueryLogConfig
X-Amz-Date: 20200415T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20200415/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample",
    "Resource": {
        "VpcId": "vpc-03cf94c75cexample"
    }
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 275
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{
    "ResolverQueryLogConfigAssociation":{
        "CreationTime": "2020-04-15T18:52:23.30Z",
        "Error": "",
        "ErrorMessage": "",
```

```
        "Id": "rqlca-ff85e1ffexample",
        "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample",
        "Resource": "vpc-03cf94c75cexample",
        "Status": "DELETING"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# DisassociateResolverRule

Service: Amazon Route 53 Resolver

Removes the association between a specified Resolver rule and a specified VPC.

> **Important**
>
> If you disassociate a Resolver rule from a VPC, Resolver stops forwarding DNS queries for the domain name that you specified in the Resolver rule.

## Request Syntax

```
{
   "ResolverRuleId": "string",
   "VPCId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverRuleId**

The ID of the Resolver rule that you want to disassociate from the specified VPC.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**VPCId**

The ID of the VPC that you want to disassociate the Resolver rule from.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverRuleAssociation": {
      "Id": "string",
      "Name": "string",
      "ResolverRuleId": "string",
      "Status": "string",
      "StatusMessage": "string",
      "VPCId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRuleAssociation**

Information about the `DisassociateResolverRule` request, including the status of the request.

Type: ResolverRuleAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### DisassociateResolverRule Example

This example illustrates one usage of DisassociateResolverRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 82
X-Amz-Target: Route53Resolver.DisassociateResolverRule
X-Amz-Date: 20181101T192826Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
```

```
                Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
                SignedHeaders=content-type;host;x-amz-date;x-amz-target,
                Signature=[calculated-signature]

{
    "ResolverRuleId": "rslvr-rr-5328a0899aexample"
    "VPCId": "vpc-03cf94c75cexample",
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:28:27 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 258
x-amzn-RequestId: 9827eb40-87e6-44d6-bee7-a1116example
Connection: keep-alive

{
    "ResolverRuleAssociation":{
        "Id":"rslvr-rrassoc-97242eaf88example",
        "Name":"forward example.com for gamma VPC",
        "ResolverRuleId":"rslvr-rr-5328a0899example",
        "Status":"DELETING",
        "StatusMessage":"[Trace id: 1-5bdb53db-75f3852c8384ad30fexample], Deleting the
 association.",
        "VPCId":"vpc-03cf94c75cexample"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallConfig

Service: Amazon Route 53 Resolver

Retrieves the configuration of the firewall behavior provided by DNS Firewall for a single VPC from Amazon Virtual Private Cloud (Amazon VPC).

## Request Syntax

```
{
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResourceId

The ID of the VPC from Amazon VPC that the configuration is for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallConfig": {
      "FirewallFailOpen": "string",
      "Id": "string",
      "OwnerId": "string",
      "ResourceId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallConfig**

Configuration of the firewall behavior provided by DNS Firewall for a single VPC from AmazonVPC.

Type: FirewallConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallDomainList

Service: Amazon Route 53 Resolver

Retrieves the specified firewall domain list.

## Request Syntax

```
{
   "FirewallDomainListId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallDomainListId

The ID of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallDomainList": {
      "Arn": "string",
      "Category": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DomainCount": number,
      "Id": "string",
      "ManagedListType": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "Name": "string",
```

```
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallDomainList**

The domain list that you requested.

Type: FirewallDomainList object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallRuleGroup

Service: Amazon Route 53 Resolver

Retrieves the specified firewall rule group.

## Request Syntax

```
{
   "FirewallRuleGroupId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallRuleGroupId

The unique identifier of the firewall rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallRuleGroup": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
      "OwnerId": "string",
      "RuleCount": number,
      "ShareStatus": "string",
      "Status": "string",
```

```
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroup**

A collection of rules used to filter DNS network traffic.

Type: FirewallRuleGroup object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallRuleGroupAssociation

Service: Amazon Route 53 Resolver

Retrieves a firewall rule group association, which enables DNS filtering for a VPC with one rule group. A VPC can have more than one firewall rule group association, and a rule group can be associated with more than one VPC.

## Request Syntax

```
{
   "FirewallRuleGroupAssociationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**FirewallRuleGroupAssociationId**

The identifier of the FirewallRuleGroupAssociation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallRuleGroupAssociation": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "FirewallRuleGroupId": "string",
      "Id": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "MutationProtection": "string",
```

```
      "Name": "string",
      "Priority": number,
      "Status": "string",
      "StatusMessage": "string",
      "VpcId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroupAssociation**

The association that you requested.

Type: FirewallRuleGroupAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetFirewallRuleGroupPolicy

Service: Amazon Route 53 Resolver

Returns the AWS Identity and Access Management (AWS IAM) policy for sharing the specified rule group. You can use the policy to share the rule group using AWS Resource Access Manager (AWS RAM).

## Request Syntax

```
{
   "Arn": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**Arn**

The ARN (Amazon Resource Name) for the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "FirewallRuleGroupPolicy": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroupPolicy**

The AWS Identity and Access Management (AWS IAM) policy for sharing the specified rule group. You can use the policy to share the rule group using AWS Resource Access Manager (AWS RAM).

Type: String

Length Constraints: Maximum length of 30000.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetOutpostResolver

Service: Amazon Route 53 Resolver

Gets information about a specified Resolver on the Outpost, such as its instance count and type, name, and the current status of the Resolver.

## Request Syntax

```
{
   "Id": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Id

The ID of the Resolver on the Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "OutpostResolver": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Id": "string",
      "InstanceCount": number,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
```

```
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OutpostResolver**

Information about the `GetOutpostResolver` request, including the status of the request.

Type: OutpostResolver object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverConfig

Service: Amazon Route 53 Resolver

Retrieves the behavior configuration of Route 53 Resolver behavior for a single VPC from Amazon Virtual Private Cloud.

## Request Syntax

```
{
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResourceId**

Resource ID of the Amazon VPC that you want to get information about.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverConfig": {
      "AutodefinedReverse": "string",
      "Id": "string",
      "OwnerId": "string",
      "ResourceId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverConfig**

Information about the behavior configuration of Route 53 Resolver behavior for the VPC you specified in the `GetResolverConfig` request.

Type: ResolverConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverDnssecConfig

Service: Amazon Route 53 Resolver

Gets DNSSEC validation information for a specified resource.

## Request Syntax

```
{
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResourceId

The ID of the virtual private cloud (VPC) for the DNSSEC validation status.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverDNSSECConfig": {
      "Id": "string",
      "OwnerId": "string",
      "ResourceId": "string",
      "ValidationStatus": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverDNSSECConfig**

The information about a configuration for DNSSEC validation.

Type: ResolverDnssecConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverEndpoint

Service: Amazon Route 53 Resolver

Gets information about a specified Resolver endpoint, such as whether it's an inbound or an outbound Resolver endpoint, and the current status of the endpoint.

## Request Syntax

```
{
   "ResolverEndpointId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResolverEndpointId

The ID of the Resolver endpoint that you want to get information about.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverEndpoint": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Direction": "string",
      "Dns64Enabled": boolean,
      "HostVPCId": "string",
      "Id": "string",
      "IpAddressCount": number,
      "Ipv6InternetAccessEnabled": boolean,
      "ModificationTime": "string",
```

```
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Protocols": [ "string" ],
      "ResolverEndpointType": "string",
      "RniEnhancedMetricsEnabled": boolean,
      "SecurityGroupIds": [ "string" ],
      "Status": "string",
      "StatusMessage": "string",
      "TargetNameServerMetricsEnabled": boolean
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverEndpoint

Information about the Resolver endpoint that you specified in a `GetResolverEndpoint` request.

Type: ResolverEndpoint object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### GetResolverEndpoint Example

This example illustrates one usage of GetResolverEndpoint.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 52
X-Amz-Target: Route53Resolver.GetResolverEndpoint
X-Amz-Date: 20181101T184736Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{"ResolverEndpointId": "rslvr-in-60b9fd8fdbexample"}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:47:36 GMT
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 490
x-amzn-RequestId: 98d13818-b790-4aa8-8ed8-87a1eexample
Connection: keep-alive

{
    "ResolverEndpoint": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-endpoint/rslvr-
in-60b9fd8fdbexample",
        "CreationTime": "2018-11-01T18:44:50.372Z",
        "CreatorRequestId": "1234",
        "Direction": "INBOUND",
        "HostVPCId": "vpc-03cf94c75cexample",
        "Id": "rslvr-in-60b9fd8fdbexample",
        "IpAddressCount": 2,
        "ModificationTime": "2018-11-01T18:44:50.372Z",
        "Name": "MyInbound",
        "Protocols": [
           "DoH"
        ],
        "ResolverEndpointType": "IPV4",
        "Dns64Enabled": false,
        "RniEnhancedMetricsEnabled": false,
        "SecurityGroupIds": [
            "sg-020a3554aexample"
        ],
        "Status": "OPERATIONAL",
        "StatusMessage": "This Resolver Endpoint is operational."
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverQueryLogConfig

Service: Amazon Route 53 Resolver

Gets information about a specified Resolver query logging configuration, such as the number of VPCs that the configuration is logging queries for and the location that logs are sent to.

## Request Syntax

```
{
   "ResolverQueryLogConfigId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverQueryLogConfigId**

The ID of the Resolver query logging configuration that you want to get information about.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverQueryLogConfig": {
      "Arn": "string",
      "AssociationCount": number,
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DestinationArn": "string",
      "Id": "string",
      "Name": "string",
      "OwnerId": "string",
      "ShareStatus": "string",
```

```
      "Status": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverQueryLogConfig**

Information about the Resolver query logging configuration that you specified in a `GetQueryLogConfig` request.

Type: ResolverQueryLogConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### GetResolverQueryLogConfig Example

This example illustrates one usage of GetResolverQueryLogConfig.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 48
X-Amz-Target: Route53Resolver.GetResolverQueryLogConfig
X-Amz-Date: 20200731T192652Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]
```

```
{
    "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:52 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 464
x-amzn-RequestId: 1d7c8aad-1c63-413d-88a9-bc7b0example
Connection: keep-alive

{
    "ResolverQueryLogConfig": {
        "Arn": "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-
config/rqlc-8ca61fe7cexample",
        "AssociationCount": "1",
        "CreationTime": "20200731T191604Z",
        "CreatorRequestId": "ramirezd-20200731T191001Z",
        "DestinationArn": "arn:aws:s3:::amzn-s3-demo-bucket/development/",
        "Id": "rqlc-8ca61fe7c055415a",
        "Name": "MyQueryLog",
        "OwnerId": "111122223333",
        "ShareStatus": "NOT_SHARED",
        "Status": "CREATING"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverQueryLogConfigAssociation

Service: Amazon Route 53 Resolver

Gets information about a specified association between a Resolver query logging configuration and an Amazon VPC. When you associate a VPC with a query logging configuration, Resolver logs DNS queries that originate in that VPC.

## Request Syntax

```
{
   "ResolverQueryLogConfigAssociationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResolverQueryLogConfigAssociationId

The ID of the Resolver query logging configuration association that you want to get information about.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverQueryLogConfigAssociation": {
      "CreationTime": "string",
      "Error": "string",
      "ErrorMessage": "string",
      "Id": "string",
      "ResolverQueryLogConfigId": "string",
      "ResourceId": "string",
      "Status": "string"
```

```
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverQueryLogConfigAssociation**

Information about the Resolver query logging configuration association that you specified in a `GetQueryLogConfigAssociation` request.

Type: ResolverQueryLogConfigAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### GetResolverQueryLogConfigAssociation Example

This example illustrates one usage of GetResolverQueryLogConfigAssociation.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 48
X-Amz-Target: Route53Resolver.GetResolverQueryLogConfigAssociation
X-Amz-Date: 20200731T192652Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]
```

```
{
    "ResolverQueryLogConfigAssociationId": "rqlca-ff85e1ffexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:52 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 464
x-amzn-RequestId: 1d7c8aad-1c63-413d-88a9-bc7b0example
Connection: keep-alive

{
    "ResolverQueryLogConfigAssociation":{
        "CreationTime": "2020-07-31T18:52:23.30Z",
        "Error": "",
        "ErrorMessage": "",
        "Id": "rqlca-ff85e1ffexample",
        "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample",
        "Resource": "vpc-03cf94c75cexample",
        "Status": "CREATED"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverQueryLogConfigPolicy

Service: Amazon Route 53 Resolver

Gets information about a query logging policy. A query logging policy specifies the Resolver query logging operations and resources that you want to allow another AWS account to be able to use.

## Request Syntax

```
{
   "Arn": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**Arn**

The ARN of the query logging configuration that you want to get the query logging policy for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "ResolverQueryLogConfigPolicy": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverQueryLogConfigPolicy**

Information about the query logging policy for the query logging configuration that you specified in a `GetResolverQueryLogConfigPolicy` request.

Type: String

Length Constraints: Maximum length of 30000.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

### UnknownResourceException

The specified resource doesn't exist.

HTTP Status Code: 400

## Examples

### GetResolverQueryLogConfigPolicy Example

This example illustrates one usage of GetResolverQueryLogConfigPolicy.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 48
X-Amz-Target: Route53Resolver.GetResolverQueryLogConfigPolicy
X-Amz-Date: 20181101T192652Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Arn": "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-config/
rqlc-8ca61fe7cexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:52 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 314
x-amzn-RequestId: 1d7c8aad-1c63-413d-88a9-bc7b0example
Connection: keep-alive
```

```
{
    "ResolverQueryLogConfigPolicy": {
        "Version": "2012-10-17",
        "Statement": [
            {
                "Effect": "Allow",
                "Principal": {
                    "AWS": [
                        "123456789012"
                    ]
                },
                "Action": [
                    "route53resolver:AssociateResolverQueryLogConfig",
                    "route53resolver:CreateResolverQueryLogConfig",
                    "route53resolver:DeleteResolverQueryLogConfig",
                    "route53resolver:DisassociateResolverQueryLogConfig",
                    "route53resolver:ListResolverQueryLogConfigAssociations",
                    "route53resolver:ListResolverQueryLogConfigs"
                ],
                "Resource": [
                    "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-
config/rqlc-8ca61fe7cexample"
                ]
            }
        ]
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverRule

Service: Amazon Route 53 Resolver

Gets information about a specified Resolver rule, such as the domain name that the rule forwards DNS queries for and the ID of the outbound Resolver endpoint that the rule is associated with.

## Request Syntax

```
{
   "ResolverRuleId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverRuleId**

The ID of the Resolver rule that you want to get information about.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverRule": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DelegationRecord": "string",
      "DomainName": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
```

```
      "OwnerId": "string",
      "ResolverEndpointId": "string",
      "RuleType": "string",
      "ShareStatus": "string",
      "Status": "string",
      "StatusMessage": "string",
      "TargetIps": [
         {
            "Ip": "string",
            "Ipv6": "string",
            "Port": number,
            "Protocol": "string",
            "ServerNameIndication": "string"
         }
      ]
   }
}
```


## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRule**

Information about the Resolver rule that you specified in a `GetResolverRule` request.

Type: ResolverRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### GetResolverRule Example

This example illustrates one usage of GetResolverRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 48
X-Amz-Target: Route53Resolver.GetResolverRule
X-Amz-Date: 20181101T192652Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]
```

```
{
    "ResolverRuleId": "rslvr-rr-5328a0899aexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:52 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 464
x-amzn-RequestId: 1d7c8aad-1c63-413d-88a9-bc7b0example
Connection: keep-alive

{
    "ResolverRule": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
        "CreatorRequestId": "999",
        "DomainName": "example.com",
        "Id": "rslvr-rr-5328a0899aexample",
        "OwnerId": "123456789012",
        "ResolverEndpointId": "rslvr-out-fdc049932dexample",
        "RuleType": "FORWARD",
        "Status": "COMPLETE",
        "StatusMessage": "[Trace id: 1-5bdb52b3-68082ffc336d18153example] Successfully
 created Resolver Rule.",
        "TargetIps": [
            {
                "Ip": "192.0.2.6",
                "Port": 53
            }
        ]
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverRuleAssociation

Service: Amazon Route 53 Resolver

Gets information about an association between a specified Resolver rule and a VPC. You associate a Resolver rule and a VPC using AssociateResolverRule.

## Request Syntax

```
{
   "ResolverRuleAssociationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResolverRuleAssociationId**

The ID of the Resolver rule association that you want to get information about.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverRuleAssociation": {
      "Id": "string",
      "Name": "string",
      "ResolverRuleId": "string",
      "Status": "string",
      "StatusMessage": "string",
      "VPCId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRuleAssociation**

Information about the Resolver rule association that you specified in a `GetResolverRuleAssociation` request.

Type: ResolverRuleAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### GetResolverRuleAssociation Example

This example illustrates one usage of GetResolverRuleAssociation.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 48
X-Amz-Target: Route53Resolver.GetResolverRuleAssociation
X-Amz-Date: 20181101T192652Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResolverRuleAssociationId": "rslvr-rrassoc-97242eaf88example"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:52 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 314
x-amzn-RequestId: 1d7c8aad-1c63-413d-88a9-bc7b0example
Connection: keep-alive

{
    "ResolverRuleAssociation":{
        "Id":"rslvr-rrassoc-97242eaf88example",
        "Name":"forward example.com for gamma VPC",
        "ResolverRuleId":"rslvr-rr-5328a0899example",
```

```
        "Status":"CREATING",
        "StatusMessage":"[Trace id: 1-5bdb53db-75f3852c8384ad30fexample], Creating the
 association.",
        "VPCId":"vpc-03cf94c75cexample"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# GetResolverRulePolicy

Service: Amazon Route 53 Resolver

Gets information about the Resolver rule policy for a specified rule. A Resolver rule policy includes the rule that you want to share with another account, the account that you want to share the rule with, and the Resolver operations that you want to allow the account to use.

## Request Syntax

```
{
   "Arn": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Arn

The ID of the Resolver rule that you want to get the Resolver rule policy for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "ResolverRulePolicy": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverRulePolicy**

The Resolver rule policy for the rule that you specified in a `GetResolverRulePolicy` request.

Type: String

Length Constraints: Maximum length of 30000.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**UnknownResourceException**

The specified resource doesn't exist.

HTTP Status Code: 400

## Examples

### GetResolverRulePolicy Example

This example illustrates one usage of GetResolverRulePolicy.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 48
X-Amz-Target: Route53Resolver.GetResolverRulePolicy
X-Amz-Date: 20181101T192652Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:52 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 314
x-amzn-RequestId: 1d7c8aad-1c63-413d-88a9-bc7b0example
Connection: keep-alive

{
    "ResolverRulePolicy":{
      "Version": "2012-10-17",
      "Statement": [
         {
            "Effect" : "Allow",
            "Principal" : {"AWS" : [ "123456789012" ] },
```

```
            "Action" : [
               "route53resolver:GetResolverRule",
               "route53resolver:AssociateResolverRule",
               "route53resolver:DisassociateResolverRule",
               "route53resolver:ListResolverRules",
               "route53resolver:ListResolverRuleAssociations"
            ],
            "Resource" : [
               "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample"
            ]
         }
      ]
   }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ImportFirewallDomains

Service: Amazon Route 53 Resolver

Imports domain names from a file into a domain list, for use in a DNS firewall rule group.

Each domain specification in your domain list must satisfy the following requirements:

- It can optionally start with * (asterisk).
- With the exception of the optional starting asterisk, it must only contain the following characters: A-Z, a-z, 0-9, - (hyphen).
- It must be from 1-255 characters in length.

## Request Syntax

```
{
   "DomainFileUrl": "string",
   "FirewallDomainListId": "string",
   "Operation": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### DomainFileUrl

The fully qualified URL or URI of the file stored in Amazon Simple Storage Service (Amazon S3) that contains the list of domains to import.

The file must be in an S3 bucket that's in the same Region as your DNS Firewall. The file must be a text file and must contain a single domain per line.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: Yes

### FirewallDomainListId

The ID of the domain list that you want to modify with the import operation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### Operation

What you want DNS Firewall to do with the domains that are listed in the file. This must be set to REPLACE, which updates the domain list to exactly match the list in the file.

Type: String

Valid Values: REPLACE

Required: Yes

## Response Syntax

```
{
   "Id": "string",
   "Name": "string",
   "Status": "string",
   "StatusMessage": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### Id

The Id of the firewall domain list that DNS Firewall just updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

**Name**

The name of the domain list.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

**Status**

Status of the import request.

Type: String

Valid Values: `COMPLETE | COMPLETE_IMPORT_FAILED | IMPORTING | DELETING | UPDATING`

**StatusMessage**

Additional information about the status of the list, if available.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallConfigs

Service: Amazon Route 53 Resolver

Retrieves the firewall configurations that you have defined. DNS Firewall uses the configurations to manage firewall behavior for your VPCs.

A single call might return only a partial list of the configurations. For information, see `MaxResults`.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**MaxResults**

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

If you don't specify a value for `MaxResults`, Resolver returns up to 100 objects.

Type: Integer

Valid Range: Minimum value of 5. Maximum value of 10.

Required: No

**NextToken**

For the first call to this list request, omit this value.

When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver returns a `NextToken` value in

the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

## Response Syntax

```
{
   "FirewallConfigs": [
      {
         "FirewallFailOpen": "string",
         "Id": "string",
         "OwnerId": "string",
         "ResourceId": "string"
      }
   ],
   "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### FirewallConfigs

The configurations for the firewall behavior provided by DNS Firewall for VPCs from Amazon Virtual Private Cloud (Amazon VPC).

Type: Array of FirewallConfig objects

### NextToken

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallDomainLists

Service: Amazon Route 53 Resolver

Retrieves the firewall domain lists that you have defined. For each firewall domain list, you can retrieve the domains that are defined for a list by calling ListFirewallDomains.

A single call to this list operation might return only a partial list of the domain lists. For information, see `MaxResults`.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**MaxResults**

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

If you don't specify a value for `MaxResults`, Resolver returns up to 100 objects.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first call to this list request, omit this value.

When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver returns a `NextToken` value in

the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

## Response Syntax

```
{
   "FirewallDomainLists": [
      {
         "Arn": "string",
         "Category": "string",
         "CreatorRequestId": "string",
         "Id": "string",
         "ManagedListType": "string",
         "ManagedOwnerName": "string",
         "Name": "string"
      }
   ],
   "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallDomainLists**

A list of the domain lists that you have defined.

This might be a partial list of the domain lists that you've defined. For information, see `MaxResults`.

Type: Array of FirewallDomainListMetadata objects

**NextToken**

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallDomains

Service: Amazon Route 53 Resolver

Retrieves the domains that you have defined for the specified firewall domain list.

A single call might return only a partial list of the domains. For information, see `MaxResults`.

## Request Syntax

```
{
   "FirewallDomainListId": "string",
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**FirewallDomainListId**

The ID of the domain list whose domains you want to retrieve.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**MaxResults**

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

If you don't specify a value for `MaxResults`, Resolver returns up to 100 objects.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 5000.

Required: No

**NextToken**

For the first call to this list request, omit this value.

When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver returns a `NextToken` value in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

## Response Syntax

```
{
   "Domains": [ "string" ],
   "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Domains**

A list of the domains in the firewall domain list.

This might be a partial list of the domains that you've defined in the domain list. For information, see `MaxResults`.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 255.

**NextToken**

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallRuleGroupAssociations

Service: Amazon Route 53 Resolver

Retrieves the firewall rule group associations that you have defined. Each association enables DNS filtering for a VPC with one rule group.

A single call might return only a partial list of the associations. For information, see `MaxResults`.

## Request Syntax

```
{
   "FirewallRuleGroupId": "string",
   "MaxResults": number,
   "NextToken": "string",
   "Priority": number,
   "Status": "string",
   "VpcId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallRuleGroupId

The unique identifier of the firewall rule group that you want to retrieve the associations for. Leave this blank to retrieve associations for any rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### MaxResults

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

If you don't specify a value for `MaxResults`, Resolver returns up to 100 objects.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

For the first call to this list request, omit this value.

When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver returns a `NextToken` value in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

### Priority

The setting that determines the processing order of the rule group among the rule groups that are associated with a single VPC. DNS Firewall filters VPC traffic starting from the rule group with the lowest numeric priority setting.

Type: Integer

Required: No

### Status

The association `Status` setting that you want DNS Firewall to filter on for the list. If you don't specify this, then DNS Firewall returns all associations, regardless of status.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING`

Required: No

### VpcId

The unique identifier of the VPC that you want to retrieve the associations for. Leave this blank to retrieve associations for any VPC.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## Response Syntax

```
{
   "FirewallRuleGroupAssociations": [
      {
         "Arn": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "FirewallRuleGroupId": "string",
         "Id": "string",
         "ManagedOwnerName": "string",
         "ModificationTime": "string",
         "MutationProtection": "string",
         "Name": "string",
         "Priority": number,
         "Status": "string",
         "StatusMessage": "string",
         "VpcId": "string"
      }
   ],
   "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### FirewallRuleGroupAssociations

A list of your firewall rule group associations.

This might be a partial list of the associations that you have defined. For information, see `MaxResults`.

Type: Array of FirewallRuleGroupAssociation objects

**NextToken**

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallRuleGroups

Service: Amazon Route 53 Resolver

Retrieves the minimal high-level information for the rule groups that you have defined.

A single call might return only a partial list of the rule groups. For information, see `MaxResults`.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**MaxResults**

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

If you don't specify a value for `MaxResults`, Resolver returns up to 100 objects.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first call to this list request, omit this value.

When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver returns a `NextToken` value in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

## Response Syntax

```
{
   "FirewallRuleGroups": [
      {
         "Arn": "string",
         "CreatorRequestId": "string",
         "Id": "string",
         "Name": "string",
         "OwnerId": "string",
         "ShareStatus": "string"
      }
   ],
   "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### FirewallRuleGroups

A list of your firewall rule groups.

This might be a partial list of the rule groups that you have defined. For information, see `MaxResults`.

Type: Array of FirewallRuleGroupMetadata objects

### NextToken

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallRules

Service: Amazon Route 53 Resolver

Retrieves the firewall rules that you have defined for the specified firewall rule group. DNS Firewall uses the rules in a rule group to filter DNS network traffic for a VPC.

A single call might return only a partial list of the rules. For information, see `MaxResults`.

For rules that require asynchronous provisioning, the response includes `Status` (see FirewallRule) and, on failure, `StatusMessage` with the reason.

## Request Syntax

```
{
   "Action": "string",
   "FirewallRuleGroupId": "string",
   "MaxResults": number,
   "NextToken": "string",
   "Priority": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Action

Optional additional filter for the rules to retrieve.

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule:

- `ALLOW` - Permit the request to go through. Not availabe for DNS Firewall Advanced rules.
- `ALERT` - Permit the request to go through but send an alert to the logs.
- `BLOCK` - Disallow the request. If this is specified, additional handling details are provided in the rule's `BlockResponse` setting.

Type: String

Valid Values: `ALLOW | BLOCK | ALERT`

Required: No

**FirewallRuleGroupId**

The unique identifier of the firewall rule group that you want to retrieve the rules for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**MaxResults**

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

If you don't specify a value for `MaxResults`, Resolver returns up to 100 objects.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first call to this list request, omit this value.

When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver returns a `NextToken` value in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

**Priority**

Optional additional filter for the rules to retrieve.

The setting that determines the processing order of the rules in a rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Integer

Required: No

## Response Syntax

```
{
   "FirewallRules": [
      {
         "Action": "string",
         "BlockOverrideDnsType": "string",
         "BlockOverrideDomain": "string",
         "BlockOverrideTtl": number,
         "BlockResponse": "string",
         "ConfidenceThreshold": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "DnsThreatProtection": "string",
         "FirewallDomainListId": "string",
         "FirewallDomainRedirectionAction": "string",
         "FirewallRuleGroupId": "string",
         "FirewallRuleType": {
            "DnsThreatProtection": {
               "ConfidenceThreshold": "string",
               "Value": "string"
            },
            "FirewallAdvancedContentCategory": {
               "Category": "string"
            },
            "FirewallAdvancedThreatCategory": {
               "Category": "string"
            },
            "PartnerThreatProtection": {
               "Partner": "string"
            }
         },
         "FirewallThreatProtectionId": "string",
         "ModificationTime": "string",
         "Name": "string",
         "Priority": number,
         "Qtype": "string",
         "Status": "string",
         "StatusMessage": "string"
```

```
        }
    ],
    "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRules**

A list of the rules that you have defined.

This might be a partial list of the firewall rules that you've defined. For information, see `MaxResults`.

Type: Array of FirewallRule objects

**NextToken**

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### ListFirewallRules Example

This example illustrates one usage of ListFirewallRules.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 84
X-Amz-Target: Route53Resolver.ListFirewallRules
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
```

```
               Signature=[calculated-signature]

{
    "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
    "MaxResults": 10
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:03 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 920
x-amzn-RequestId: 2a3b4c5d-6e7f-8a9b-0c1d-2e3f4example
Connection: keep-alive

{
    "FirewallRules": [
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
            "Name": "block-bad-domains",
            "Priority": 101,
            "Action": "BLOCK",
            "BlockResponse": "NODATA",
            "CreatorRequestId": "create-rule-1",
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:01.000Z"
        },
        {
            "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
            "FirewallThreatProtectionId": "rslvr-ftp-1a2b3c4d5example",
            "Name": "panw-advanced-threat",
            "Priority": 200,
            "Action": "BLOCK",
            "BlockResponse": "NODATA",
            "CreatorRequestId": "create-partner-rule-1",
            "CreationTime": "2026-04-20T12:00:01.000Z",
            "ModificationTime": "2026-04-20T12:00:05.000Z",
            "Status": "CREATION_FAILED",
            "StatusMessage": "Account is not subscribed to the requested AWS
 Marketplace product.",
            "FirewallRuleType": {
```

```
                "PartnerThreatProtection": {
                    "Partner": "PANW_MALWARE_DOMAINS"
                }
            }
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListFirewallRuleTypes

Service: Amazon Route 53 Resolver

Retrieves the rule-type variants that can be used in the `FirewallRuleType` field of CreateFirewallRule and UpdateFirewallRule. Each returned FirewallRuleTypeDefinition identifies one variant + value combination — for example, `FirewallAdvancedContentCategory` + `VIOLENCE_AND_HATE_SPEECH`, or `PartnerThreatProtection` + a partner-managed feed.

The supported `RuleType` filter values are `FirewallAdvancedContentCategory`, `FirewallAdvancedThreatCategory`, `DnsThreatProtection`, and `PartnerThreatProtection`. When a returned definition's variant requires an external subscription (currently only `PartnerThreatProtection`), the response also includes a SubscriptionInfo identifying the AWS Marketplace product that backs it; absence of `SubscriptionInfo` means the variant is fully managed by AWS and requires no separate subscription.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "RuleType": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### MaxResults

The maximum number of objects that you want Resolver to return for this request. If more objects are available, in the response, Resolver provides a `NextToken` value that you can use in a subsequent call to get the next batch of objects.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first call to this list request, omit this value. When you request a list of objects, Resolver returns at most the number of objects specified in `MaxResults`. If more objects are available for retrieval, Resolver provides a `NextToken` value in the response. To retrieve the next batch of objects, use the token that was returned for the prior request in your next request.

Type: String

Required: No

**RuleType**

An optional filter that restricts the response to a single FirewallRuleType variant. Supported values: `FirewallAdvancedContentCategory`, `FirewallAdvancedThreatCategory`, `DnsThreatProtection`, and `PartnerThreatProtection`. If omitted, definitions across all variants are returned.

Type: String

Length Constraints: Maximum length of 128.

Required: No

## Response Syntax

```
{
   "FirewallRuleTypes": [
      {
         "Description": "string",
         "DisplayName": "string",
         "RuleType": "string",
         "SubscriptionInfo": {
            "ProductId": "string",
            "VendorName": "string"
         },
         "Value": "string"
      }
   ],
   "NextToken": "string"
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleTypes**

A list of the available rule type definitions.

Type: Array of FirewallRuleTypeDefinition objects

**NextToken**

If objects are still available for retrieval, Resolver returns this token in the response. To retrieve the next batch of objects, provide this token in your next request.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### ListFirewallRuleTypes Example

This example illustrates one usage of ListFirewallRuleTypes.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 22
X-Amz-Target: Route53Resolver.ListFirewallRuleTypes
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "MaxResults": 10
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:04 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 450
x-amzn-RequestId: 7e5d4f6a-8b9c-0d1e-2f3a-4b5c6example
```

```
Connection: keep-alive

{
    "FirewallRuleTypes": [
        {
            "RuleType": "FirewallAdvancedContentCategory",
            "Value": "VIOLENCE_AND_HATE_SPEECH",
            "DisplayName": "Violence and Hate Speech",
            "Description": "Content category: Violence and Hate Speech"
        },
        {
            "RuleType": "FirewallAdvancedThreatCategory",
            "Value": "PHISHING",
            "DisplayName": "Phishing",
            "Description": "Advanced threat category: Phishing"
        }
    ]
}
```

### ListFirewallRuleTypes Example - filter by PartnerThreatProtection

This example illustrates one usage of ListFirewallRuleTypes.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 64
X-Amz-Target: Route53Resolver.ListFirewallRuleTypes
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "RuleType": "PartnerThreatProtection",
    "MaxResults": 10
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:06 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 612
x-amzn-RequestId: 3d4e5f6a-7b8c-9d0e-1f2a-3b4c5example
Connection: keep-alive

{
    "FirewallRuleTypes": [
        {
            "RuleType": "PartnerThreatProtection",
            "Value": "PANW_MALWARE_DOMAINS",
            "DisplayName": "Palo Alto Networks - Malware Domains",
            "Description": "Partner-managed advanced threat protection delivered by
 Palo Alto Networks.",
            "SubscriptionInfo": {
                "VendorName": "Palo Alto Networks",
                "ProductId": "prod-aaaaaaaaaaaa"
            }
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# ListOutpostResolvers

Service: Amazon Route 53 Resolver

Lists all the Resolvers on Outposts that were created using the current AWS account.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "OutpostArn": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**MaxResults**

The maximum number of Resolvers on the Outpost that you want to return in the response to a `ListOutpostResolver` request. If you don't specify a value for `MaxResults`, the request returns up to 100 Resolvers.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first `ListOutpostResolver` request, omit this value.

Type: String

Required: No

**OutpostArn**

The Amazon Resource Name (ARN) of the Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^arn:aws([a-z-]+)?:outposts:[a-z\d-]+:\d{12}:outpost/op-[a-f0-9]{17}$`

Required: No

## Response Syntax

```
{
   "NextToken": "string",
   "OutpostResolvers": [
      {
         "Arn": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "Id": "string",
         "InstanceCount": number,
         "ModificationTime": "string",
         "Name": "string",
         "OutpostArn": "string",
         "PreferredInstanceType": "string",
         "Status": "string",
         "StatusMessage": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If more than `MaxResults` Resolvers match the specified criteria, you can submit another `ListOutpostResolver` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**OutpostResolvers**

The Resolvers on Outposts that were created by using the current AWS account, and that match the specified filters, if any.

Type: Array of OutpostResolver objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverConfigs

Service: Amazon Route 53 Resolver

Retrieves the Resolver configurations that you have defined. Route 53 Resolver uses the configurations to manage DNS resolution behavior for your VPCs.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### MaxResults

The maximum number of Resolver configurations that you want to return in the response to a `ListResolverConfigs` request. If you don't specify a value for `MaxResults`, up to 100 Resolver configurations are returned.

Type: Integer

Valid Range: Minimum value of 5. Maximum value of 100.

Required: No

### NextToken

(Optional) If the current AWS account has more than `MaxResults` Resolver configurations, use `NextToken` to get the second and subsequent pages of results.

For the first `ListResolverConfigs` request, omit this value.

For the second and subsequent requests, get the value of `NextToken` from the previous response and specify that value for `NextToken` in the request.

Type: String

Required: No

## Response Syntax

```
{
   "NextToken": "string",
   "ResolverConfigs": [
      {
         "AutodefinedReverse": "string",
         "Id": "string",
         "OwnerId": "string",
         "ResourceId": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If a response includes the last of the Resolver configurations that are associated with the current AWS account, `NextToken` doesn't appear in the response.

If a response doesn't include the last of the configurations, you can get more configurations by submitting another `ListResolverConfigs` request. Get the value of `NextToken` that Amazon Route 53 returned in the previous response and include it in `NextToken` in the next request.

Type: String

### ResolverConfigs

An array that contains one `ResolverConfigs` element for each Resolver configuration that is associated with the current AWS account.

Type: Array of ResolverConfig objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverDnssecConfigs

Service: Amazon Route 53 Resolver

Lists the configurations for DNSSEC validation that are associated with the current AWS account.

## Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Filters

An optional specification to return a subset of objects.

Type: Array of Filter objects

Required: No

### MaxResults

*Optional*: An integer that specifies the maximum number of DNSSEC configuration results that you want Amazon Route 53 to return. If you don't specify a value for `MaxResults`, Route 53 returns up to 100 configuration per page.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

(Optional) If the current AWS account has more than `MaxResults` DNSSEC configurations, use `NextToken` to get the second and subsequent pages of results.

For the first `ListResolverDnssecConfigs` request, omit this value.

For the second and subsequent requests, get the value of `NextToken` from the previous response and specify that value for `NextToken` in the request.

Type: String

Required: No

## Response Syntax

```
{
   "NextToken": "string",
   "ResolverDnssecConfigs": [
      {
         "Id": "string",
         "OwnerId": "string",
         "ResourceId": "string",
         "ValidationStatus": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If a response includes the last of the DNSSEC configurations that are associated with the current AWS account, `NextToken` doesn't appear in the response.

If a response doesn't include the last of the configurations, you can get more configurations by submitting another ListResolverDnssecConfigs request. Get the value of `NextToken` that

Amazon Route 53 returned in the previous response and include it in `NextToken` in the next request.

Type: String

**ResolverDnssecConfigs**

An array that contains one ResolverDnssecConfig element for each configuration for DNSSEC validation that is associated with the current AWS account. It doesn't contain disabled DNSSEC configurations for the resource.

Type: Array of ResolverDnssecConfig objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverEndpointIpAddresses

Service: Amazon Route 53 Resolver

Gets the IP addresses for a specified Resolver endpoint.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResolverEndpointId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**MaxResults**

The maximum number of IP addresses that you want to return in the response to a `ListResolverEndpointIpAddresses` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 IP addresses.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first `ListResolverEndpointIpAddresses` request, omit this value.

If the specified Resolver endpoint has more than `MaxResults` IP addresses, you can submit another `ListResolverEndpointIpAddresses` request to get the next group of IP addresses. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

### ResolverEndpointId

The ID of the Resolver endpoint that you want to get IP addresses for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "IpAddresses": [
      {
         "CreationTime": "string",
         "Ip": "string",
         "IpId": "string",
         "Ipv6": "string",
         "ModificationTime": "string",
         "Status": "string",
         "StatusMessage": "string",
         "SubnetId": "string"
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### IpAddresses

Information about the IP addresses in your VPC that DNS queries originate from (for outbound endpoints) or that you forward DNS queries to (for inbound endpoints).

Type: Array of IpAddressResponse objects

**MaxResults**

The value that you specified for `MaxResults` in the request.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

**NextToken**

If the specified endpoint has more than `MaxResults` IP addresses, you can submit another `ListResolverEndpointIpAddresses` request to get the next group of IP addresses. In the next request, specify the value of `NextToken` from the previous response.

Type: String

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListResolverEndpointIpAddresses Example

This example illustrates one usage of ListResolverEndpointIpAddresses.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 52
X-Amz-Target: Route53Resolver.ListResolverEndpointIpAddresses
X-Amz-Date: 20181101T193143Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResolverEndpointId": "rslvr-in-60b9fd8fdbexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:31:43 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 780
```

```
x-amzn-RequestId: df6722d0-49a0-4300-a491-fe290example
Connection: keep-alive

{
    "IpAddresses": [
        {
            "CreationTime": "2018-11-01T18:44:50.375Z",
            "Ip": "192.0.2.42",
            "IpId": "rni-42ed238be6example",
            "ModificationTime": "2018-11-01T18:45:10.956Z",
            "Status": "ATTACHED",
            "StatusMessage": "This IP address is operational.",
            "SubnetId": "subnet-02f91e0e98example"
        },
        {
            "CreationTime": "2018-11-01T18:44:50.379Z",
            "Ip": "192.0.2.18",
            "IpId": "rni-2cf1fc97bfexample",
            "ModificationTime": "2018-11-01T18:45:10.724Z",
            "Status": "ATTACHED",
            "StatusMessage": "This IP address is operational.",
            "SubnetId": "subnet-02f91e0e98example"
        },
        {
            "CreationTime": "2018-11-01T18:52:22.471Z",
            "Ip": "192.0.2.40",
            "IpId": "rni-e6b5f1b6e6example",
            "ModificationTime": "2018-11-01T18:52:45.886Z",
            "Status": "ATTACHED",
            "StatusMessage": "This IP address is operational.",
            "SubnetId": "subnet-02f91e0e98example"
        }
    ],
    "MaxResults": 10
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverEndpoints

Service: Amazon Route 53 Resolver

Lists all the Resolver endpoints that were created using the current AWS account.

## Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Filters

An optional specification to return a subset of Resolver endpoints, such as all inbound Resolver endpoints.

> **Note**
>
> If you submit a second or subsequent `ListResolverEndpoints` request and specify the `NextToken` parameter, you must use the same values for `Filters`, if any, as in the previous request.

Type: Array of Filter objects

Required: No

### MaxResults

The maximum number of Resolver endpoints that you want to return in the response to a `ListResolverEndpoints` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 Resolver endpoints.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

For the first `ListResolverEndpoints` request, omit this value.

If you have more than `MaxResults` Resolver endpoints, you can submit another `ListResolverEndpoints` request to get the next group of Resolver endpoints. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

## Response Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResolverEndpoints": [
      {
         "Arn": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "Direction": "string",
         "Dns64Enabled": boolean,
         "HostVPCId": "string",
         "Id": "string",
         "IpAddressCount": number,
         "Ipv6InternetAccessEnabled": boolean,
         "ModificationTime": "string",
         "Name": "string",
         "OutpostArn": "string",
```

```
            "PreferredInstanceType": "string",
            "Protocols": [ "string" ],
            "ResolverEndpointType": "string",
            "RniEnhancedMetricsEnabled": boolean,
            "SecurityGroupIds": [ "string" ],
            "Status": "string",
            "StatusMessage": "string",
            "TargetNameServerMetricsEnabled": boolean
        }
    ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### MaxResults

The value that you specified for `MaxResults` in the request.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

### NextToken

If more than `MaxResults` IP addresses match the specified criteria, you can submit another `ListResolverEndpoint` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

### ResolverEndpoints

The Resolver endpoints that were created by using the current AWS account, and that match the specified filters, if any.

Type: Array of ResolverEndpoint objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListResolverEndpoints Example

This example illustrates one usage of ListResolverEndpoints.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
```

```
X-Amz-Target: Route53Resolver.ListResolverEndpoints
X-Amz-Date: 20181101T191920Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:19:20 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 983
x-amzn-RequestId: 35a62daa-889c-47e4-994e-5a4dbd9818fb
Connection: keep-alive

{
    "MaxResults": 10,
    "ResolverEndpoints": [
        {
            "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-endpoint/
rslvr-in-60b9fd8fdbexample",
            "CreationTime": "2018-11-01T18:44:50.372Z",
            "CreatorRequestId": "1234",
            "Direction": "INBOUND",
            "HostVPCId": "vpc-03cf94c75cexample",
            "Id": "rslvr-in-60b9fd8fdbexample",
            "IpAddressCount": 3,
            "ModificationTime": "2018-11-01T18:44:50.372Z",
            "Name": "MyInbound",
            "Protocols": [
                "DoH"
            ],
            "ResolverEndpointType": "IPV4",
            "Dns64Enabled": false,
            "RniEnhancedMetricsEnabled": false,
            "SecurityGroupIds": [
                "sg-020a3554aexample"
```

```
            ],
            "Status": "OPERATIONAL",
            "StatusMessage": "This Resolver Endpoint is operational."
        },
        {
            "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-endpoint/
rslvr-out-fdc049932d9645ffa",
            "CreationTime": "2018-11-01T19:13:44.830Z",
            "CreatorRequestId": "5678",
            "Direction": "OUTBOUND",
            "HostVPCId": "vpc-0dd415a0edexample",
            "Id": "rslvr-out-fdc049932dexample",
            "IpAddressCount": 2,
            "ModificationTime": "2018-11-01T19:13:44.830Z",
            "Name": "MyOutbound",
            "Protocols": [
                "DoH"
            ],
            "ResolverEndpointType": "IPV4",
            "Ipv6InternetAccessEnabled": false,
            "RniEnhancedMetricsEnabled": false,
            "SecurityGroupIds": [
                "sg-071b99f42example"
            ],
            "Status": "OPERATIONAL",
            "StatusMessage": "This Resolver Endpoint is operational."
            "TargetNameServerMetricsEnabled": true
        }
    ]
}
```


## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverQueryLogConfigAssociations

Service: Amazon Route 53 Resolver

Lists information about associations between Amazon VPCs and query logging configurations.

## Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string",
   "SortBy": "string",
   "SortOrder": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Filters

An optional specification to return a subset of query logging associations.

> **Note**
>
> If you submit a second or subsequent `ListResolverQueryLogConfigAssociations` request and specify the `NextToken` parameter, you must use the same values for `Filters`, if any, as in the previous request.

Type: Array of Filter objects

Required: No

### MaxResults

The maximum number of query logging associations that you want to return in the response to a `ListResolverQueryLogConfigAssociations` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 query logging associations.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

For the first `ListResolverQueryLogConfigAssociations` request, omit this value.

If there are more than `MaxResults` query logging associations that match the values that you specify for `Filters`, you can submit another `ListResolverQueryLogConfigAssociations` request to get the next group of associations. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

### SortBy

The element that you want Resolver to sort query logging associations by.

> **Note**
>
> If you submit a second or subsequent `ListResolverQueryLogConfigAssociations` request and specify the `NextToken` parameter, you must use the same value for `SortBy`, if any, as in the previous request.

Valid values include the following elements:

- `CreationTime`: The ID of the query logging association.
- `Error`: If the value of `Status` is `FAILED`, the value of `Error` indicates the cause:
  - `DESTINATION_NOT_FOUND`: The specified destination (for example, an Amazon S3 bucket) was deleted.
  - `ACCESS_DENIED`: Permissions don't allow sending logs to the destination.

If `Status` is a value other than `FAILED`, `ERROR` is null.

- `Id`: The ID of the query logging association
- `ResolverQueryLogConfigId`: The ID of the query logging configuration
- `ResourceId`: The ID of the VPC that is associated with the query logging configuration
- `Status`: The current status of the configuration. Valid values include the following:
  - `CREATING`: Resolver is creating an association between an Amazon VPC and a query logging configuration.
  - `CREATED`: The association between an Amazon VPC and a query logging configuration was successfully created. Resolver is logging queries that originate in the specified VPC.
  - `DELETING`: Resolver is deleting this query logging association.
  - `FAILED`: Resolver either couldn't create or couldn't delete the query logging association. Here are two common causes:
    - The specified destination (for example, an Amazon S3 bucket) was deleted.
    - Permissions don't allow sending logs to the destination.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## SortOrder

If you specified a value for `SortBy`, the order that you want query logging associations to be listed in, `ASCENDING` or `DESCENDING`.

> **Note**
>
> If you submit a second or subsequent `ListResolverQueryLogConfigAssociations` request and specify the `NextToken` parameter, you must use the same value for `SortOrder`, if any, as in the previous request.

Type: String

Valid Values: `ASCENDING | DESCENDING`

Required: No

## Response Syntax

```
{
   "NextToken": "string",
   "ResolverQueryLogConfigAssociations": [
      {
         "CreationTime": "string",
         "Error": "string",
         "ErrorMessage": "string",
         "Id": "string",
         "ResolverQueryLogConfigId": "string",
         "ResourceId": "string",
         "Status": "string"
      }
   ],
   "TotalCount": number,
   "TotalFilteredCount": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If there are more than `MaxResults` query logging associations, you can submit another `ListResolverQueryLogConfigAssociations` request to get the next group of associations. In the next request, specify the value of `NextToken` from the previous response.

Type: String

### ResolverQueryLogConfigAssociations

A list that contains one `ResolverQueryLogConfigAssociations` element for each query logging association that matches the values that you specified for `Filter`.

Type: Array of ResolverQueryLogConfigAssociation objects

### TotalCount

The total number of query logging associations that were created by the current account in the specified Region. This count can differ from the number of associations that are returned in a

`ListResolverQueryLogConfigAssociations` response, depending on the values that you specify in the request.

Type: Integer

**TotalFilteredCount**

The total number of query logging associations that were created by the current account in the specified Region and that match the filters that were specified in the `ListResolverQueryLogConfigAssociations` request. For the total number of associations that were created by the current account in the specified Region, see `TotalCount`.

Type: Integer

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListResolverQueryLogConfigAssociations Example

This example illustrates one usage of ListResolverQueryLogConfigAssociations.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 283
X-Amz-Target: Route53Resolver.ListResolverQueryLogConfigAssociations
X-Amz-Date: 20200415T191344Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]
```

```
{
    "Filters": [
        {
            "Name": "Status",
            "Values": "CREATED"
        }
    ],
    "MaxResults": 10,
    "SortBy": "DestinationArn",
    "SortOrder": "ASCENDING"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:13:44 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 531
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive

{
    "MaxResults": 10,
    "ResolverQueryLogConfigAssociations": [
        {
            "CreationTime": "2020-04-15T18:52:23.30Z",
            "Error": "",
            "ErrorMessage": "",
            "Id": "rqlca-ff85e1ffexample",
            "ResolverQueryLogConfigId": "rqlc-8ca61fe7cexample",
            "Resource": "vpc-03cf94c75cexample",
            "Status": "CREATED"
        }
    ],
    "TotalCount": 10,
    "TotalFilteredCount": 1
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverQueryLogConfigs

Service: Amazon Route 53 Resolver

Lists information about the specified query logging configurations. Each configuration defines where you want Resolver to save DNS query logs and specifies the VPCs that you want to log queries for.

## Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string",
   "SortBy": "string",
   "SortOrder": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Filters

An optional specification to return a subset of query logging configurations.

> **Note**
>
> If you submit a second or subsequent `ListResolverQueryLogConfigs` request and specify the `NextToken` parameter, you must use the same values for `Filters`, if any, as in the previous request.

Type: Array of Filter objects

Required: No

### MaxResults

The maximum number of query logging configurations that you want to return in the response to a `ListResolverQueryLogConfigs` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 query logging configurations.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

For the first `ListResolverQueryLogConfigs` request, omit this value.

If there are more than `MaxResults` query logging configurations that match the values that you specify for `Filters`, you can submit another `ListResolverQueryLogConfigs` request to get the next group of configurations. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

### SortBy

The element that you want Resolver to sort query logging configurations by.

> **Note**
>
> If you submit a second or subsequent `ListResolverQueryLogConfigs` request and specify the `NextToken` parameter, you must use the same value for `SortBy`, if any, as in the previous request.

Valid values include the following elements:

- `Arn`: The ARN of the query logging configuration
- `AssociationCount`: The number of VPCs that are associated with the specified configuration
- `CreationTime`: The date and time that Resolver returned when the configuration was created

- `CreatorRequestId`: The value that was specified for `CreatorRequestId` when the configuration was created
- `DestinationArn`: The location that logs are sent to
- `Id`: The ID of the configuration
- `Name`: The name of the configuration
- `OwnerId`: The AWS account number of the account that created the configuration
- `ShareStatus`: Whether the configuration is shared with other AWS accounts or shared with the current account by another AWS account. Sharing is configured through AWS Resource Access Manager (AWS RAM).
- `Status`: The current status of the configuration. Valid values include the following:
  - `CREATING`: Resolver is creating the query logging configuration.
  - `CREATED`: The query logging configuration was successfully created. Resolver is logging queries that originate in the specified VPC.
  - `DELETING`: Resolver is deleting this query logging configuration.
  - `FAILED`: Resolver either couldn't create or couldn't delete the query logging configuration. Here are two common causes:
    - The specified destination (for example, an Amazon S3 bucket) was deleted.
    - Permissions don't allow sending logs to the destination.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## SortOrder

If you specified a value for `SortBy`, the order that you want query logging configurations to be listed in, `ASCENDING` or `DESCENDING`.

> **Note**
>
> If you submit a second or subsequent `ListResolverQueryLogConfigs` request and specify the `NextToken` parameter, you must use the same value for `SortOrder`, if any, as in the previous request.

Type: String

Valid Values: `ASCENDING | DESCENDING`

Required: No

## Response Syntax

```
{
   "NextToken": "string",
   "ResolverQueryLogConfigs": [
      {
         "Arn": "string",
         "AssociationCount": number,
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "DestinationArn": "string",
         "Id": "string",
         "Name": "string",
         "OwnerId": "string",
         "ShareStatus": "string",
         "Status": "string"
      }
   ],
   "TotalCount": number,
   "TotalFilteredCount": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If there are more than `MaxResults` query logging configurations, you can submit another `ListResolverQueryLogConfigs` request to get the next group of configurations. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**ResolverQueryLogConfigs**

A list that contains one `ResolverQueryLogConfig` element for each query logging configuration that matches the values that you specified for `Filter`.

Type: Array of ResolverQueryLogConfig objects

**TotalCount**

The total number of query logging configurations that were created by the current account in the specified Region. This count can differ from the number of query logging configurations that are returned in a `ListResolverQueryLogConfigs` response, depending on the values that you specify in the request.

Type: Integer

**TotalFilteredCount**

The total number of query logging configurations that were created by the current account in the specified Region and that match the filters that were specified in the `ListResolverQueryLogConfigs` request. For the total number of query logging configurations that were created by the current account in the specified Region, see `TotalCount`.

Type: Integer

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListResolverQueryLogConfigs Example

This example illustrates one usage of ListResolverQueryLogConfigs.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 283
X-Amz-Target: Route53Resolver.ListResolverQueryLogConfigs
X-Amz-Date: 20200415T191344Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Filters": [
        {
            "Name": "ShareStatus",
            "Values": "SHARED_BY_ME"
        }
    ],
    "MaxResults": 10,
    "SortBy": "DestinationArn",
    "SortOrder": "ASCENDING"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:13:44 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 531
x-amzn-RequestId: 08afd081-9d67-4281-a277-b3880example
Connection: keep-alive

{
    "MaxResults": 10,
    "ResolverQueryLogConfigs": [
        {
            "Arn": "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-
config/rqlc-8ca61fe7cexample",
            "AssociationCount": "1",
            "CreationTime": "20200415T191604Z",
            "CreatorRequestId": "ramirezd-20200415T191001Z",
            "DestinationArn": "arn:aws:s3:::amzn-s3-demo-bucket/development/",
            "Id": "rqlc-8ca61fe7c055415a",
            "Name": "MyQueryLog",
            "OwnerId": "111122223333",
            "ShareStatus": "SHARED_BY_ME",
            "Status": "CREATING"
        }
```

```
    ],
    "SortBy": "DestinationArn",
    "SortOrder": "ASCENDING",
    "TotalCount": 10,
    "TotalFilteredCount": 1
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverRuleAssociations

Service: Amazon Route 53 Resolver

Lists the associations that were created between Resolver rules and VPCs using the current AWS account.

## Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Filters

An optional specification to return a subset of Resolver rules, such as Resolver rules that are associated with the same VPC ID.

> **Note**
>
> If you submit a second or subsequent `ListResolverRuleAssociations` request and specify the `NextToken` parameter, you must use the same values for `Filters`, if any, as in the previous request.

Type: Array of Filter objects

Required: No

### MaxResults

The maximum number of rule associations that you want to return in the response to a `ListResolverRuleAssociations` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 rule associations.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

For the first `ListResolverRuleAssociation` request, omit this value.

If you have more than `MaxResults` rule associations, you can submit another `ListResolverRuleAssociation` request to get the next group of rule associations. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

## Response Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResolverRuleAssociations": [
      {
         "Id": "string",
         "Name": "string",
         "ResolverRuleId": "string",
         "Status": "string",
         "StatusMessage": "string",
         "VPCId": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**MaxResults**

The value that you specified for `MaxResults` in the request.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

**NextToken**

If more than `MaxResults` rule associations match the specified criteria, you can submit another `ListResolverRuleAssociation` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**ResolverRuleAssociations**

The associations that were created between Resolver rules and VPCs using the current AWS account, and that match the specified filters, if any.

Type: Array of ResolverRuleAssociation objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListResolverRuleAssociations Example

This example illustrates one usage of ListResolverRuleAssociations.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: Route53Resolver.ListResolverRuleAssociations
X-Amz-Date: 20181101T193011Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]
```

```
{}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:30:11 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 277
x-amzn-RequestId: 5ad8f14f-64c0-4cb0-a4f9-e5c48example
Connection: keep-alive

{
    "MaxResults": 30,
    "ResolverRuleAssociations": [
        {
            "Id": "rslvr-rrassoc-97242eaf88example",
            "Name":"forward example.com for gamma VPC",
            "ResolverRuleId": "rslvr-rr-5328a0899aexample",
            "Status": "COMPLETE",
            "StatusMessage": "[Trace id: 1-5bdb53db-75f3852c8384ad30fexample] Creating
 the association.",
            "VPCId": "vpc-03cf94c75eexample"
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListResolverRules

Service: Amazon Route 53 Resolver

Lists the Resolver rules that were created using the current AWS account.

## Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Filters

An optional specification to return a subset of Resolver rules, such as all Resolver rules that are associated with the same Resolver endpoint.

> **Note**
>
> If you submit a second or subsequent `ListResolverRules` request and specify the `NextToken` parameter, you must use the same values for `Filters`, if any, as in the previous request.

Type: Array of Filter objects

Required: No

### MaxResults

The maximum number of Resolver rules that you want to return in the response to a `ListResolverRules` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 Resolver rules.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### NextToken

For the first `ListResolverRules` request, omit this value.

If you have more than `MaxResults` Resolver rules, you can submit another `ListResolverRules` request to get the next group of Resolver rules. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

## Response Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResolverRules": [
      {
         "Arn": "string",
         "CreationTime": "string",
         "CreatorRequestId": "string",
         "DelegationRecord": "string",
         "DomainName": "string",
         "Id": "string",
         "ModificationTime": "string",
         "Name": "string",
         "OwnerId": "string",
         "ResolverEndpointId": "string",
         "RuleType": "string",
```

```
         "ShareStatus": "string",
         "Status": "string",
         "StatusMessage": "string",
         "TargetIps": [
            {
               "Ip": "string",
               "Ipv6": "string",
               "Port": number,
               "Protocol": "string",
               "ServerNameIndication": "string"
            }
         ]
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**MaxResults**

The value that you specified for `MaxResults` in the request.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

**NextToken**

If more than `MaxResults` Resolver rules match the specified criteria, you can submit another `ListResolverRules` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

**ResolverRules**

The Resolver rules that were created using the current AWS account and that match the specified filters, if any.

Type: Array of ResolverRule objects

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListResolverRules Example

This example illustrates one usage of ListResolverRules.

## Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: Route53Resolver.ListResolverRules
X-Amz-Date: 20181101T192600Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 483
x-amzn-RequestId: cfa09aaa-6619-40d4-8791-064c6example
Connection: keep-alive

{
    "MaxResults": 30,
    "ResolverRules": [
        {
            "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
            "CreatorRequestId": "999",
            "DomainName": "example.com",
            "Id": "rslvr-rr-5328a0899aexample",
            "OwnerId": "123456789012",
            "ResolverEndpointId": "rslvr-out-fdc049932dexample",
            "RuleType": "FORWARD",
            "Status": "COMPLETE",
            "StatusMessage": "[Trace id: 1-5bdb52b3-68082ffc336d18153example]
 Successfully created Resolver Rule.",
            "TargetIps": [
```

```
                {
                    "Ip": "192.0.2.6",
                    "Port": 53
                }
            ]
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# ListTagsForResource

Service: Amazon Route 53 Resolver

Lists the tags that you associated with the specified resource.

## Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResourceArn": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**MaxResults**

The maximum number of tags that you want to return in the response to a `ListTagsForResource` request. If you don't specify a value for `MaxResults`, Resolver returns up to 100 tags.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken**

For the first `ListTagsForResource` request, omit this value.

If you have more than `MaxResults` tags, you can submit another `ListTagsForResource` request to get the next group of tags for the resource. In the next request, specify the value of `NextToken` from the previous response.

Type: String

Required: No

### ResourceArn

The Amazon Resource Name (ARN) for the resource that you want to list tags for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## Response Syntax

```
{
   "NextToken": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### NextToken

If more than `MaxResults` tags match the specified criteria, you can submit another `ListTagsForResource` request to get the next group of results. In the next request, specify the value of `NextToken` from the previous response.

Type: String

### Tags

The tags that are associated with the resource that you specified in the `ListTagsForResource` request.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidNextTokenException**

The value that you specified for `NextToken` in a `List` request isn't valid.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### ListTagsForResource Example

This example illustrates one usage of ListTagsForResource.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 134
X-Amz-Target: Route53Resolver.ListTagsForResource
X-Amz-Date: 20181101T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "MaxResults": 10,
    "ResourceArn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 107
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{
    "Tags": [
        {
```

```
            "Key": "account-id",
            "Value": "12345"
        }
    ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# PutFirewallRuleGroupPolicy

Service: Amazon Route 53 Resolver

Attaches an AWS Identity and Access Management (AWS IAM) policy for sharing the rule group. You can use the policy to share the rule group using AWS Resource Access Manager (AWS RAM).

## Request Syntax

```
{
   "Arn": "string",
   "FirewallRuleGroupPolicy": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Arn

The ARN (Amazon Resource Name) for the rule group that you want to share.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### FirewallRuleGroupPolicy

The AWS Identity and Access Management (AWS IAM) policy to attach to the rule group.

Type: String

Length Constraints: Maximum length of 30000.

Required: Yes

## Response Syntax

```
{
```

```
   "ReturnValue": boolean
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ReturnValue**

Type: Boolean

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# PutResolverQueryLogConfigPolicy

Service: Amazon Route 53 Resolver

Specifies an AWS account that you want to share a query logging configuration with, the query logging configuration that you want to share, and the operations that you want the account to be able to perform on the configuration.

## Request Syntax

```
{
   "Arn": "string",
   "ResolverQueryLogConfigPolicy": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**Arn**

The Amazon Resource Name (ARN) of the account that you want to share rules with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**ResolverQueryLogConfigPolicy**

An AWS Identity and Access Management policy statement that lists the query logging configurations that you want to share with another AWS account and the operations that you want the account to be able to perform. You can specify the following operations in the `Actions` section of the statement:

- `route53resolver:AssociateResolverQueryLogConfig`
- `route53resolver:DisassociateResolverQueryLogConfig`
- `route53resolver:ListResolverQueryLogConfigs`

In the `Resource` section of the statement, you specify the ARNs for the query logging configurations that you want to share with the account that you specified in `Arn`.

Type: String

Length Constraints: Maximum length of 30000.

Required: Yes

## Response Syntax

```
{
   "ReturnValue": boolean
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ReturnValue**

Whether the `PutResolverQueryLogConfigPolicy` request was successful.

Type: Boolean

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidPolicyDocument**

The specified Resolver rule policy is invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**UnknownResourceException**

The specified resource doesn't exist.

HTTP Status Code: 400

## Examples

### PutResolverQueryLogConfigPolicy Example

This example illustrates one usage of PutResolverQueryLogConfigPolicy.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
```

```
X-Amz-Target: Route53Resolver.PutResolverQueryLogConfigPolicy
X-Amz-Date: 20181101T192600Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Arn": "[ARN for the account that you want to share query logging operations and
 resources with]",
    "ResolverQueryLogConfigPolicy": {
        "Version": "2012-10-17",
        "Statement": [
            {
                "Effect": "Allow",
                "Principal": {
                    "AWS": [
                        "123456789012"
                    ]
                },
                "Action": [
                    "route53resolver:AssociateResolverQueryLogConfig",
                    "route53resolver:DisassociateResolverQueryLogConfig",
                    "route53resolver:ListResolverQueryLogConfigs"
                ],
                "Resource": [
                    "arn:aws:route53resolver:us-east-1:111122223333:resolver-query-log-
config/rqlc-8ca61fe7cexample"
                ]
            }
        ]
    }"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 27
```

```
x-amzn-RequestId: cfa09aaa-6619-40d4-8791-064c6example
Connection: keep-alive

{
    "ReturnValue": true
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# PutResolverRulePolicy

Service: Amazon Route 53 Resolver

Specifies an AWS rule that you want to share with another account, the account that you want to share the rule with, and the operations that you want the account to be able to perform on the rule.

## Request Syntax

```
{
   "Arn": "string",
   "ResolverRulePolicy": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**Arn**

The Amazon Resource Name (ARN) of the rule that you want to share with another account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**ResolverRulePolicy**

An AWS Identity and Access Management policy statement that lists the rules that you want to share with another AWS account and the operations that you want the account to be able to perform. You can specify the following operations in the `Action` section of the statement:

- `route53resolver:GetResolverRule`
- `route53resolver:AssociateResolverRule`
- `route53resolver:DisassociateResolverRule`
- `route53resolver:ListResolverRules`
- `route53resolver:ListResolverRuleAssociations`

In the `Resource` section of the statement, specify the ARN for the rule that you want to share with another account. Specify the same ARN that you specified in `Arn`.

Type: String

Length Constraints: Maximum length of 30000.

Required: Yes

## Response Syntax

```
{
   "ReturnValue": boolean
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ReturnValue**

Whether the `PutResolverRulePolicy` request was successful.

Type: Boolean

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidPolicyDocument**

The specified Resolver rule policy is invalid.

HTTP Status Code: 400

**UnknownResourceException**

The specified resource doesn't exist.

HTTP Status Code: 400

## Examples

### PutResolverRulePolicy Example

This example illustrates one usage of PutResolverRulePolicy.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: Route53Resolver.PutResolverRulePolicy
X-Amz-Date: 20181101T192600Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
   "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
   "ResolverRulePolicy": "{
      "Version": "2012-10-17",
      "Statement": [
         {
            "Effect" : "Allow",
            "Principal" : {"AWS" : [ "123456789012" ] },
            "Action" : [
               "route53resolver:GetResolverRule",
               "route53resolver:AssociateResolverRule",
               "route53resolver:DisassociateResolverRule",
               "route53resolver:ListResolverRules",
               "route53resolver:ListResolverRuleAssociations"
            ],
            "Resource" : [
               "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample"
            ]
         }
      ]
   }"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:26:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 27
x-amzn-RequestId: cfa09aaa-6619-40d4-8791-064c6example
Connection: keep-alive

{
    "ReturnValue": true
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# TagResource

Service: Amazon Route 53 Resolver

Adds one or more tags to a specified resource.

## Request Syntax

```
{
   "ResourceArn": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### ResourceArn

The Amazon Resource Name (ARN) for the resource that you want to add tags to. To get the ARN for a resource, use the applicable `Get` or `List` command:

- GetResolverEndpoint
- GetResolverRule
- GetResolverRuleAssociation
- ListResolverEndpoints
- ListResolverRuleAssociations
- ListResolverRules

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### Tags

The tags that you want to add to the specified resource.

Type: Array of Tag objects

Array Members: Maximum number of 200 items.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**InvalidTagException**

The specified tag is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### TagResource Example

This example illustrates one usage of TagResource.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 217
X-Amz-Target: Route53Resolver.TagResource
X-Amz-Date: 20181101T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
```

```
                SignedHeaders=content-type;host;x-amz-date;x-amz-target,
                Signature=[calculated-signature]

{
    "ResourceArn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
    "Tags": [
        {
            "Key": "account-id",
            "Value": "12345"
        }
    ]
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 2
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

# UntagResource

Service: Amazon Route 53 Resolver

Removes one or more tags from a specified resource.

## Request Syntax

```
{
   "ResourceArn": "string",
   "TagKeys": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResourceArn**

The Amazon Resource Name (ARN) for the resource that you want to remove tags from. To get the ARN for a resource, use the applicable `Get` or `List` command:

- GetResolverEndpoint
- GetResolverRule
- GetResolverRuleAssociation
- ListResolverEndpoints
- ListResolverRuleAssociations
- ListResolverRules

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**TagKeys**

The tags that you want to remove to the specified resource.

Type: Array of strings

Array Members: Maximum number of 200 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

### ThrottlingException

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### UntagResource Example

This example illustrates one usage of UntagResource.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 165
X-Amz-Target: Route53Resolver.UntagResource
X-Amz-Date: 20181101T185222Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "ResourceArn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
    "TagKeys": [
        "Key": "account-id"
    ]
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 2
```

```
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive

{}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateFirewallConfig

Service: Amazon Route 53 Resolver

Updates the configuration of the firewall behavior provided by DNS Firewall for a single VPC from Amazon Virtual Private Cloud (Amazon VPC).

## Request Syntax

```
{
   "FirewallFailOpen": "string",
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### FirewallFailOpen

Determines how Route 53 Resolver handles queries during failures, for example when all traffic that is sent to DNS Firewall fails to receive a reply.

- By default, fail open is disabled, which means the failure mode is closed. This approach favors security over availability. DNS Firewall blocks queries that it is unable to evaluate properly.
- If you enable this option, the failure mode is open. This approach favors availability over security. DNS Firewall allows queries to proceed if it is unable to properly evaluate them.

This behavior is only enforced for VPCs that have at least one DNS Firewall rule group association.

Type: String

Valid Values: `ENABLED | DISABLED | USE_LOCAL_RESOURCE_SETTING`

Required: Yes

### ResourceId

The ID of the VPC that the configuration is for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "FirewallConfig": {
      "FirewallFailOpen": "string",
      "Id": "string",
      "OwnerId": "string",
      "ResourceId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallConfig**

Configuration of the firewall behavior provided by DNS Firewall for a single VPC.

Type: FirewallConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateFirewallDomains

Service: Amazon Route 53 Resolver

Updates the firewall domain list from an array of domain specifications.

DNS Firewall throttles `UpdateFirewallDomains` requests based on both the request rate and the total number of domains across your requests.

**Best Practice for Updating Domain Lists**

If you only need to modify a subset of domains, use the `ADD` or `REMOVE` operations instead of `REPLACE`. With `REPLACE`, you send the complete list you want to end up with, and throttling counts every domain in that request, including domains that aren't changing, which can use up your available throttling capacity.

## Request Syntax

```
{
   "Domains": [ "string" ],
   "FirewallDomainListId": "string",
   "Operation": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Domains

A list of domains to use in the update operation.

> **Important**
>
> There is a limit of 1000 domains per request.

Each domain specification in your domain list must satisfy the following requirements:

- It can optionally start with * (asterisk).

- With the exception of the optional starting asterisk, it must only contain the following characters: A-Z, a-z, 0-9, - (hyphen).
- It must be from 1-255 characters in length.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**FirewallDomainListId**

The ID of the domain list whose domains you want to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**Operation**

What you want DNS Firewall to do with the domains that you are providing:

- ADD - Add the domains to the ones that are already in the domain list.
- REMOVE - Search the domain list for the domains and remove them from the list.
- REPLACE - Update the domain list to exactly match the list that you are providing.

Type: String

Valid Values: ADD | REMOVE | REPLACE

Required: Yes

## Response Syntax

```
{
   "Id": "string",
   "Name": "string",
   "Status": "string",
   "StatusMessage": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Id**

The ID of the firewall domain list that DNS Firewall just updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

**Name**

The name of the domain list.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

**Status**

Status of the `UpdateFirewallDomains` request.

Type: String

Valid Values: `COMPLETE | COMPLETE_IMPORT_FAILED | IMPORTING | DELETING | UPDATING`

**StatusMessage**

Additional information about the status of the list, if available.

Type: String

Length Constraints: Maximum length of 255.

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateFirewallRule

Service: Amazon Route 53 Resolver

Updates the specified firewall rule. The rule's `FirewallRuleType`, `FirewallDomainListId`, and top-level `DnsThreatProtection` match source cannot be changed after creation. Rules whose `Status` is `CREATING` or `CREATION_FAILED` cannot be updated; remove a failed rule with DeleteFirewallRule.

## Request Syntax

```
{
   "Action": "string",
   "BlockOverrideDnsType": "string",
   "BlockOverrideDomain": "string",
   "BlockOverrideTtl": number,
   "BlockResponse": "string",
   "ConfidenceThreshold": "string",
   "DnsThreatProtection": "string",
   "FirewallDomainListId": "string",
   "FirewallDomainRedirectionAction": "string",
   "FirewallRuleGroupId": "string",
   "FirewallRuleType": {
      "DnsThreatProtection": {
         "ConfidenceThreshold": "string",
         "Value": "string"
      },
      "FirewallAdvancedContentCategory": {
         "Category": "string"
      },
      "FirewallAdvancedThreatCategory": {
         "Category": "string"
      },
      "PartnerThreatProtection": {
         "Partner": "string"
      }
   },
   "FirewallThreatProtectionId": "string",
   "Name": "string",
   "Priority": number,
   "Qtype": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule:

- `ALLOW` - Permit the request to go through. Not available for DNS Firewall Advanced rules.
- `ALERT` - Permit the request to go through but send an alert to the logs.
- `BLOCK` - Disallow the request. This option requires additional details in the rule's `BlockResponse`.

Type: String

Valid Values: `ALLOW | BLOCK | ALERT`

Required: No

### BlockOverrideDnsType

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: `CNAME`

Required: No

### BlockOverrideDomain

The custom DNS record to send back in response to the query. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

### BlockOverrideTtl

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

### BlockResponse

The way that you want DNS Firewall to block the request. Used for the rule action setting BLOCK.

- NODATA - Respond indicating that the query was successful, but no response is available for it.
- NXDOMAIN - Respond indicating that the domain name that's in the query doesn't exist.
- OVERRIDE - Provide a custom override in the response. This option requires custom handling details in the rule's BlockOverride* settings.

Type: String

Valid Values: NODATA | NXDOMAIN | OVERRIDE

Required: No

### ConfidenceThreshold

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create a DNS Firewall Advanced rule. The confidence level values mean:

- LOW: Provides the highest detection rate for threats, but also increases false positives.
- MEDIUM: Provides a balance between detecting threats and false positives.
- HIGH: Detects only the most well corroborated threats with a low rate of false positives.

Type: String

Valid Values: LOW | MEDIUM | HIGH

Required: No

### DnsThreatProtection

The type of the DNS Firewall Advanced rule. This setting is mutually exclusive with `FirewallDomainListId` and `FirewallRuleType`. Valid values are:

- `DGA`: Domain generation algorithms detection. DGAs are used by attackers to generate a large number of domains to launch malware attacks.
- `DNS_TUNNELING`: DNS tunneling detection. DNS tunneling is used by attackers to exfiltrate data from the client by using the DNS tunnel without making a network connection to the client.
- `DICTIONARY_DGA`: Dictionary-based domain generation algorithms detection. Dictionary DGAs use wordlists to generate domains that appear more legitimate, making them harder to detect than traditional DGAs.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

### FirewallDomainListId

The ID of the domain list to use in the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### FirewallDomainRedirectionAction

How you want the the rule to evaluate DNS redirection in the DNS redirection chain, such as CNAME or DNAME.

`INSPECT_REDIRECTION_DOMAIN`: (Default) inspects all domains in the redirection chain. The individual domains in the redirection chain must be added to the domain list.

`TRUST_REDIRECTION_DOMAIN`: Inspects only the first domain in the redirection chain. You don't need to add the subsequent domains in the domain in the redirection list to the domain list.

Type: String

Valid Values: `INSPECT_REDIRECTION_DOMAIN | TRUST_REDIRECTION_DOMAIN`

Required: No

**FirewallRuleGroupId**

The unique identifier of the firewall rule group for the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**FirewallRuleType**

The rule type configuration for the firewall rule. This is a tagged union — set exactly one of its members. This setting is mutually exclusive with the top-level `FirewallDomainListId` and `DnsThreatProtection` fields. Use one of:

- `FirewallAdvancedContentCategory` — match an AWS-managed content category (for example, `VIOLENCE_AND_HATE_SPEECH`).
- `FirewallAdvancedThreatCategory` — match an AWS-managed advanced threat category (for example, `PHISHING`).
- `DnsThreatProtection` — match a built-in DNS Firewall Advanced threat detector (`DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`).
- `PartnerThreatProtection` — match a third-party threat feed delivered through AWS Marketplace. The selected partner must be an active subscription on the calling account.

To enumerate the values supported in your account, call ListFirewallRuleTypes.

Type: FirewallRuleType object

Required: No

**FirewallThreatProtectionId**

The DNS Firewall Advanced rule ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### Name

The name of the rule.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

### Priority

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

You must specify a unique priority for each rule in a rule group. To make it easier to insert rules later, leave space between the numbers, for example, use 100, 200, and so on. You can change the priority setting for the rules in a rule group at any time.

Type: Integer

Required: No

### Qtype

The DNS query type you want the rule to evaluate. Allowed values are;

- A: Returns an IPv4 address.
- AAAA: Returns an Ipv6 address.
- CAA: Restricts CAs that can create SSL/TLS certifications for the domain.
- CNAME: Returns another domain name.
- DS: Record that identifies the DNSSEC signing key of a delegated zone.
- MX: Specifies mail servers.
- NAPTR: Regular-expression-based rewriting of domain names.
- NS: Authoritative name servers.
- PTR: Maps an IP address to a domain name.
- SOA: Start of authority record for the zone.
- SPF: Lists the servers authorized to send emails from a domain.

- SRV: Application specific values that identify servers.
- TXT: Verifies email senders and application-specific values.
- A query type you define by using the DNS type ID, for example 28 for AAAA. The values must be defined as TYPENUMBER, where the NUMBER can be 1-65534, for example, TYPE28. For more information, see List of DNS record types.

> **Note**
>
> If you set up a firewall BLOCK rule with action NXDOMAIN on query type equals AAAA, this action will not be applied to synthetic IPv6 addresses generated when DNS64 is enabled.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

## Response Syntax

```
{
   "FirewallRule": {
      "Action": "string",
      "BlockOverrideDnsType": "string",
      "BlockOverrideDomain": "string",
      "BlockOverrideTtl": number,
      "BlockResponse": "string",
      "ConfidenceThreshold": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DnsThreatProtection": "string",
      "FirewallDomainListId": "string",
      "FirewallDomainRedirectionAction": "string",
      "FirewallRuleGroupId": "string",
      "FirewallRuleType": {
         "DnsThreatProtection": {
            "ConfidenceThreshold": "string",
            "Value": "string"
         },
         "FirewallAdvancedContentCategory": {
```

```
            "Category": "string"
         },
         "FirewallAdvancedThreatCategory": {
            "Category": "string"
         },
         "PartnerThreatProtection": {
            "Partner": "string"
         }
      },
      "FirewallThreatProtectionId": "string",
      "ModificationTime": "string",
      "Name": "string",
      "Priority": number,
      "Qtype": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### FirewallRule

The firewall rule that you just updated.

Type: FirewallRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

### AccessDeniedException

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## Examples

### UpdateFirewallRule Example

This example illustrates one usage of UpdateFirewallRule.

## Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 200
X-Amz-Target: Route53Resolver.UpdateFirewallRule
X-Amz-Date: 20260420T120000Z
User-Agent: aws-cli/2.15.0 Python/3.11.6
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20260420/us-east-1/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
    "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
    "Priority": 150,
    "Action": "BLOCK",
    "BlockResponse": "NXDOMAIN",
    "Name": "block-bad-domains-updated"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 20 Apr 2026 12:00:02 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 460
x-amzn-RequestId: 5c4d3e2f-1a0b-9c8d-7e6f-5a4b3example
Connection: keep-alive

{
    "FirewallRule": {
        "FirewallRuleGroupId": "rslvr-frg-47f93271fexample",
        "FirewallDomainListId": "rslvr-fdl-9e956e9bfexample",
        "Name": "block-bad-domains-updated",
        "Priority": 150,
        "Action": "BLOCK",
        "BlockResponse": "NXDOMAIN",
        "CreatorRequestId": "create-rule-1",
```

```
        "CreationTime": "2026-04-20T12:00:01.000Z",
        "ModificationTime": "2026-04-20T12:00:02.000Z"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateFirewallRuleGroupAssociation

Service: Amazon Route 53 Resolver

Changes the association of a FirewallRuleGroup with a VPC. The association enables DNS filtering for the VPC.

## Request Syntax

```
{
   "FirewallRuleGroupAssociationId": "string",
   "MutationProtection": "string",
   "Name": "string",
   "Priority": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**FirewallRuleGroupAssociationId**

The identifier of the FirewallRuleGroupAssociation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**MutationProtection**

If enabled, this setting disallows modification or removal of the association, to help prevent against accidentally altering DNS firewall protections.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

### Name

The name of the rule group association.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

### Priority

The setting that determines the processing order of the rule group among the rule groups that you associate with the specified VPC. DNS Firewall filters VPC traffic starting from the rule group with the lowest numeric priority setting.

You must specify a unique priority for each rule group that you associate with a single VPC. To make it easier to insert rule groups later, leave space between the numbers, for example, use 100, 200, and so on. You can change the priority setting for a rule group association after you create it.

Type: Integer

Required: No

## Response Syntax

```
{
   "FirewallRuleGroupAssociation": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "FirewallRuleGroupId": "string",
      "Id": "string",
      "ManagedOwnerName": "string",
      "ModificationTime": "string",
      "MutationProtection": "string",
      "Name": "string",
      "Priority": number,
      "Status": "string",
      "StatusMessage": "string",
```

```
        "VpcId": "string"
    }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FirewallRuleGroupAssociation**

The association that you just updated.

Type: FirewallRuleGroupAssociation object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateOutpostResolver

Service: Amazon Route 53 Resolver

You can use `UpdateOutpostResolver` to update the instance count, type, or name of a Resolver on an Outpost.

> **Note**
>
> This operation applies to first-generation AWS Outposts only. On second-generation AWS Outposts, Resolver is managed automatically by AWS and can't be updated directly.

## Request Syntax

```
{
   "Id": "string",
   "InstanceCount": number,
   "Name": "string",
   "PreferredInstanceType": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Id

A unique string that identifies Resolver on an Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### InstanceCount

The Amazon EC2 instance count for a Resolver on the Outpost.

Type: Integer

Required: No

### Name

Name of the Resolver on the Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

### PreferredInstanceType

Amazon EC2 instance type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

## Response Syntax

```
{
   "OutpostResolver": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Id": "string",
      "InstanceCount": number,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Status": "string",
      "StatusMessage": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**OutpostResolver**

The response to an `UpdateOutpostResolver` request.

Type: OutpostResolver object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**ConflictException**

The requested state transition isn't valid. For example, you can't delete a firewall domain list if it is in the process of being deleted, or you can't import domains into a domain list that is in the process of being deleted.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ServiceQuotaExceededException**

Fulfilling the request would cause one or more quotas to be exceeded.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateResolverConfig

Service: Amazon Route 53 Resolver

Updates the behavior configuration of Amazon Route 53 Resolver behavior for a single VPC from Amazon Virtual Private Cloud.

## Request Syntax

```
{
   "AutodefinedReverseFlag": "string",
   "ResourceId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### AutodefinedReverseFlag

Indicates whether or not the Resolver will create autodefined rules for reverse DNS lookups. This is enabled by default. Disabling this option will also affect EC2-Classic instances using ClassicLink. For more information, see ClassicLink in the *Amazon EC2 guide*.

> **Important**
>
> We are retiring EC2-Classic on August 15, 2022. We recommend that you migrate from EC2-Classic to a VPC. For more information, see Migrate from EC2-Classic to a VPC in the *Amazon EC2 guide* and the blog EC2-Classic Networking is Retiring – Here's How to Prepare.

> **Note**
>
> It can take some time for the status change to be completed.

Type: String

Valid Values: `ENABLE | DISABLE | USE_LOCAL_RESOURCE_SETTING`

Required: Yes

**ResourceId**

The ID of the Amazon Virtual Private Cloud VPC or a Route 53 Profile that you're configuring Resolver for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverConfig": {
      "AutodefinedReverse": "string",
      "Id": "string",
      "OwnerId": "string",
      "ResourceId": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverConfig**

An array that contains settings for the specified Resolver configuration.

Type: ResolverConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ResourceUnavailableException**

The specified resource isn't available.

**ResourceType**

For a `ResourceUnavailableException` error, the type of resource that isn't available.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

**ValidationException**

You have provided an invalid command. If you ran the `UpdateFirewallDomains` request. supported values are `ADD`, `REMOVE`, or `REPLACE` a domain.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateResolverDnssecConfig

Service: Amazon Route 53 Resolver

Updates an existing DNSSEC validation configuration. If there is no existing DNSSEC validation configuration, one is created.

## Request Syntax

```
{
   "ResourceId": "string",
   "Validation": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

**ResourceId**

The ID of the virtual private cloud (VPC) that you're updating the DNSSEC validation status for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**Validation**

The new value that you are specifying for DNSSEC validation for the VPC. The value can be `ENABLE` or `DISABLE`. Be aware that it can take time for a validation status change to be completed.

Type: String

Valid Values: `ENABLE | DISABLE | USE_LOCAL_RESOURCE_SETTING`

Required: Yes

## Response Syntax

```
{
   "ResolverDNSSECConfig": {
      "Id": "string",
      "OwnerId": "string",
      "ResourceId": "string",
      "ValidationStatus": "string"
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ResolverDNSSECConfig**

A complex type that contains settings for the specified DNSSEC configuration.

Type: ResolverDnssecConfig object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateResolverEndpoint

Service: Amazon Route 53 Resolver

Updates the name, or endpoint type for an inbound or an outbound Resolver endpoint. You can only update between IPV4 and DUALSTACK, IPV6 endpoint type can't be updated to other type.

## Request Syntax

```
{
   "Dns64Enabled": boolean,
   "Ipv6InternetAccessEnabled": boolean,
   "Name": "string",
   "Protocols": [ "string" ],
   "ResolverEndpointId": "string",
   "ResolverEndpointType": "string",
   "RniEnhancedMetricsEnabled": boolean,
   "TargetNameServerMetricsEnabled": boolean,
   "UpdateIpAddresses": [
      {
         "IpId": "string",
         "Ipv6": "string"
      }
   ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Dns64Enabled

Specifies whether DNS64 is enabled for the inbound Resolver endpoint. When set to `true`, Route 53 Resolver synthesizes AAAA (IPv6) records for IPv4-only services by prepending the `64:ff9b::/96` prefix to the IPv4 address. This enables IPv6-only clients that send queries through the inbound endpoint to reach IPv4-only services. DNS64 works with NAT64 to provide complete IPv6-to-IPv4 translation.

Type: Boolean

Required: No

### Ipv6InternetAccessEnabled

Specifies whether IPv6 internet access is enabled for the outbound Resolver endpoint. When set to `true`, the endpoint elastic network interfaces (ENIs) can forward DNS queries to public IPv6 targets through an internet gateway.

> **Important**
>
> When you enable IPv6 internet access, use network controls like security groups, NACLs, or egress-only internet gateways to protect the endpoint ENIs from unsolicited ingress traffic. Be aware that some network controls can affect DNS query throughput due to connection tracking. For more information, see Amazon EC2 security group connection tracking and Resolver endpoint scaling.

Type: Boolean

Required: No

### Name

The name of the Resolver endpoint that you want to update.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

### Protocols

The protocols you want to use for the endpoint. DoH-FIPS is applicable for default inbound endpoints only.

For a default inbound endpoint you can apply the protocols as follows:

- Do53 and DoH in combination.
- Do53 and DoH-FIPS in combination.
- Do53 alone.
- DoH alone.
- DoH-FIPS alone.

- None, which is treated as Do53.

For a delegation inbound endpoint you can use Do53 only.

For an outbound endpoint you can apply the protocols as follows:

- Do53 and DoH in combination.
- Do53 alone.
- DoH alone.
- None, which is treated as Do53.

> **Important**
>
> You can't change the protocol of an inbound endpoint directly from only Do53 to only DoH, or DoH-FIPS. This is to prevent a sudden disruption to incoming traffic that relies on Do53. To change the protocol from Do53 to DoH, or DoH-FIPS, you must first enable both Do53 and DoH, or Do53 and DoH-FIPS, to make sure that all incoming traffic has transferred to using the DoH protocol, or DoH-FIPS, and then remove the Do53.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: `DoH | Do53 | DoH-FIPS`

Required: No

**ResolverEndpointId**

The ID of the Resolver endpoint that you want to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**ResolverEndpointType**

Specifies the endpoint type for what type of IP address the endpoint uses to forward DNS queries.

Updating to `IPV6` type isn't currently supported.

Type: String

Valid Values: `IPV6 | IPV4 | DUALSTACK`

Required: No

**RniEnhancedMetricsEnabled**

Updates whether RNI enhanced metrics are enabled for the Resolver endpoints. When set to true, one-minute granular metrics are published in CloudWatch for each RNI associated with this endpoint. When set to false, metrics are not published.

> **Note**
>
> Standard CloudWatch pricing and charges are applied for using the Route 53 Resolver endpoint RNI enhanced metrics. For more information, see Detailed metrics.

Type: Boolean

Required: No

**TargetNameServerMetricsEnabled**

Updates whether target name server metrics are enabled for the outbound Resolver endpoints. When set to true, one-minute granular metrics are published in CloudWatch for each target name server associated with this endpoint. When set to false, metrics are not published. This setting is not supported for inbound Resolver endpoints.

> **Note**
>
> Standard CloudWatch pricing and charges are applied for using the Route 53 Resolver endpoint target name server metrics. For more information, see Detailed metrics.

Type: Boolean

Required: No

**UpdateIpAddresses**

Specifies the IPv6 address when you update the Resolver endpoint from IPv4 to dual-stack. If you don't specify an IPv6 address, one will be automatically chosen from your subnet.

Type: Array of UpdateIpAddress objects

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Required: No

## Response Syntax

```
{
   "ResolverEndpoint": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "Direction": "string",
      "Dns64Enabled": boolean,
      "HostVPCId": "string",
      "Id": "string",
      "IpAddressCount": number,
      "Ipv6InternetAccessEnabled": boolean,
      "ModificationTime": "string",
      "Name": "string",
      "OutpostArn": "string",
      "PreferredInstanceType": "string",
      "Protocols": [ "string" ],
      "ResolverEndpointType": "string",
      "RniEnhancedMetricsEnabled": boolean,
      "SecurityGroupIds": [ "string" ],
      "Status": "string",
      "StatusMessage": "string",
      "TargetNameServerMetricsEnabled": boolean
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverEndpoint

The response to an `UpdateResolverEndpoint` request.

Type: ResolverEndpoint object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### UpdateResolverEndpoint Example

This example illustrates one usage of UpdateResolverEndpoint.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: Route53Resolver.UpdateResolverEndpoint
X-Amz-Date: 20181101T192600Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Name":"MyInbound",
    "ResolverEndpointId": "rslvr-in-60b9fd8fdbexample"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 18:52:22 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 479
x-amzn-RequestId: bda80f7b-0f2c-41d1-9043-f36d3example
Connection: keep-alive
```

```
{
    "ResolverEndpoint":{
        "Arn":"arn:aws:route53resolver:us-east-2:0123456789012:resolver-endpoint/rslvr-
in-60b9fd8fdbexample",
        "CreationTime":"2018-11-01T18:44:50.372Z",
        "CreatorRequestId":"1234",
        "Direction":"INBOUND",
        "HostVPCId":"vpc-03cf94c75cexample",
        "Id":"rslvr-in-60b9fd8fdbexample",
        "IpAddressCount":3,
        "ModificationTime":"2018-11-01T18:44:50.372Z",
        "Name":"MyInbound",
        "Protocols": [
            "DoH"
        ],
        "ResolverEndpointType": "IPV4",
        "Dns64Enabled": false,
        "RniEnhancedMetricsEnabled": false,
        "SecurityGroupIds":[
            "sg-020a3554aexample"
        ],
        "Status":"UPDATING",
        "StatusMessage":"Updating the Resolver Endpoint"
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# UpdateResolverRule

Service: Amazon Route 53 Resolver

Updates settings for a specified Resolver rule. `ResolverRuleId` is required, and all other parameters are optional. If you don't specify a parameter, it retains its current value.

## Request Syntax

```
{
   "Config": {
      "Name": "string",
      "ResolverEndpointId": "string",
      "TargetIps": [
         {
            "Ip": "string",
            "Ipv6": "string",
            "Port": number,
            "Protocol": "string",
            "ServerNameIndication": "string"
         }
      ]
   },
   "ResolverRuleId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see Common Parameters.

The request accepts the following data in JSON format.

### Config

The new settings for the Resolver rule.

Type: ResolverRuleConfig object

Required: Yes

### ResolverRuleId

The ID of the Resolver rule that you want to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

## Response Syntax

```
{
   "ResolverRule": {
      "Arn": "string",
      "CreationTime": "string",
      "CreatorRequestId": "string",
      "DelegationRecord": "string",
      "DomainName": "string",
      "Id": "string",
      "ModificationTime": "string",
      "Name": "string",
      "OwnerId": "string",
      "ResolverEndpointId": "string",
      "RuleType": "string",
      "ShareStatus": "string",
      "Status": "string",
      "StatusMessage": "string",
      "TargetIps": [
         {
            "Ip": "string",
            "Ipv6": "string",
            "Port": number,
            "Protocol": "string",
            "ServerNameIndication": "string"
         }
      ]
   }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### ResolverRule

The response to an `UpdateResolverRule` request.

Type: ResolverRule object

## Errors

For information about the errors that are common to all actions, see Common Error Types.

**AccessDeniedException**

The current account doesn't have the IAM permissions required to perform the specified Resolver operation.

This error can also be thrown when a customer has reached the 5120 character limit for a resource policy for CloudWatch Logs.

HTTP Status Code: 400

**InternalServiceErrorException**

We encountered an unknown error. Try again in a few minutes.

HTTP Status Code: 400

**InvalidParameterException**

One or more parameters in this request are not valid.

**FieldName**

For an `InvalidParameterException` error, the name of the parameter that's invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is invalid.

HTTP Status Code: 400

**LimitExceededException**

The request caused one or more limits to be exceeded.

**ResourceType**

For a `LimitExceededException` error, the type of resource that exceeded the current limit.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource doesn't exist.

**ResourceType**

For a `ResourceNotFoundException` error, the type of resource that doesn't exist.

HTTP Status Code: 400

**ResourceUnavailableException**

The specified resource isn't available.

**ResourceType**

For a `ResourceUnavailableException` error, the type of resource that isn't available.

HTTP Status Code: 400

**ThrottlingException**

The request was throttled. Try again in a few minutes.

HTTP Status Code: 400

## Examples

### UpdateResolverRule Example

This example illustrates one usage of UpdateResolverRule.

### Sample Request

```
POST / HTTP/1.1
Host: route53resolver.us-east-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 170
X-Amz-Target: Route53Resolver.UpdateResolverRule
X-Amz-Date: 20181101T192331Z
User-Agent: aws-cli/1.16.45 Python/2.7.10 Darwin/16.7.0 botocore/1.12.35
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
```

```
               Credential=AKIAJJ2SONIPEXAMPLE/20181101/us-east-2/route53resolver/
aws4_request,
               SignedHeaders=content-type;host;x-amz-date;x-amz-target,
               Signature=[calculated-signature]

{
    "Config": {
        "Name": "MyRule",
        "ResolverEndpointId": "rslvr-out-fdc049932dexample",
        "TargetIps": [
            {
                "Ip": "192.0.2.6"
            }
        ]
    },
    "ResolverRuleId": "rslvr-rr-5328a0899aexample"
}
```

## Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 01 Nov 2018 19:23:31 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 464
x-amzn-RequestId: f51a7bc8-e9c6-4399-b408-086ecexample
Connection: keep-alive

{
    "ResolverRule": {
        "Arn": "arn:aws:route53resolver:us-east-2:123456789012:resolver-rule/rslvr-
rr-5328a0899aexample",
        "CreatorRequestId": "999",
        "DomainName": "example.net",
        "Id": "rslvr-rr-5328a0899aexample",
        "Name": "MyRule",
        "OwnerId": "123456789012",
        "ResolverEndpointId": "rslvr-out-fdc049932dexample",
        "RuleType": "FORWARD",
        "ShareStatus": "NOT_SHARED",
        "Status": "COMPLETE",
        "StatusMessage": "[Trace id: 1-5bdb52b3-68082ffc336d18153example] Successfully
 updated Resolver Rule.",
        "TargetIps": [
```

```
            {
                "Ip": "192.0.2.6",
                "Port": 53
            }
        ]
    }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

# Data Types

The following data types are supported by Amazon Route 53:

- AccountLimit
- AlarmIdentifier
- AliasTarget
- Change
- ChangeBatch
- ChangeInfo
- CidrBlockSummary
- CidrCollection
- CidrCollectionChange
- CidrRoutingConfig
- CloudWatchAlarmConfiguration
- CollectionSummary
- Coordinates
- DelegationSet
- Dimension
- DNSSECStatus
- GeoLocation
- GeoLocationDetails
- GeoProximityLocation
- HealthCheck
- HealthCheckConfig
- HealthCheckObservation
- HostedZone
- HostedZoneConfig
- HostedZoneFailureReasons
- HostedZoneFeatures
- HostedZoneLimit

- HostedZoneOwner
- HostedZoneSummary
- KeySigningKey
- LinkedService
- LocationSummary
- ProtectionError
- QueryLoggingConfig
- ResourceRecord
- ResourceRecordSet
- ResourceRecordSetProtection
- ResourceRecordSetProtectionConfig
- ResourceRecordSetProtectionKey
- ResourceTagSet
- ReusableDelegationSetLimit
- StatusReport
- Tag
- TrafficPolicy
- TrafficPolicyInstance
- TrafficPolicySummary
- VPC

The following data types are supported by Amazon Route 53 domain registration:

- BillingRecord
- Consent
- ContactDetail
- DnssecKey
- DnssecSigningAttributes
- DomainPrice
- DomainSuggestion
- DomainSummary

- DomainTransferability
- ExtraParam
- FilterCondition
- Nameserver
- OperationSummary
- PriceWithCurrency
- SortCondition
- Tag

The following data types are supported by Amazon Route 53 Global Resolver:

- AccessSourcesItem
- AccessTokenItem
- BatchCreateFirewallRuleInputItem
- BatchCreateFirewallRuleOutputItem
- BatchCreateFirewallRuleResult
- BatchDeleteFirewallRuleInputItem
- BatchDeleteFirewallRuleOutputItem
- BatchDeleteFirewallRuleResult
- BatchUpdateFirewallRuleInputItem
- BatchUpdateFirewallRuleOutputItem
- BatchUpdateFirewallRuleResult
- DNSViewSummary
- FirewallDomainListsItem
- FirewallRulesItem
- GlobalResolversItem
- HostedZoneAssociationSummary
- ManagedFirewallDomainListsItem
- ValidationExceptionField

The following data types are supported by Route 53 Profiles:

- Profile
- ProfileAssociation
- ProfileResourceAssociation
- ProfileSummary
- Tag

The following data types are supported by Amazon Route 53 Resolver:

- BatchCreateFirewallRuleError
- BatchDeleteFirewallRuleError
- BatchUpdateFirewallRuleError
- CreateFirewallRuleEntry
- DeleteFirewallRuleEntry
- DnsThreatProtectionRuleTypeConfig
- Filter
- FirewallAdvancedContentCategoryConfig
- FirewallAdvancedThreatCategoryConfig
- FirewallConfig
- FirewallDomainList
- FirewallDomainListMetadata
- FirewallRule
- FirewallRuleGroup
- FirewallRuleGroupAssociation
- FirewallRuleGroupMetadata
- FirewallRuleType
- FirewallRuleTypeDefinition
- IpAddressRequest
- IpAddressResponse
- IpAddressUpdate
- OutpostResolver
- PartnerThreatProtectionConfig

- ResolverConfig
- ResolverDnssecConfig
- ResolverEndpoint
- ResolverQueryLogConfig
- ResolverQueryLogConfigAssociation
- ResolverRule
- ResolverRuleAssociation
- ResolverRuleConfig
- SubscriptionInfo
- Tag
- TargetAddress
- UpdateFirewallRuleEntry
- UpdateIpAddress

## Amazon Route 53

The following data types are supported by Amazon Route 53:

- AccountLimit
- AlarmIdentifier
- AliasTarget
- Change
- ChangeBatch
- ChangeInfo
- CidrBlockSummary
- CidrCollection
- CidrCollectionChange
- CidrRoutingConfig
- CloudWatchAlarmConfiguration
- CollectionSummary
- Coordinates

- DelegationSet
- Dimension
- DNSSECStatus
- GeoLocation
- GeoLocationDetails
- GeoProximityLocation
- HealthCheck
- HealthCheckConfig
- HealthCheckObservation
- HostedZone
- HostedZoneConfig
- HostedZoneFailureReasons
- HostedZoneFeatures
- HostedZoneLimit
- HostedZoneOwner
- HostedZoneSummary
- KeySigningKey
- LinkedService
- LocationSummary
- ProtectionError
- QueryLoggingConfig
- ResourceRecord
- ResourceRecordSet
- ResourceRecordSetProtection
- ResourceRecordSetProtectionConfig
- ResourceRecordSetProtectionKey
- ResourceTagSet
- ReusableDelegationSetLimit
- StatusReport
- Tag

- TrafficPolicy
- TrafficPolicyInstance
- TrafficPolicySummary
- VPC

# AccountLimit

Service: Amazon Route 53

A complex type that contains the type of limit that you specified in the request and the current value for that limit.

## Contents

### Type

The limit that you requested. Valid values include the following:

- **MAX_HEALTH_CHECKS_BY_OWNER**: The maximum number of health checks that you can create using the current account.
- **MAX_HOSTED_ZONES_BY_OWNER**: The maximum number of hosted zones that you can create using the current account.
- **MAX_REUSABLE_DELEGATION_SETS_BY_OWNER**: The maximum number of reusable delegation sets that you can create using the current account.
- **MAX_TRAFFIC_POLICIES_BY_OWNER**: The maximum number of traffic policies that you can create using the current account.
- **MAX_TRAFFIC_POLICY_INSTANCES_BY_OWNER**: The maximum number of traffic policy instances that you can create using the current account. (Traffic policy instances are referred to as traffic flow policy records in the Amazon Route 53 console.)

Type: String

Valid Values: `MAX_HEALTH_CHECKS_BY_OWNER | MAX_HOSTED_ZONES_BY_OWNER | MAX_TRAFFIC_POLICY_INSTANCES_BY_OWNER | MAX_REUSABLE_DELEGATION_SETS_BY_OWNER | MAX_TRAFFIC_POLICIES_BY_OWNER`

Required: Yes

### Value

The current value for the limit that is specified by Type.

Type: Long

Valid Range: Minimum value of 1.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AlarmIdentifier

Service: Amazon Route 53

A complex type that identifies the CloudWatch alarm that you want Amazon Route 53 health checkers to use to determine whether the specified health check is healthy.

## Contents

### Name

The name of the CloudWatch alarm that you want Amazon Route 53 health checkers to use to determine whether this health check is healthy.

> **Note**
>
> Route 53 supports CloudWatch alarms with the following features:
>
> - Standard-resolution metrics. High-resolution metrics aren't supported. For more information, see High-Resolution Metrics in the *Amazon CloudWatch User Guide*.
> - Statistics: Average, Minimum, Maximum, Sum, and SampleCount. Extended statistics aren't supported.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

### Region

For the CloudWatch alarm that you want Route 53 health checkers to use to determine whether this health check is healthy, the region that the alarm was created in.

For the current list of CloudWatch regions, see Amazon CloudWatch endpoints and quotas in the *Amazon Web Services General Reference*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-east-2 | us-west-1 | us-west-2 | ca-central-1 | eu-central-1 | eu-central-2 | eu-west-1 | eu-west-2 | eu-west-3 |`

`ap-east-1 | me-south-1 | me-central-1 | ap-south-1 | ap-south-2 | ap-southeast-1 | ap-southeast-2 | ap-southeast-3 | ap-northeast-1 | ap-northeast-2 | ap-northeast-3 | eu-north-1 | sa-east-1 | cn-northwest-1 | cn-north-1 | af-south-1 | eu-south-1 | eu-south-2 | us-gov-west-1 | us-gov-east-1 | us-iso-east-1 | us-iso-west-1 | us-isob-east-1 | ap-southeast-4 | il-central-1 | ca-west-1 | ap-southeast-5 | mx-central-1 | us-isof-south-1 | us-isof-east-1 | ap-southeast-7 | ap-east-2 | eu-isoe-west-1 | ap-southeast-6 | us-isob-west-1 | eusc-de-east-1`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AliasTarget

Service: Amazon Route 53

*Alias resource record sets only:* Information about the AWS resource, such as a CloudFront distribution or an Amazon S3 bucket, that you want to route traffic to.

When creating resource record sets for a private hosted zone, note the following:

- For information about creating failover resource record sets in a private hosted zone, see Configuring Failover in a Private Hosted Zone.

## Contents

### DNSName

*Alias resource record sets only:* The value that you specify depends on where you want to route queries:

Amazon API Gateway custom regional APIs and edge-optimized APIs

Specify the applicable domain name for your API. You can get the applicable value using the AWS CLI command get-domain-names:

- For regional APIs, specify the value of `regionalDomainName`.
- For edge-optimized APIs, specify the value of `distributionDomainName`. This is the name of the associated CloudFront distribution, such as `da1b2c3d4e5.cloudfront.net`.

> **Note**
>
> The name of the record that you're creating must match a custom domain name for your API, such as `api.example.com`.

Amazon Virtual Private Cloud interface VPC endpoint

Enter the API endpoint for the interface endpoint, such as `vpce-123456789abcdef01-example-us-east-1a.elasticloadbalancing.us-east-1.vpce.amazonaws.com`. For edge-optimized APIs, this is the domain name for the corresponding CloudFront distribution. You can get the value of `DnsName` using the AWS CLI command describe-vpc-endpoints.

CloudFront distribution

Specify the domain name that CloudFront assigned when you created your distribution.

Your CloudFront distribution must include an alternate domain name that matches the name of the resource record set. For example, if the name of the resource record set is *acme.example.com*, your CloudFront distribution must include *acme.example.com* as one of the alternate domain names. For more information, see Using Alternate Domain Names (CNAMEs) in the *Amazon CloudFront Developer Guide*.

You can't create a resource record set in a private hosted zone to route traffic to a CloudFront distribution.

**Note**

For failover alias records, you can't specify a CloudFront distribution for both the primary and secondary records. A distribution must include an alternate domain name that matches the name of the record. However, the primary and secondary records have the same name, and you can't include the same alternate domain name in more than one distribution.

Elastic Beanstalk environment

If the domain name for your Elastic Beanstalk environment includes the region that you deployed the environment in, you can create an alias record that routes traffic to the environment. For example, the domain name `my-environment.us-west-2.elasticbeanstalk.com` is a regionalized domain name.

**Important**

For environments that were created before early 2016, the domain name doesn't include the region. To route traffic to these environments, you must create a CNAME record instead of an alias record. Note that you can't create a CNAME record for the root domain name. For example, if your domain name is example.com, you can create a record that routes traffic for acme.example.com to your Elastic Beanstalk environment, but you can't create a record that routes traffic for example.com to your Elastic Beanstalk environment.

For Elastic Beanstalk environments that have regionalized subdomains, specify the CNAME attribute for the environment. You can use the following methods to get the value of the CNAME attribute:

- *AWS Management Console* : For information about how to get the value by using the console, see Using Custom Domains with AWS Elastic Beanstalk in the *AWS Elastic Beanstalk Developer Guide*.
- *Elastic Beanstalk API*: Use the `DescribeEnvironments` action to get the value of the CNAME attribute. For more information, see DescribeEnvironments in the *AWS Elastic Beanstalk API Reference*.
- *AWS CLI* : Use the `describe-environments` command to get the value of the CNAME attribute. For more information, see describe-environments in the *AWS CLI Command Reference*.

ELB load balancer

Specify the DNS name that is associated with the load balancer. Get the DNS name by using the AWS Management Console, the ELB API, or the AWS CLI.

- **AWS Management Console** : Go to the EC2 page, choose **Load Balancers** in the navigation pane, choose the load balancer, choose the **Description** tab, and get the value of the **DNS name** field.

  If you're routing traffic to a Classic Load Balancer, get the value that begins with **dualstack**. If you're routing traffic to another type of load balancer, get the value that applies to the record type, A or AAAA.
- **Elastic Load Balancing API**: Use `DescribeLoadBalancers` to get the value of `DNSName`. For more information, see the applicable guide:
  - Classic Load Balancers: DescribeLoadBalancers
  - Application and Network Load Balancers: DescribeLoadBalancers
- **AWS CLI** : Use `describe-load-balancers` to get the value of `DNSName`. For more information, see the applicable guide:
  - Classic Load Balancers: describe-load-balancers
  - Application and Network Load Balancers: describe-load-balancers

AWS Global Accelerator accelerator

Specify the DNS name for your accelerator:

- **Global Accelerator API:** To get the DNS name, use DescribeAccelerator.

- **AWS CLI:** To get the DNS name, use describe-accelerator.

Amazon S3 bucket that is configured as a static website

Specify the domain name of the Amazon S3 website endpoint that you created the bucket in, for example, `s3-website.us-east-2.amazonaws.com`. For more information about valid values, see the table Amazon S3 Website Endpoints in the *Amazon Web Services General Reference*. For more information about using S3 buckets for websites, see Getting Started with Amazon Route 53 in the *Amazon Route 53 Developer Guide.*

Another Route 53 resource record set

Specify the value of the `Name` element for a resource record set in the current hosted zone.

> **Note**
>
> If you're creating an alias record that has the same name as the hosted zone (known as the zone apex), you can't specify the domain name for a record for which the value of `Type` is `CNAME`. This is because the alias record must have the same type as the record that you're routing traffic to, and creating a CNAME record for the zone apex isn't supported even for an alias record.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**EvaluateTargetHealth**

*Applies only to alias, failover alias, geolocation alias, latency alias, and weighted alias resource record sets:* When `EvaluateTargetHealth` is `true`, an alias resource record set inherits the health of the referenced AWS resource, such as an ELB load balancer or another resource record set in the hosted zone.

Note the following:

CloudFront distributions

You can't set `EvaluateTargetHealth` to `true` when the alias target is a CloudFront distribution.

Elastic Beanstalk environments that have regionalized subdomains

If you specify an Elastic Beanstalk environment in `DNSName` and the environment contains an ELB load balancer, Elastic Load Balancing routes queries only to the healthy Amazon EC2 instances that are registered with the load balancer. (An environment automatically contains an ELB load balancer if it includes more than one Amazon EC2 instance.) If you set `EvaluateTargetHealth` to `true` and either no Amazon EC2 instances are healthy or the load balancer itself is unhealthy, Route 53 routes queries to other available resources that are healthy, if any.

If the environment contains a single Amazon EC2 instance, there are no special requirements.

ELB load balancers

Health checking behavior depends on the type of load balancer:

- **Classic Load Balancers**: If you specify an ELB Classic Load Balancer in `DNSName`, Elastic Load Balancing routes queries only to the healthy Amazon EC2 instances that are registered with the load balancer. If you set `EvaluateTargetHealth` to `true` and either no EC2 instances are healthy or the load balancer itself is unhealthy, Route 53 routes queries to other resources.
- **Application and Network Load Balancers**: If you specify an ELB Application or Network Load Balancer and you set `EvaluateTargetHealth` to `true`, Route 53 routes queries to the load balancer based on the health of the target groups that are associated with the load balancer:
  - For an Application or Network Load Balancer to be considered healthy, every target group that contains targets must contain at least one healthy target. If any target group contains only unhealthy targets, the load balancer is considered unhealthy, and Route 53 routes queries to other resources.
  - A target group that has no registered targets is considered unhealthy.

> **Note**
>
> When you create a load balancer, you configure settings for Elastic Load Balancing health checks; they're not Route 53 health checks, but they perform a similar function. Do not create Route 53 health checks for the EC2 instances that you register with an ELB load balancer.

API Gateway APIs

There are no special requirements for setting `EvaluateTargetHealth` to `true` when the alias target is an API Gateway API. However, because API Gateway is highly available by design, `EvaluateTargetHealth` provides no operational benefit and Route 53 health checks are recommended instead for failover scenarios.

S3 buckets

There are no special requirements for setting `EvaluateTargetHealth` to `true` when the alias target is an S3 bucket. However, because S3 buckets are highly available by design, `EvaluateTargetHealth` provides no operational benefit and Route 53 health checks are recommended instead for failover scenarios.

VPC interface endpoints

There are no special requirements for setting `EvaluateTargetHealth` to `true` when the alias target is a VPC interface endpoint. However, because VPC interface endpoints are highly available by design, `EvaluateTargetHealth` provides no operational benefit and Route 53 health checks are recommended instead for failover scenarios.

Other records in the same hosted zone

If the AWS resource that you specify in `DNSName` is a record or a group of records (for example, a group of weighted records) but is not another alias record, we recommend that you associate a health check with all of the records in the alias target. For more information, see What Happens When You Omit Health Checks? in the *Amazon Route 53 Developer Guide*.

**Note**

While `EvaluateTargetHealth` can be set to `true` for highly available AWS services (such as S3 buckets, VPC interface endpoints, and API Gateway), these services are designed for high availability and rarely experience outages that would be detected by this feature. For failover scenarios with these services, consider using Route 53 health checks that monitor your application's ability to access the service instead.

For more information and examples, see Amazon Route 53 Health Checks and DNS Failover in the *Amazon Route 53 Developer Guide*.

Type: Boolean

Required: Yes

**HostedZoneId**

*Alias resource records sets only*: The value used depends on where you want to route traffic:

Amazon API Gateway custom regional APIs and edge-optimized APIs

Specify the hosted zone ID for your API. You can get the applicable value using the AWS CLI command get-domain-names:

- For regional APIs, specify the value of `regionalHostedZoneId`.
- For edge-optimized APIs, specify the value of `distributionHostedZoneId`.

Amazon Virtual Private Cloud interface VPC endpoint

Specify the hosted zone ID for your interface endpoint. You can get the value of `HostedZoneId` using the AWS CLI command describe-vpc-endpoints.

CloudFront distribution

Specify `Z2FDTNDATAQYW2`.

> **Note**
>
> Alias resource record sets for CloudFront can't be created in a private zone.

Elastic Beanstalk environment

Specify the hosted zone ID for the region that you created the environment in. The environment must have a regionalized subdomain. For a list of regions and the corresponding hosted zone IDs, see AWS Elastic Beanstalk endpoints and quotas in the *Amazon Web Services General Reference*.

ELB load balancer

Specify the value of the hosted zone ID for the load balancer. Use the following methods to get the hosted zone ID:

- Elastic Load Balancing endpoints and quotas topic in the *Amazon Web Services General Reference*: Use the value that corresponds with the region that you created your load balancer in. Note that there are separate columns for Application and Classic Load Balancers and for Network Load Balancers.

- **AWS Management Console** : Go to the Amazon EC2 page, choose **Load Balancers** in the navigation pane, select the load balancer, and get the value of the **Hosted zone** field on the **Description** tab.
- **Elastic Load Balancing API**: Use `DescribeLoadBalancers` to get the applicable value. For more information, see the applicable guide:
  - Classic Load Balancers: Use DescribeLoadBalancers to get the value of `CanonicalHostedZoneNameId`.
  - Application and Network Load Balancers: Use DescribeLoadBalancers to get the value of `CanonicalHostedZoneId`.
- **AWS CLI** : Use `describe-load-balancers` to get the applicable value. For more information, see the applicable guide:
  - Classic Load Balancers: Use describe-load-balancers to get the value of `CanonicalHostedZoneNameId`.
  - Application and Network Load Balancers: Use describe-load-balancers to get the value of `CanonicalHostedZoneId`.

AWS Global Accelerator accelerator

Specify `Z2BJ6XQ5FK7U4H`.

An Amazon S3 bucket configured as a static website

Specify the hosted zone ID for the region that you created the bucket in. For more information about valid values, see the table Amazon S3 Website Endpoints in the *Amazon Web Services General Reference*.

Another Route 53 resource record set in your hosted zone

Specify the hosted zone ID of your hosted zone. (An alias resource record set can't reference a resource record set in a different hosted zone.)

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Change

Service: Amazon Route 53

The information for each resource record set that you want to change.

## Contents

### Action

The action to perform:

- CREATE: Creates a resource record set that has the specified values.
- DELETE: Deletes a existing resource record set.

> **Important**
>
> To delete the resource record set that is associated with a traffic policy instance, use DeleteTrafficPolicyInstance. Amazon Route 53 will delete the resource record set automatically. If you delete the resource record set by using ChangeResourceRecordSets, Route 53 doesn't automatically delete the traffic policy instance, and you'll continue to be charged for it even though it's no longer in use.

- UPSERT: If a resource record set doesn't already exist, Route 53 creates it. If a resource record set does exist, Route 53 updates it with the values in the request.

Type: String

Valid Values: CREATE | DELETE | UPSERT

Required: Yes

### ResourceRecordSet

Information about the resource record set to create, delete, or update.

Type: ResourceRecordSet object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ChangeBatch

Service: Amazon Route 53

The information for a change request.

## Contents

### Changes

Information about the changes to make to the record sets.

Type: Array of Change objects

Array Members: Minimum number of 1 item.

Required: Yes

### Comment

*Optional:* Any comments you want to include about a change batch request.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ChangeInfo

Service: Amazon Route 53

A complex type that describes change information about changes made to your hosted zone.

## Contents

**Id**

This element contains an ID that you use when performing a GetChange action to get detailed information about the change.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

**Status**

The current state of the request. `PENDING` indicates that this request has not yet been applied to all Amazon Route 53 DNS servers.

Type: String

Valid Values: `PENDING | INSYNC`

Required: Yes

**SubmittedAt**

The date and time that the change request was submitted in ISO 8601 format and Coordinated Universal Time (UTC). For example, the value `2017-03-27T17:48:16.751Z` represents March 27, 2017 at 17:48:16.751 UTC.

Type: Timestamp

Required: Yes

**Comment**

A comment you can provide.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CidrBlockSummary

Service: Amazon Route 53

A complex type that lists the CIDR blocks.

## Contents

### CidrBlock

Value for the CIDR block.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `.*\S.*`

Required: No

### LocationName

The location name of the CIDR block.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Pattern: `[0-9A-Za-z_\-]+`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CidrCollection

Service: Amazon Route 53

A complex type that identifies a CIDR collection.

## Contents

**Arn**

The ARN of the collection. Can be used to reference the collection in IAM policy or in another AWS account.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `.*\S.*`

Required: No

**Id**

The unique ID of the CIDR collection.

Type: String

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: No

**Name**

The name of a CIDR collection.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[0-9A-Za-z_\-]+`

Required: No

**Version**

A sequential counter that Route 53 sets to 1 when you create a CIDR collection and increments by 1 each time you update settings for the CIDR collection.

Type: Long

Valid Range: Minimum value of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CidrCollectionChange

Service: Amazon Route 53

A complex type that contains information about the CIDR collection change.

## Contents

### Action

CIDR collection change action.

Type: String

Valid Values: `PUT | DELETE_IF_EXISTS`

Required: Yes

### CidrList

List of CIDR blocks.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `.*\S.*`

Required: Yes

### LocationName

Name of the location that is associated with the CIDR collection.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Pattern: `[0-9A-Za-z_\-]+`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CidrRoutingConfig

Service: Amazon Route 53

The object that is specified in resource record set object when you are linking a resource record set to a CIDR location.

A `LocationName` with an asterisk “*” can be used to create a default CIDR record. `CollectionId` is still required for default record.

## Contents

**CollectionId**

The CIDR collection ID.

Type: String

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: Yes

**LocationName**

The CIDR collection location name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Pattern: `[0-9A-Za-z_\-\*]+`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CloudWatchAlarmConfiguration

Service: Amazon Route 53

A complex type that contains information about the CloudWatch alarm that Amazon Route 53 is monitoring for this health check.

## Contents

**ComparisonOperator**

For the metric that the CloudWatch alarm is associated with, the arithmetic operation that is used for the comparison.

Type: String

Valid Values: `GreaterThanOrEqualToThreshold | GreaterThanThreshold | LessThanThreshold | LessThanOrEqualToThreshold`

Required: Yes

**EvaluationPeriods**

For the metric that the CloudWatch alarm is associated with, the number of periods that the metric is compared to the threshold.

Type: Integer

Valid Range: Minimum value of 1.

Required: Yes

**MetricName**

The name of the CloudWatch metric that the alarm is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**Namespace**

The namespace of the metric that the alarm is associated with. For more information, see Amazon CloudWatch Namespaces, Dimensions, and Metrics Reference in the *Amazon CloudWatch User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**Period**

For the metric that the CloudWatch alarm is associated with, the duration of one evaluation period in seconds.

Type: Integer

Valid Range: Minimum value of 60.

Required: Yes

**Statistic**

For the metric that the CloudWatch alarm is associated with, the statistic that is applied to the metric.

Type: String

Valid Values: `Average | Sum | SampleCount | Maximum | Minimum`

Required: Yes

**Threshold**

For the metric that the CloudWatch alarm is associated with, the value the metric is compared with.

Type: Double

Required: Yes

**Dimensions**

For the metric that the CloudWatch alarm is associated with, a complex type that contains information about the dimensions for the metric. For information, see Amazon CloudWatch Namespaces, Dimensions, and Metrics Reference in the *Amazon CloudWatch User Guide*.

Type: Array of Dimension objects

Array Members: Maximum number of 10 items.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CollectionSummary

Service: Amazon Route 53

A complex type that is an entry in an CidrCollection array.

## Contents

**Arn**

The ARN of the collection summary. Can be used to reference the collection in IAM policy or cross-account.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `.*\S.*`

Required: No

**Id**

Unique ID for the CIDR collection.

Type: String

Pattern: `[0-9a-f]{8}-(?:[0-9a-f]{4}-){3}[0-9a-f]{12}`

Required: No

**Name**

The name of a CIDR collection.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[0-9A-Za-z_\-]+`

Required: No

**Version**

A sequential counter that Route 53 sets to 1 when you create a CIDR collection and increments by 1 each time you update settings for the CIDR collection.

Type: Long

Valid Range: Minimum value of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Coordinates

Service: Amazon Route 53

A complex type that lists the coordinates for a geoproximity resource record.

## Contents

**Latitude**

Specifies a coordinate of the north–south position of a geographic point on the surface of the Earth (-90 - 90).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 6.

Pattern: `[-+]?[0-9]{1,2}(\.[0-9]{0,2})?`

Required: Yes

**Longitude**

Specifies a coordinate of the east–west position of a geographic point on the surface of the Earth (-180 - 180).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 7.

Pattern: `[-+]?[0-9]{1,3}(\.[0-9]{0,2})?`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DelegationSet

Service: Amazon Route 53

A complex type that lists the name servers in a delegation set, as well as the `CallerReference` and the `ID` for the delegation set.

## Contents

**NameServers**

A complex type that contains a list of the authoritative name servers for a hosted zone or for a reusable delegation set.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Maximum length of 1024.

Required: Yes

**CallerReference**

The value that you specified for `CallerReference` when you created the reusable delegation set.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: No

**Id**

The ID that Amazon Route 53 assigns to a reusable delegation set.

Type: String

Length Constraints: Maximum length of 32.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Dimension

Service: Amazon Route 53

For the metric that the CloudWatch alarm is associated with, a complex type that contains information about one dimension.

## Contents

**Name**

For the metric that the CloudWatch alarm is associated with, the name of one dimension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

**Value**

For the metric that the CloudWatch alarm is associated with, the value of one dimension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DNSSECStatus

Service: Amazon Route 53

A string representing the status of DNSSEC signing.

## Contents

### ServeSignature

A string that represents the current hosted zone signing status.

Status can have one of the following values:

SIGNING

DNSSEC signing is enabled for the hosted zone.

NOT_SIGNING

DNSSEC signing is not enabled for the hosted zone.

DELETING

DNSSEC signing is in the process of being removed for the hosted zone.

ACTION_NEEDED

There is a problem with signing in the hosted zone that requires you to take action to resolve. For example, the customer managed key might have been deleted, or the permissions for the customer managed key might have been changed.

INTERNAL_FAILURE

There was an error during a request. Before you can continue to work with DNSSEC signing, including with key-signing keys (KSKs), you must correct the problem by enabling or disabling DNSSEC signing for the hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No

**StatusMessage**

The status message provided for the following DNSSEC signing status: `INTERNAL_FAILURE`. The status message includes information about what the problem might be and steps that you can take to correct the issue.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GeoLocation

Service: Amazon Route 53

A complex type that contains information about a geographic location.

## Contents

### ContinentCode

The two-letter code for the continent.

Amazon Route 53 supports the following continent codes:

- **AF**: Africa
- **AN**: Antarctica
- **AS**: Asia
- **EU**: Europe
- **OC**: Oceania
- **NA**: North America
- **SA**: South America

Constraint: Specifying `ContinentCode` with either `CountryCode` or `SubdivisionCode` returns an `InvalidInput` error.

Type: String

Length Constraints: Fixed length of 2.

Required: No

### CountryCode

For geolocation resource record sets, the two-letter code for a country.

Amazon Route 53 uses the two-letter country codes that are specified in ISO standard 3166-1 alpha-2.

Route 53 also supports the country code **UA** for Ukraine.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2.

Required: No

**SubdivisionCode**

For geolocation resource record sets, the two-letter code for a state of the United States. Route 53 doesn't support any other values for `SubdivisionCode`. For a list of state abbreviations, see Appendix B: Two–Letter State and Possession Abbreviations on the United States Postal Service website.

If you specify `subdivisioncode`, you must also specify US for `CountryCode`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 3.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GeoLocationDetails

Service: Amazon Route 53

A complex type that contains the codes and full continent, country, and subdivision names for the specified `geolocation` code.

## Contents

**ContinentCode**

The two-letter code for the continent.

Type: String

Length Constraints: Fixed length of 2.

Required: No

**ContinentName**

The full name of the continent.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

**CountryCode**

The two-letter code for the country.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2.

Required: No

**CountryName**

The name of the country.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**SubdivisionCode**

The code for the subdivision, such as a particular state within the United States. For a list of US state abbreviations, see Appendix B: Two–Letter State and Possession Abbreviations on the United States Postal Service website. For a list of all supported subdivision codes, use the ListGeoLocations API.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 3.

Required: No

**SubdivisionName**

The full name of the subdivision. Route 53 currently supports only states in the United States.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GeoProximityLocation

Service: Amazon Route 53

(Resource record sets only): A complex type that lets you specify where your resources are located. Only one of `LocalZoneGroup`, `Coordinates`, or `AWSRegion` is allowed per request at a time.

For more information about geoproximity routing, see Geoproximity routing in the *Amazon Route 53 Developer Guide*.

## Contents

**AWSRegion**

The AWS Region the resource you are directing DNS traffic to, is in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Bias**

The bias increases or decreases the size of the geographic region from which Route 53 routes traffic to a resource.

To use `Bias` to change the size of the geographic region, specify the applicable value for the bias:

- To expand the size of the geographic region from which Route 53 routes traffic to a resource, specify a positive integer from 1 to 99 for the bias. Route 53 shrinks the size of adjacent regions.
- To shrink the size of the geographic region from which Route 53 routes traffic to a resource, specify a negative bias of -1 to -99. Route 53 expands the size of adjacent regions.

Type: Integer

Valid Range: Minimum value of -99. Maximum value of 99.

Required: No

**Coordinates**

Contains the longitude and latitude for a geographic region.

Type: Coordinates object

Required: No

**LocalZoneGroup**

Specifies an AWS Local Zone Group.

A local Zone Group is usually the Local Zone code without the ending character. For example, if the Local Zone is `us-east-1-bue-1a` the Local Zone Group is `us-east-1-bue-1`.

You can identify the Local Zones Group for a specific Local Zone by using the describe-availability-zones CLI command:

This command returns: `"GroupName": "us-west-2-den-1"`, specifying that the Local Zone `us-west-2-den-1a` belongs to the Local Zone Group `us-west-2-den-1`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HealthCheck

Service: Amazon Route 53

A complex type that contains information about one health check that is associated with the current AWS account.

## Contents

**CallerReference**

A unique string that you specified when you created the health check.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**HealthCheckConfig**

A complex type that contains detailed information about one health check.

Type: HealthCheckConfig object

Required: Yes

**HealthCheckVersion**

The version of the health check. You can optionally pass this value in a call to `UpdateHealthCheck` to prevent overwriting another change to the health check.

Type: Long

Valid Range: Minimum value of 1.

Required: Yes

**Id**

The identifier that Amazon Route 53 assigned to the health check when you created it. When you add or update a resource record set, you use this value to specify which health check to use. The value can be up to 64 characters long.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

**CloudWatchAlarmConfiguration**

A complex type that contains information about the CloudWatch alarm that Amazon Route 53 is monitoring for this health check.

Type: CloudWatchAlarmConfiguration object

Required: No

**LinkedService**

If the health check was created by another service, the service that created the health check. When a health check is created by another service, you can't edit or delete it using Amazon Route 53.

Type: LinkedService object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HealthCheckConfig

Service: Amazon Route 53

A complex type that contains information about the health check.

## Contents

### Type

The type of health check that you want to create, which indicates how Amazon Route 53 determines whether an endpoint is healthy.

> **Important**
>
> You can't change the value of Type after you create a health check.

You can create the following types of health checks:

- **HTTP**: Route 53 tries to establish a TCP connection. If successful, Route 53 submits an HTTP request and waits for an HTTP status code of 200 or greater and less than 400.
- **HTTPS**: Route 53 tries to establish a TCP connection. If successful, Route 53 submits an HTTPS request and waits for an HTTP status code of 200 or greater and less than 400.

  > **Important**
  >
  > If you specify HTTPS for the value of Type, the endpoint must support TLS v1.0, v1.1, or v1.2.

- **HTTP_STR_MATCH**: Route 53 tries to establish a TCP connection. If successful, Route 53 submits an HTTP request and searches the first 5,120 bytes of the response body for the string that you specify in SearchString.
- **HTTPS_STR_MATCH**: Route 53 tries to establish a TCP connection. If successful, Route 53 submits an HTTPS request and searches the first 5,120 bytes of the response body for the string that you specify in SearchString.
- **TCP**: Route 53 tries to establish a TCP connection.
- **CLOUDWATCH_METRIC**: The health check is associated with a CloudWatch alarm. If the state of the alarm is OK, the health check is considered healthy. If the state is ALARM, the

health check is considered unhealthy. If CloudWatch doesn't have sufficient data to determine whether the state is OK or ALARM, the health check status depends on the setting for InsufficientDataHealthStatus: Healthy, Unhealthy, or LastKnownStatus.

- **CALCULATED**: For health checks that monitor the status of other health checks, Route 53 adds up the number of health checks that Route 53 health checkers consider to be healthy and compares that number with the value of HealthThreshold.
- **RECOVERY_CONTROL**: The health check is associated with a Route53 Application Recovery Controller routing control. If the routing control state is ON, the health check is considered healthy. If the state is OFF, the health check is considered unhealthy.

For more information, see How Route 53 Determines Whether an Endpoint Is Healthy in the *Amazon Route 53 Developer Guide*.

Type: String

Valid Values: HTTP | HTTPS | HTTP_STR_MATCH | HTTPS_STR_MATCH | TCP | CALCULATED | CLOUDWATCH_METRIC | RECOVERY_CONTROL

Required: Yes

**AlarmIdentifier**

A complex type that identifies the CloudWatch alarm that you want Amazon Route 53 health checkers to use to determine whether the specified health check is healthy.

Type: AlarmIdentifier object

Required: No

**ChildHealthChecks**

(CALCULATED Health Checks Only) A complex type that contains one ChildHealthCheck element for each health check that you want to associate with a CALCULATED health check.

Type: Array of strings

Array Members: Maximum number of 256 items.

Length Constraints: Maximum length of 64.

Required: No

**Disabled**

Stops Route 53 from performing health checks. When you disable a health check, here's what happens:

- **Health checks that check the health of endpoints:** Route 53 stops submitting requests to your application, server, or other resource.
- **Calculated health checks:** Route 53 stops aggregating the status of the referenced health checks.
- **Health checks that monitor CloudWatch alarms:** Route 53 stops monitoring the corresponding CloudWatch metrics.

After you disable a health check, Route 53 considers the status of the health check to always be healthy. If you configured DNS failover, Route 53 continues to route traffic to the corresponding resources. If you want to stop routing traffic to a resource, change the value of Inverted.

Charges for a health check still apply when the health check is disabled. For more information, see Amazon Route 53 Pricing.

Type: Boolean

Required: No

**EnableSNI**

Specify whether you want Amazon Route 53 to send the value of `FullyQualifiedDomainName` to the endpoint in the `client_hello` message during TLS negotiation. This allows the endpoint to respond to `HTTPS` health check requests with the applicable SSL/TLS certificate.

Some endpoints require that `HTTPS` requests include the host name in the `client_hello` message. If you don't enable SNI, the status of the health check will be `SSL alert handshake_failure`. A health check can also have that status for other reasons. If SNI is enabled and you're still getting the error, check the SSL/TLS configuration on your endpoint and confirm that your certificate is valid.

The SSL/TLS certificate on your endpoint includes a domain name in the `Common Name` field and possibly several more in the `Subject Alternative Names` field. One of the domain names in the certificate should match the value that you specify for `FullyQualifiedDomainName`. If the endpoint responds to the `client_hello`

message with a certificate that does not include the domain name that you specified in `FullyQualifiedDomainName`, a health checker will retry the handshake. In the second attempt, the health checker will omit `FullyQualifiedDomainName` from the `client_hello` message.

Type: Boolean

Required: No

**FailureThreshold**

The number of consecutive health checks that an endpoint must pass or fail for Amazon Route 53 to change the current status of the endpoint from unhealthy to healthy or vice versa. For more information, see How Amazon Route 53 Determines Whether an Endpoint Is Healthy in the *Amazon Route 53 Developer Guide*.

`FailureThreshold` is not supported when you specify a value for `Type` of `RECOVERY_CONTROL`.

Otherwise, if you don't specify a value for `FailureThreshold`, the default value is three health checks.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

**FullyQualifiedDomainName**

Amazon Route 53 behavior depends on whether you specify a value for `IPAddress`.

**If you specify a value for** `IPAddress`:

Amazon Route 53 sends health check requests to the specified IPv4 or IPv6 address and passes the value of `FullyQualifiedDomainName` in the `Host` header for all health checks except TCP health checks. This is typically the fully qualified DNS name of the endpoint on which you want Route 53 to perform health checks.

When Route 53 checks the health of an endpoint, here is how it constructs the `Host` header:

- If you specify a value of `80` for `Port` and `HTTP` or `HTTP_STR_MATCH` for `Type`, Route 53 passes the value of `FullyQualifiedDomainName` to the endpoint in the Host header.

- If you specify a value of 443 for Port and HTTPS or HTTPS_STR_MATCH for Type, Route 53 passes the value of FullyQualifiedDomainName to the endpoint in the Host header.
- If you specify another value for Port and any value except TCP for Type, Route 53 passes FullyQualifiedDomainName:Port to the endpoint in the Host header.

If you don't specify a value for FullyQualifiedDomainName, Route 53 substitutes the value of IPAddress in the Host header in each of the preceding cases.

**If you don't specify a value for** IPAddress:

Route 53 sends a DNS request to the domain that you specify for FullyQualifiedDomainName at the interval that you specify for RequestInterval. Using an IPv4 address that DNS returns, Route 53 then checks the health of the endpoint.

> **Note**
>
> If you don't specify a value for IPAddress, Route 53 uses only IPv4 to send health checks to the endpoint. If there's no resource record set with a type of A for the name that you specify for FullyQualifiedDomainName, the health check fails with a "DNS resolution failed" error.

If you want to check the health of weighted, latency, or failover resource record sets and you choose to specify the endpoint only by FullyQualifiedDomainName, we recommend that you create a separate health check for each endpoint. For example, create a health check for each HTTP server that is serving content for www.example.com. For the value of FullyQualifiedDomainName, specify the domain name of the server (such as us-east-2-www.example.com), not the name of the resource record sets (www.example.com).

> **Important**
>
> In this configuration, if you create a health check for which the value of FullyQualifiedDomainName matches the name of the resource record sets and you then associate the health check with those resource record sets, health check results will be unpredictable.

In addition, if the value that you specify for Type is HTTP, HTTPS, HTTP_STR_MATCH, or HTTPS_STR_MATCH, Route 53 passes the value of FullyQualifiedDomainName in the Host

header, as it does when you specify a value for `IPAddress`. If the value of `Type` is `TCP`, Route 53 doesn't pass a `Host` header.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**HealthThreshold**

The number of child health checks that are associated with a `CALCULATED` health check that Amazon Route 53 must consider healthy for the `CALCULATED` health check to be considered healthy. To specify the child health checks that you want to associate with a `CALCULATED` health check, use the ChildHealthChecks element.

Note the following:

- If you specify a number greater than the number of child health checks, Route 53 always considers this health check to be unhealthy.
- If you specify `0`, Route 53 always considers this health check to be healthy.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 256.

Required: No

**InsufficientDataHealthStatus**

When CloudWatch has insufficient data about the metric to determine the alarm state, the status that you want Amazon Route 53 to assign to the health check:

- `Healthy`: Route 53 considers the health check to be healthy.
- `Unhealthy`: Route 53 considers the health check to be unhealthy.
- `LastKnownStatus`: Route 53 uses the status of the health check from the last time that CloudWatch had sufficient data to determine the alarm state. For new health checks that have no last known status, the default status for the health check is healthy.

Type: String

Valid Values: `Healthy | Unhealthy | LastKnownStatus`

Required: No

**Inverted**

Specify whether you want Amazon Route 53 to invert the status of a health check, for example, to consider a health check unhealthy when it otherwise would be considered healthy.

Type: Boolean

Required: No

**IPAddress**

The IPv4 or IPv6 IP address of the endpoint that you want Amazon Route 53 to perform health checks on. If you don't specify a value for `IPAddress`, Route 53 sends a DNS request to resolve the domain name that you specify in `FullyQualifiedDomainName` at the interval that you specify in `RequestInterval`. Using an IP address returned by DNS, Route 53 then checks the health of the endpoint.

Use one of the following formats for the value of `IPAddress`:

- **IPv4 address**: four values between 0 and 255, separated by periods (.), for example, `192.0.2.44`.
- **IPv6 address**: eight groups of four hexadecimal values, separated by colons (:), for example, `2001:0db8:85a3:0000:0000:abcd:0001:2345`. You can also shorten IPv6 addresses as described in RFC 5952, for example, `2001:db8:85a3::abcd:1:2345`.

If the endpoint is an EC2 instance, we recommend that you create an Elastic IP address, associate it with your EC2 instance, and specify the Elastic IP address for `IPAddress`. This ensures that the IP address of your instance will never change.

For more information, see FullyQualifiedDomainName.

Constraints: Route 53 can't check the health of endpoints for which the IP address is in local, private, non-routable, or multicast ranges. For more information about IP addresses for which you can't create health checks, see the following documents:

- RFC 5735, Special Use IPv4 Addresses
- RFC 6598, IANA-Reserved IPv4 Prefix for Shared Address Space
- RFC 5156, Special-Use IPv6 Addresses

When the value of `Type` is `CALCULATED` or `CLOUDWATCH_METRIC`, omit `IPAddress`.

Type: String

Length Constraints: Maximum length of 45.

Pattern: `(^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$|^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$)`

Required: No

**MeasureLatency**

Specify whether you want Amazon Route 53 to measure the latency between health checkers in multiple AWS regions and your endpoint, and to display CloudWatch latency graphs on the **Health Checks** page in the Route 53 console.

`MeasureLatency` is not supported when you specify a value for `Type` of `RECOVERY_CONTROL`.

> **Important**
>
> You can't change the value of `MeasureLatency` after you create a health check.

Type: Boolean

Required: No

**Port**

The port on the endpoint that you want Amazon Route 53 to perform health checks on.

> **Note**
>
> Don't specify a value for `Port` when you specify a value for `Type` of `CLOUDWATCH_METRIC` or `CALCULATED`.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65535.

Required: No

**Regions**

A complex type that contains one `Region` element for each region from which you want Amazon Route 53 health checkers to check the specified endpoint.

If you don't specify any regions, Route 53 health checkers automatically performs checks from all of the regions that are listed under **Valid Values**.

If you update a health check to remove a region that has been performing health checks, Route 53 will briefly continue to perform checks from that region to ensure that some health checkers are always checking the endpoint (for example, if you replace three regions with four different regions).

Type: Array of strings

Array Members: Minimum number of 3 items. Maximum number of 64 items.

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-west-1 | us-west-2 | eu-west-1 | ap-southeast-1 | ap-southeast-2 | ap-northeast-1 | sa-east-1`

Required: No

**RequestInterval**

The number of seconds between the time that Amazon Route 53 gets a response from your endpoint and the time that it sends the next health check request. Each Route 53 health checker makes requests at this interval.

`RequestInterval` is not supported when you specify a value for `Type` of `RECOVERY_CONTROL`.

> **Important**
>
> You can't change the value of `RequestInterval` after you create a health check.

If you don't specify a value for `RequestInterval`, the default value is `30` seconds.

Type: Integer

Valid Range: Minimum value of 10. Maximum value of 30.

Required: No

**ResourcePath**

The path, if any, that you want Amazon Route 53 to request when performing health checks. The path can be any value for which your endpoint will return an HTTP status code of 2xx or 3xx when the endpoint is healthy, for example, the file /docs/route53-health-check.html. You can also include query string parameters, for example, `/welcome.html?language=jp&login=y`.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**RoutingControlArn**

The Amazon Resource Name (ARN) for the Route 53 Application Recovery Controller routing control.

For more information about Route 53 Application Recovery Controller, see Route 53 Application Recovery Controller Developer Guide..

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**SearchString**

If the value of Type is `HTTP_STR_MATCH` or `HTTPS_STR_MATCH`, the string that you want Amazon Route 53 to search for in the response body from the specified resource. If the string appears in the response body, Route 53 considers the resource healthy.

Route 53 considers case when searching for `SearchString` in the response body.

Type: String

Length Constraints: Maximum length of 255.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HealthCheckObservation

Service: Amazon Route 53

A complex type that contains the last failure reason as reported by one Amazon Route 53 health checker.

## Contents

### IPAddress

The IP address of the Amazon Route 53 health checker that provided the failure reason in `StatusReport`.

Type: String

Length Constraints: Maximum length of 45.

Pattern: `(^((([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5]))$|^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3,3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$)`

Required: No

### Region

The region of the Amazon Route 53 health checker that provided the status in `StatusReport`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-west-1 | us-west-2 | eu-west-1 | ap-southeast-1 | ap-southeast-2 | ap-northeast-1 | sa-east-1`

Required: No

**StatusReport**

A complex type that contains the last failure reason as reported by one Amazon Route 53 health checker and the time of the failed health check.

Type: StatusReport object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZone

Service: Amazon Route 53

A complex type that contains general information about the hosted zone.

## Contents

**CallerReference**

The value that you specified for `CallerReference` when you created the hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

**Id**

The ID that Amazon Route 53 assigned to the hosted zone when you created it.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

**Name**

The name of the domain. For public hosted zones, this is the name that you have registered with your DNS registrar.

For information about how to specify characters other than `a-z`, `0-9`, and `-` (hyphen) and how to specify internationalized domain names, see CreateHostedZone.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**Config**

A complex type that includes the `Comment` and `PrivateZone` elements. If you omitted the `HostedZoneConfig` and `Comment` elements from the request, the `Config` and `Comment` elements don't appear in the response.

Type: HostedZoneConfig object

Required: No

**Features**

The features configuration for the hosted zone, including accelerated recovery settings and status information.

Type: HostedZoneFeatures object

Required: No

**LinkedService**

If the hosted zone was created by another service, the service that created the hosted zone. When a hosted zone is created by another service, you can't edit or delete it using Route 53.

Type: LinkedService object

Required: No

**ResourceRecordSetCount**

The number of resource record sets in the hosted zone.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZoneConfig

Service: Amazon Route 53

A complex type that contains an optional comment about your hosted zone. If you don't want to specify a comment, omit both the `HostedZoneConfig` and `Comment` elements.

## Contents

**Comment**

Any comments that you want to include about the hosted zone.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**PrivateZone**

A value that indicates whether this is a private hosted zone.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZoneFailureReasons

Service: Amazon Route 53

Contains information about why certain features failed to be enabled or configured for the hosted zone.

## Contents

### AcceleratedRecovery

The reason why accelerated recovery failed to be enabled or disabled for the hosted zone, if applicable.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZoneFeatures

Service: Amazon Route 53

Represents the features configuration for a hosted zone, including the status of various features and any associated failure reasons.

## Contents

**AcceleratedRecoveryStatus**

The current status of accelerated recovery for the hosted zone.

Type: String

Valid Values: `ENABLING | ENABLE_FAILED | ENABLING_HOSTED_ZONE_LOCKED | ENABLED | DISABLING | DISABLE_FAILED | DISABLED | DISABLING_HOSTED_ZONE_LOCKED`

Required: No

**FailureReasons**

Information about any failures that occurred when attempting to enable or configure features for the hosted zone.

Type: HostedZoneFailureReasons object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZoneLimit

Service: Amazon Route 53

A complex type that contains the type of limit that you specified in the request and the current value for that limit.

## Contents

**Type**

The limit that you requested. Valid values include the following:

- **MAX_RRSETS_BY_ZONE**: The maximum number of records that you can create in the specified hosted zone.
- **MAX_VPCS_ASSOCIATED_BY_ZONE**: The maximum number of Amazon VPCs that you can associate with the specified private hosted zone.

Type: String

Valid Values: `MAX_RRSETS_BY_ZONE | MAX_VPCS_ASSOCIATED_BY_ZONE`

Required: Yes

**Value**

The current value for the limit that is specified by `Type`.

Type: Long

Valid Range: Minimum value of 1.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZoneOwner

Service: Amazon Route 53

A complex type that identifies a hosted zone that a specified Amazon VPC is associated with and the owner of the hosted zone. If there is a value for `OwningAccount`, there is no value for `OwningService`, and vice versa.

## Contents

**OwningAccount**

If the hosted zone was created by an AWS account, or was created by an AWS service that creates hosted zones using the current account, `OwningAccount` contains the account ID of that account. For example, when you use AWS Cloud Map to create a hosted zone, Cloud Map creates the hosted zone using the current AWS account.

Type: String

Required: No

**OwningService**

If an AWS service uses its own account to create a hosted zone and associate the specified VPC with that hosted zone, `OwningService` contains an abbreviation that identifies the service. For example, if Amazon Elastic File System (Amazon EFS) created a hosted zone and associated a VPC with the hosted zone, the value of `OwningService` is `efs.amazonaws.com`.

Type: String

Length Constraints: Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# HostedZoneSummary

Service: Amazon Route 53

In the response to a `ListHostedZonesByVPC` request, the `HostedZoneSummaries` element contains one `HostedZoneSummary` element for each hosted zone that the specified Amazon VPC is associated with. Each `HostedZoneSummary` element contains the hosted zone name and ID, and information about who owns the hosted zone.

## Contents

**HostedZoneId**

The Route 53 hosted zone ID of a private hosted zone that the specified VPC is associated with.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

**Name**

The name of the private hosted zone, such as `example.com`.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**Owner**

The owner of a private hosted zone that the specified VPC is associated with. The owner can be either an AWS account or an AWS service.

Type: HostedZoneOwner object

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# KeySigningKey

Service: Amazon Route 53

A key-signing key (KSK) is a complex type that represents a public/private key pair. The private key is used to generate a digital signature for the zone signing key (ZSK). The public key is stored in the DNS and is used to authenticate the ZSK. A KSK is always associated with a hosted zone; it cannot exist by itself.

## Contents

**CreatedDate**

The date when the key-signing key (KSK) was created.

Type: Timestamp

Required: No

**DigestAlgorithmMnemonic**

A string used to represent the delegation signer digest algorithm. This value must follow the guidelines provided by RFC-8624 Section 3.3.

Type: String

Required: No

**DigestAlgorithmType**

An integer used to represent the delegation signer digest algorithm. This value must follow the guidelines provided by RFC-8624 Section 3.3.

Type: Integer

Required: No

**DigestValue**

A cryptographic digest of a DNSKEY resource record (RR). DNSKEY records are used to publish the public key that resolvers can use to verify DNSSEC signatures that are used to secure certain kinds of information provided by the DNS system.

Type: String

Required: No

**DNSKEYRecord**

A string that represents a DNSKEY record.

Type: String

Required: No

**DSRecord**

A string that represents a delegation signer (DS) record.

Type: String

Required: No

**Flag**

An integer that specifies how the key is used. For key-signing key (KSK), this value is always 257.

Type: Integer

Required: No

**KeyTag**

An integer used to identify the DNSSEC record for the domain name. The process used to calculate the value is described in RFC-4034 Appendix B.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65536.

Required: No

**KmsArn**

The Amazon resource name (ARN) used to identify the customer managed key in AWS Key Management Service (AWS KMS). The `KmsArn` must be unique for each key-signing key (KSK) in a single hosted zone.

You must configure the customer managed key as follows:

Status

Enabled

Key spec

ECC_NIST_P256

Key usage

Sign and verify

Key policy

The key policy must give permission for the following actions:

- DescribeKey
- GetPublicKey
- Sign

The key policy must also include the Amazon Route 53 service in the principal for your account. Specify the following:

- `"Service": "dnssec-route53.amazonaws.com"`

For more information about working with the customer managed key in AWS KMS, see AWS Key Management Service concepts.

Type: String

Required: No

**LastModifiedDate**

The last time that the key-signing key (KSK) was changed.

Type: Timestamp

Required: No

**Name**

A string used to identify a key-signing key (KSK). `Name` can include numbers, letters, and underscores (_). `Name` must be unique for each key-signing key in the same hosted zone.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 128.

Required: No

**PublicKey**

The public key, represented as a Base64 encoding, as required by RFC-4034 Page 5.

Type: String

Required: No

**SigningAlgorithmMnemonic**

A string used to represent the signing algorithm. This value must follow the guidelines provided by RFC-8624 Section 3.1.

Type: String

Required: No

**SigningAlgorithmType**

An integer used to represent the signing algorithm. This value must follow the guidelines provided by RFC-8624 Section 3.1.

Type: Integer

Required: No

**Status**

A string that represents the current key-signing key (KSK) status.

Status can have one of the following values:

ACTIVE

The KSK is being used for signing.

INACTIVE

The KSK is not being used for signing.

DELETING

The KSK is in the process of being deleted.

ACTION_NEEDED

There is a problem with the KSK that requires you to take action to resolve. For example, the customer managed key might have been deleted, or the permissions for the customer managed key might have been changed.

INTERNAL_FAILURE

There was an error during a request. Before you can continue to work with DNSSEC signing, including actions that involve this KSK, you must correct the problem. For example, you may need to activate or deactivate the KSK.

Type: String

Length Constraints: Minimum length of 5. Maximum length of 150.

Required: No

**StatusMessage**

The status message provided for the following key-signing key (KSK) statuses: `ACTION_NEEDED` or `INTERNAL_FAILURE`. The status message includes information about what the problem might be and steps that you can take to correct the issue.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# LinkedService

Service: Amazon Route 53

If a health check or hosted zone was created by another service, `LinkedService` is a complex type that describes the service that created the resource. When a resource is created by another service, you can't edit or delete it using Amazon Route 53.

## Contents

**Description**

If the health check or hosted zone was created by another service, an optional description that can be provided by the other service. When a resource is created by another service, you can't edit or delete it using Amazon Route 53.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**ServicePrincipal**

If the health check or hosted zone was created by another service, the service that created the resource. When a resource is created by another service, you can't edit or delete it using Amazon Route 53.

Type: String

Length Constraints: Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# LocationSummary

Service: Amazon Route 53

A complex type that contains information about the CIDR location.

## Contents

### LocationName

A string that specifies a location name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Pattern: `[0-9A-Za-z_\-\*]+`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ProtectionError

Service: Amazon Route 53

Describes one entry in a `CreateResourceRecordSetProtections` or `DeleteResourceRecordSetProtections` request that Route 53 couldn't process.

## Contents

### Code

The reason that the entry failed. Valid values include the following:

- `InvalidInput` means that the entry isn't valid. For example, the name isn't a valid DNS name, the name isn't in the hosted zone, the record type can't be protected, or the same name and type appear more than once in the request.
- `ProtectionAlreadyExists` means that a protection already exists for the name and type.
- `ProtectionNotFound` means that no protection exists for the name and type.

Type: String

Required: Yes

### Message

A message that explains why Route 53 couldn't process the entry.

Type: String

Required: Yes

### RecordName

The name in the failing entry.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

### RecordType

The record type in the failing entry.

Type: String

Valid Values: SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# QueryLoggingConfig

Service: Amazon Route 53

A complex type that contains information about a configuration for DNS query logging.

## Contents

**CloudWatchLogsLogGroupArn**

The Amazon Resource Name (ARN) of the CloudWatch Logs log group that Amazon Route 53 is publishing logs to.

Type: String

Required: Yes

**HostedZoneId**

The ID of the hosted zone that CloudWatch Logs is logging queries for.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

**Id**

The ID for a configuration for DNS query logging.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# ResourceRecord

Service: Amazon Route 53

Information specific to the resource record.

> **Note**
>
> If you're creating an alias resource record set, omit `ResourceRecord`.

## Contents

### Value

The current or new DNS record value, not to exceed 4,000 characters. In the case of a `DELETE` action, if the current value does not match the actual value, an error is returned. For descriptions about how to format `Value` for different record types, see Supported DNS Resource Record Types in the *Amazon Route 53 Developer Guide*.

You can specify more than one value for all record types except `CNAME` and `SOA`.

> **Note**
>
> If you're creating an alias resource record set, omit `Value`.

Type: String

Length Constraints: Maximum length of 4000.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# ResourceRecordSet

Service: Amazon Route 53

Information about the resource record set to create or delete.

## Contents

### Name

For `ChangeResourceRecordSets` requests, the name of the record that you want to create, update, or delete. For `ListResourceRecordSets` responses, the name of a record in the specified hosted zone.

**ChangeResourceRecordSets Only**

Enter a fully qualified domain name, for example, `www.example.com`. You can optionally include a trailing dot. If you omit the trailing dot, Amazon Route 53 assumes that the domain name that you specify is fully qualified. This means that Route 53 treats `www.example.com` (without a trailing dot) and `www.example.com.` (with a trailing dot) as identical.

For information about how to specify characters other than `a-z`, `0-9`, and `-` (hyphen) and how to specify internationalized domain names, see DNS Domain Name Format in the *Amazon Route 53 Developer Guide*.

You can use the asterisk (*) wildcard to replace the leftmost label in a domain name, for example, `*.example.com`. Note the following:

- The * must replace the entire label. For example, you can't specify `*prod.example.com` or `prod*.example.com`.
- The * can't replace any of the middle labels, for example, marketing.*.example.com.
- If you include * in any position other than the leftmost label in a domain name, DNS treats it as an * character (ASCII 42), not as a wildcard.

> **Important**
>
> You can't use the * wildcard for resource records sets that have a type of NS.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**Type**

The DNS record type. For information about different record types and how data is encoded for them, see Supported DNS Resource Record Types in the *Amazon Route 53 Developer Guide*.

Valid values for basic resource record sets: A | AAAA | CAA | CNAME | DS |MX | NAPTR | NS | PTR | SOA | SPF | SRV | TXT| TLSA| SSHFP| SVCB| HTTPS

Values for weighted, latency, geolocation, and failover resource record sets: A | AAAA | CAA | CNAME | MX | NAPTR | PTR | SPF | SRV | TXT| TLSA| SSHFP| SVCB| HTTPS. When creating a group of weighted, latency, geolocation, or failover resource record sets, specify the same value for all of the resource record sets in the group.

Valid values for multivalue answer resource record sets: A | AAAA | MX | NAPTR | PTR | SPF | SRV | TXT| CAA| TLSA| SSHFP| SVCB| HTTPS

> **Note**
>
> SPF records were formerly used to verify the identity of the sender of email messages. However, we no longer recommend that you create resource record sets for which the value of Type is SPF. RFC 7208, *Sender Policy Framework (SPF) for Authorizing Use of Domains in Email, Version 1*, has been updated to say, "...[I]ts existence and mechanism defined in [RFC4408] have led to some interoperability issues. Accordingly, its use is no longer appropriate for SPF version 1; implementations are not to use it." In RFC 7208, see section 14.1, The SPF DNS Record Type.

Values for alias resource record sets:

- **Amazon API Gateway custom regional APIs and edge-optimized APIs:** A
- **CloudFront distributions:** A

  If IPv6 is enabled for the distribution, create two resource record sets to route traffic to your distribution, one with a value of A and one with a value of AAAA.
- **Amazon API Gateway environment that has a regionalized subdomain**: A
- **ELB load balancers:** A | AAAA

- **Amazon S3 buckets:** A
- **Amazon Virtual Private Cloud interface VPC endpoints** A
- **Another resource record set in this hosted zone:** Specify the type of the resource record set that you're creating the alias for. All values are supported except NS and SOA.

> **Note**
>
> If you're creating an alias record that has the same name as the hosted zone (known as the zone apex), you can't route traffic to a record for which the value of Type is CNAME. This is because the alias record must have the same type as the record you're routing traffic to, and creating a CNAME record for the zone apex isn't supported even for an alias record.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

Required: Yes

**AliasTarget**

*Alias resource record sets only:* Information about the AWS resource, such as a CloudFront distribution or an Amazon S3 bucket, that you want to route traffic to.

If you're creating resource records sets for a private hosted zone, note the following:

- You can't create an alias resource record set in a private hosted zone to route traffic to a CloudFront distribution.
- For information about creating failover resource record sets in a private hosted zone, see Configuring Failover in a Private Hosted Zone in the *Amazon Route 53 Developer Guide*.

Type: AliasTarget object

Required: No

**CidrRoutingConfig**

The object that is specified in resource record set object when you are linking a resource record set to a CIDR location.

A `LocationName` with an asterisk “*” can be used to create a default CIDR record. `CollectionId` is still required for default record.

Type: CidrRoutingConfig object

Required: No

**Failover**

*Failover resource record sets only:* To configure failover, you add the `Failover` element to two resource record sets. For one resource record set, you specify `PRIMARY` as the value for `Failover`; for the other resource record set, you specify `SECONDARY`. In addition, you include the `HealthCheckId` element and specify the health check that you want Amazon Route 53 to perform for each resource record set.

Except where noted, the following failover behaviors assume that you have included the `HealthCheckId` element in both resource record sets:

- When the primary resource record set is healthy, Route 53 responds to DNS queries with the applicable value from the primary resource record set regardless of the health of the secondary resource record set.
- When the primary resource record set is unhealthy and the secondary resource record set is healthy, Route 53 responds to DNS queries with the applicable value from the secondary resource record set.
- When the secondary resource record set is unhealthy, Route 53 responds to DNS queries with the applicable value from the primary resource record set regardless of the health of the primary resource record set.
- If you omit the `HealthCheckId` element for the secondary resource record set, and if the primary resource record set is unhealthy, Route 53 always responds to DNS queries with the applicable value from the secondary resource record set. This is true regardless of the health of the associated endpoint.

You can't create non-failover resource record sets that have the same values for the `Name` and `Type` elements as failover resource record sets.

For failover alias resource record sets, you must also include the `EvaluateTargetHealth` element and set the value to true.

For more information about configuring failover for Route 53, see the following topics in the *Amazon Route 53 Developer Guide*:

- Route 53 Health Checks and DNS Failover
- Configuring Failover in a Private Hosted Zone

Type: String

Valid Values: `PRIMARY` | `SECONDARY`

Required: No

**GeoLocation**

*Geolocation resource record sets only:* A complex type that lets you control how Amazon Route 53 responds to DNS queries based on the geographic origin of the query. For example, if you want all queries from Africa to be routed to a web server with an IP address of `192.0.2.111`, create a resource record set with a `Type` of `A` and a `ContinentCode` of `AF`.

If you create separate resource record sets for overlapping geographic regions (for example, one resource record set for a continent and one for a country on the same continent), priority goes to the smallest geographic region. This allows you to route most queries for a continent to one resource and to route queries for a country on that continent to a different resource.

You can't create two geolocation resource record sets that specify the same geographic location.

The value `*` in the `CountryCode` element matches all geographic locations that aren't specified in other geolocation resource record sets that have the same values for the `Name` and `Type` elements.

> **Important**
>
> Geolocation works by mapping IP addresses to locations. However, some IP addresses aren't mapped to geographic locations, so even if you create geolocation resource record sets that cover all seven continents, Route 53 will receive some DNS queries from locations that it can't identify. We recommend that you create a resource record set for which the value of `CountryCode` is `*`. Two groups of queries are routed to the resource that you specify in this record: queries that come from locations for which you haven't created geolocation resource record sets and queries from IP addresses that aren't mapped to a location. If you don't create a `*` resource record set, Route 53 returns a "no answer" response for queries from those locations.

You can't create non-geolocation resource record sets that have the same values for the `Name` and `Type` elements as geolocation resource record sets.

Type: GeoLocation object

Required: No

**GeoProximityLocation**

*GeoproximityLocation resource record sets only:* A complex type that lets you control how Route 53 responds to DNS queries based on the geographic origin of the query and your resources.

Type: GeoProximityLocation object

Required: No

**HealthCheckId**

If you want Amazon Route 53 to return this resource record set in response to a DNS query only when the status of a health check is healthy, include the `HealthCheckId` element and specify the ID of the applicable health check.

Route 53 determines whether a resource record set is healthy based on one of the following:

- By periodically sending a request to the endpoint that is specified in the health check
- By aggregating the status of a specified group of health checks (calculated health checks)
- By determining the current state of a CloudWatch alarm (CloudWatch metric health checks)

> **Important**
>
> Route 53 doesn't check the health of the endpoint that is specified in the resource record set, for example, the endpoint specified by the IP address in the `Value` element. When you add a `HealthCheckId` element to a resource record set, Route 53 checks the health of the endpoint that you specified in the health check.

For more information, see the following topics in the *Amazon Route 53 Developer Guide*:

- How Amazon Route 53 Determines Whether an Endpoint Is Healthy
- Route 53 Health Checks and DNS Failover
- Configuring Failover in a Private Hosted Zone

### When to Specify HealthCheckId

Specifying a value for `HealthCheckId` is useful only when Route 53 is choosing between two or more resource record sets to respond to a DNS query, and you want Route 53 to base the choice in part on the status of a health check. Configuring health checks makes sense only in the following configurations:

- **Non-alias resource record sets**: You're checking the health of a group of non-alias resource record sets that have the same routing policy, name, and type (such as multiple weighted records named www.example.com with a type of A) and you specify health check IDs for all the resource record sets.

  If the health check status for a resource record set is healthy, Route 53 includes the record among the records that it responds to DNS queries with.

  If the health check status for a resource record set is unhealthy, Route 53 stops responding to DNS queries using the value for that resource record set.

  If the health check status for all resource record sets in the group is unhealthy, Route 53 considers all resource record sets in the group healthy and responds to DNS queries accordingly.
- **Alias resource record sets**: You specify the following settings:
  - You set `EvaluateTargetHealth` to true for an alias resource record set in a group of resource record sets that have the same routing policy, name, and type (such as multiple weighted records named www.example.com with a type of A).
  - You configure the alias resource record set to route traffic to a non-alias resource record set in the same hosted zone.
  - You specify a health check ID for the non-alias resource record set.

  If the health check status is healthy, Route 53 considers the alias resource record set to be healthy and includes the alias record among the records that it responds to DNS queries with.

  If the health check status is unhealthy, Route 53 stops responding to DNS queries using the alias resource record set.

  > **Note**
  >
  > The alias resource record set can also route traffic to a *group* of non-alias resource record sets that have the same routing policy, name, and type. In that configuration,

associate health checks with all of the resource record sets in the group of non-alias resource record sets.

**Geolocation Routing**

For geolocation resource record sets, if an endpoint is unhealthy, Route 53 looks for a resource record set for the larger, associated geographic region. For example, suppose you have resource record sets for a state in the United States, for the entire United States, for North America, and a resource record set that has * for `CountryCode` is *, which applies to all locations. If the endpoint for the state resource record set is unhealthy, Route 53 checks for healthy resource record sets in the following order until it finds a resource record set for which the endpoint is healthy:

- The United States
- North America
- The default resource record set

**Specifying the Health Check Endpoint by Domain Name**

If your health checks specify the endpoint only by domain name, we recommend that you create a separate health check for each endpoint. For example, create a health check for each HTTP server that is serving content for `www.example.com`. For the value of `FullyQualifiedDomainName`, specify the domain name of the server (such as `us-east-2-www.example.com`), not the name of the resource record sets (`www.example.com`).

**Important**

Health check results will be unpredictable if you do the following:

- Create a health check that has the same value for `FullyQualifiedDomainName` as the name of a resource record set.
- Associate that health check with the resource record set.

Type: String

Length Constraints: Maximum length of 64.

Required: No

**MultiValueAnswer**

*Multivalue answer resource record sets only*: To route traffic approximately randomly to multiple resources, such as web servers, create one multivalue answer record for each resource and specify `true` for `MultiValueAnswer`. Note the following:

- If you associate a health check with a multivalue answer resource record set, Amazon Route 53 responds to DNS queries with the corresponding IP address only when the health check is healthy.
- If you don't associate a health check with a multivalue answer record, Route 53 always considers the record to be healthy.
- Route 53 responds to DNS queries with up to eight healthy records; if you have eight or fewer healthy records, Route 53 responds to all DNS queries with all the healthy records.
- If you have more than eight healthy records, Route 53 responds to different DNS resolvers with different combinations of healthy records.
- When all records are unhealthy, Route 53 responds to DNS queries with up to eight unhealthy records.
- If a resource becomes unavailable after a resolver caches a response, client software typically tries another of the IP addresses in the response.

You can't create multivalue answer alias records.

Type: Boolean

Required: No

**Region**

*Latency-based resource record sets only:* The Amazon EC2 Region where you created the resource that this resource record set refers to. The resource typically is an AWS resource, such as an EC2 instance or an ELB load balancer, and is referred to by an IP address or a DNS domain name, depending on the record type.

When Amazon Route 53 receives a DNS query for a domain name and type for which you have created latency resource record sets, Route 53 selects the latency resource record set that has the lowest latency between the end user and the associated Amazon EC2 Region. Route 53 then returns the value that is associated with the selected resource record set.

Note the following:

- You can only specify one `ResourceRecord` per latency resource record set.

- You can only create one latency resource record set for each Amazon EC2 Region.
- You aren't required to create latency resource record sets for all Amazon EC2 Regions. Route 53 will choose the region with the best latency from among the regions that you create latency resource record sets for.
- You can't create non-latency resource record sets that have the same values for the `Name` and `Type` elements as latency resource record sets.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-east-2 | us-west-1 | us-west-2 | ca-central-1 | eu-west-1 | eu-west-2 | eu-west-3 | eu-central-1 | eu-central-2 | ap-southeast-1 | ap-southeast-2 | ap-southeast-3 | ap-northeast-1 | ap-northeast-2 | ap-northeast-3 | eu-north-1 | sa-east-1 | cn-north-1 | cn-northwest-1 | ap-east-1 | me-south-1 | me-central-1 | ap-south-1 | ap-south-2 | af-south-1 | eu-south-1 | eu-south-2 | ap-southeast-4 | il-central-1 | ca-west-1 | ap-southeast-5 | mx-central-1 | ap-southeast-7 | us-gov-east-1 | us-gov-west-1 | ap-east-2 | ap-southeast-6 | eusc-de-east-1`

Required: No

**ResourceRecords**

Information about the resource records to act upon.

> **Note**
>
> If you're creating an alias resource record set, omit `ResourceRecords`.

Type: Array of ResourceRecord objects

Array Members: Minimum number of 1 item.

Required: No

**SetIdentifier**

*Resource record sets that have a routing policy other than simple:* An identifier that differentiates among multiple resource record sets that have the same combination of name and type, such

as multiple weighted resource record sets named acme.example.com that have a type of A. In a group of resource record sets that have the same name and type, the value of `SetIdentifier` must be unique for each resource record set.

For information about routing policies, see Choosing a Routing Policy in the *Amazon Route 53 Developer Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: No

**TrafficPolicyInstanceId**

When you create a traffic policy instance, Amazon Route 53 automatically creates a resource record set. `TrafficPolicyInstanceId` is the ID of the traffic policy instance that Route 53 created this resource record set for.

> **Important**
>
> To delete the resource record set that is associated with a traffic policy instance, use `DeleteTrafficPolicyInstance`. Route 53 will delete the resource record set automatically. If you delete the resource record set by using `ChangeResourceRecordSets`, Route 53 doesn't automatically delete the traffic policy instance, and you'll continue to be charged for it even though it's no longer in use.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: No

**TTL**

The resource record cache time to live (TTL), in seconds. Note the following:

- If you're creating or updating an alias resource record set, omit `TTL`. Amazon Route 53 uses the value of `TTL` for the alias target.
- If you're associating this resource record set with a health check (if you're adding a `HealthCheckId` element), we recommend that you specify a `TTL` of 60 seconds or less so clients respond quickly to changes in health status.

- All of the resource record sets in a group of weighted resource record sets must have the same value for TTL.
- If a group of weighted resource record sets includes one or more weighted alias resource record sets for which the alias target is an ELB load balancer, we recommend that you specify a TTL of 60 seconds for all of the non-alias weighted resource record sets that have the same name and type. Values other than 60 seconds (the TTL for load balancers) will change the effect of the values that you specify for `Weight`.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 2147483647.

Required: No

**Weight**

*Weighted resource record sets only:* Among resource record sets that have the same combination of DNS name and type, a value that determines the proportion of DNS queries that Amazon Route 53 responds to using the current resource record set. Route 53 calculates the sum of the weights for the resource record sets that have the same combination of DNS name and type. Route 53 then responds to queries based on the ratio of a resource's weight to the total. Note the following:

- You must specify a value for the `Weight` element for every weighted resource record set.
- You can only specify one `ResourceRecord` per weighted resource record set.
- You can't create latency, failover, or geolocation resource record sets that have the same values for the `Name` and `Type` elements as weighted resource record sets.
- You can create a maximum of 100 weighted resource record sets that have the same values for the `Name` and `Type` elements.
- For weighted (but not weighted alias) resource record sets, if you set `Weight` to `0` for a resource record set, Route 53 never responds to queries with the applicable value for that resource record set. However, if you set `Weight` to `0` for all resource record sets that have the same combination of DNS name and type, traffic is routed to all resources with equal probability.

  The effect of setting `Weight` to `0` is different when you associate health checks with weighted resource record sets. For more information, see Options for Configuring Route 53 Active-Active and Active-Passive Failover in the *Amazon Route 53 Developer Guide*.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 255.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResourceRecordSetProtection

Service: Amazon Route 53

A protection for the resource record sets in a hosted zone that have the specified name and type. While the protection exists, Route 53 rejects `ChangeResourceRecordSets` requests that create, update, or delete those resource record sets.

## Contents

**RecordName**

The name of the protected resource record sets.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**RecordType**

The DNS record type of the protected resource record sets.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

Required: Yes

**Comment**

The comment that was specified when the protection was created, if any.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResourceRecordSetProtectionConfig

Service: Amazon Route 53

A protection to create for the resource record sets in a hosted zone that have the specified name and type.

## Contents

**RecordName**

The name of the resource record sets to protect, for example, `www.example.com`. The name must be the name of the hosted zone or a subdomain of it.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**RecordType**

The DNS record type of the resource record sets to protect. You can't protect records of type `DNAME` or of the DNSSEC record types that Route 53 manages.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

Required: Yes

**Comment**

An optional comment about the protection, for example, the reason that the resource record sets are protected. The comment can be up to 256 characters long. If you don't specify a comment, the protection doesn't have a comment. When Route 53 rejects a `ChangeResourceRecordSets` request because of this protection, the error message includes the comment, so don't include sensitive information.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResourceRecordSetProtectionKey

Service: Amazon Route 53

The name and type that identify a resource record set protection.

## Contents

**RecordName**

The name of the protected resource record sets.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**RecordType**

The DNS record type of the protected resource record sets.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResourceTagSet

Service: Amazon Route 53

A complex type containing a resource and its associated tags.

## Contents

**ResourceId**

The ID for the specified resource.

Type: String

Length Constraints: Maximum length of 64.

Required: No

**ResourceType**

The type of the resource.

- The resource type for health checks is `healthcheck`.
- The resource type for hosted zones is `hostedzone`.

Type: String

Valid Values: `healthcheck | hostedzone`

Required: No

**Tags**

The tags associated with the specified resource.

Type: Array of Tag objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ReusableDelegationSetLimit

Service: Amazon Route 53

A complex type that contains the type of limit that you specified in the request and the current value for that limit.

## Contents

**Type**

The limit that you requested: `MAX_ZONES_BY_REUSABLE_DELEGATION_SET`, the maximum number of hosted zones that you can associate with the specified reusable delegation set.

Type: String

Valid Values: `MAX_ZONES_BY_REUSABLE_DELEGATION_SET`

Required: Yes

**Value**

The current value for the `MAX_ZONES_BY_REUSABLE_DELEGATION_SET` limit.

Type: Long

Valid Range: Minimum value of 1.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# StatusReport

Service: Amazon Route 53

A complex type that contains the status that one Amazon Route 53 health checker reports and the time of the health check.

## Contents

### CheckedTime

The date and time that the health checker performed the health check in ISO 8601 format and Coordinated Universal Time (UTC). For example, the value `2017-03-27T17:48:16.751Z` represents March 27, 2017 at 17:48:16.751 UTC.

Type: Timestamp

Required: No

### Status

A description of the status of the health check endpoint as reported by one of the Amazon Route 53 health checkers.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Tag

Service: Amazon Route 53

A complex type that contains information about a tag that you want to add or edit for the specified health check or hosted zone.

## Contents

### Key

The value of `Key` depends on the operation that you want to perform:

- **Add a tag to a health check or hosted zone**: `Key` is the name that you want to give the new tag.
- **Edit a tag**: `Key` is the name of the tag that you want to change the `Value` for.
- **Delete a key**: `Key` is the name of the tag you want to remove.
- **Give a name to a health check**: Edit the default `Name` tag. In the Amazon Route 53 console, the list of your health checks includes a **Name** column that lets you see the name that you've given to each health check.

Type: String

Length Constraints: Maximum length of 128.

Required: No

### Value

The value of `Value` depends on the operation that you want to perform:

- **Add a tag to a health check or hosted zone**: `Value` is the value that you want to give the new tag.
- **Edit a tag**: `Value` is the new value that you want to assign the tag.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TrafficPolicy

Service: Amazon Route 53

A complex type that contains settings for a traffic policy.

## Contents

**Document**

The definition of a traffic policy in JSON format. You specify the JSON document to use for a new traffic policy in the `CreateTrafficPolicy` request. For more information about the JSON format, see Traffic Policy Document Format.

Type: String

Length Constraints: Maximum length of 102400.

Required: Yes

**Id**

The ID that Amazon Route 53 assigned to a traffic policy when you created it.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

**Name**

The name that you specified when you created the traffic policy.

Type: String

Length Constraints: Maximum length of 512.

Required: Yes

**Type**

The DNS type of the resource record sets that Amazon Route 53 creates when you use a traffic policy to create a traffic policy instance.

Type: String

Valid Values: SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS

Required: Yes

**Version**

The version number that Amazon Route 53 assigns to a traffic policy. For a new traffic policy, the value of `Version` is always 1.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**Comment**

The comment that you specify in the `CreateTrafficPolicy` request, if any.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TrafficPolicyInstance

Service: Amazon Route 53

A complex type that contains settings for the new traffic policy instance.

## Contents

**HostedZoneId**

The ID of the hosted zone that Amazon Route 53 created resource record sets in.

Type: String

Length Constraints: Maximum length of 32.

Required: Yes

**Id**

The ID that Amazon Route 53 assigned to the new traffic policy instance.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

**Message**

If `State` is `Failed`, an explanation of the reason for the failure. If `State` is another value, `Message` is empty.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**Name**

The DNS name, such as www.example.com, for which Amazon Route 53 responds to queries by using the resource record sets that are associated with this traffic policy instance.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

**State**

The value of `State` is one of the following values:

Applied

Amazon Route 53 has finished creating resource record sets, and changes have propagated to all Route 53 edge locations.

Creating

Route 53 is creating the resource record sets. Use `GetTrafficPolicyInstance` to confirm that the `CreateTrafficPolicyInstance` request completed successfully.

Failed

Route 53 wasn't able to create or update the resource record sets. When the value of `State` is `Failed`, see `Message` for an explanation of what caused the request to fail.

Type: String

Required: Yes

**TrafficPolicyId**

The ID of the traffic policy that Amazon Route 53 used to create resource record sets in the specified hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

**TrafficPolicyType**

The DNS type that Amazon Route 53 assigned to all of the resource record sets that it created for this traffic policy instance.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

Required: Yes

**TrafficPolicyVersion**

The version of the traffic policy that Amazon Route 53 used to create resource record sets in the specified hosted zone.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**TTL**

The TTL that Amazon Route 53 assigned to all of the resource record sets that it created in the specified hosted zone.

Type: Long

Valid Range: Minimum value of 0. Maximum value of 2147483647.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TrafficPolicySummary

Service: Amazon Route 53

A complex type that contains information about the latest version of one traffic policy that is associated with the current AWS account.

## Contents

**Id**

The ID that Amazon Route 53 assigned to the traffic policy when you created it.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Required: Yes

**LatestVersion**

The version number of the latest version of the traffic policy.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**Name**

The name that you specified for the traffic policy when you created it.

Type: String

Length Constraints: Maximum length of 512.

Required: Yes

**TrafficPolicyCount**

The number of traffic policies that are associated with the current AWS account.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**Type**

The DNS type of the resource record sets that Amazon Route 53 creates when you use a traffic policy to create a traffic policy instance.

Type: String

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA | DS | TLSA | SSHFP | SVCB | HTTPS`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# VPC

Service: Amazon Route 53

(Private hosted zones only) A complex type that contains information about an Amazon VPC.

If you associate a private hosted zone with an Amazon VPC when you make a CreateHostedZone request, the following parameters are also required.

## Contents

### VPCId

(Private hosted zones only) The ID of an Amazon VPC.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

### VPCRegion

(Private hosted zones only) The region that an Amazon VPC was created in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Valid Values: `us-east-1 | us-east-2 | us-west-1 | us-west-2 | eu-west-1 | eu-west-2 | eu-west-3 | eu-central-1 | eu-central-2 | ap-east-1 | me-south-1 | us-gov-west-1 | us-gov-east-1 | us-iso-east-1 | us-iso-west-1 | us-isob-east-1 | me-central-1 | ap-southeast-1 | ap-southeast-2 | ap-southeast-3 | ap-south-1 | ap-south-2 | ap-northeast-1 | ap-northeast-2 | ap-northeast-3 | eu-north-1 | sa-east-1 | ca-central-1 | cn-north-1 | cn-northwest-1 | af-south-1 | eu-south-1 | eu-south-2 | ap-southeast-4 | il-central-1 | ca-west-1 | ap-southeast-5 | mx-central-1 | us-isof-south-1 | us-isof-east-1 | ap-southeast-7 | ap-east-2 | eu-isoe-west-1 | ap-southeast-6 | us-isob-west-1 | eusc-de-east-1`

Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

## Amazon Route 53 domain registration

The following data types are supported by Amazon Route 53 domain registration:

- BillingRecord
- Consent
- ContactDetail
- DnssecKey
- DnssecSigningAttributes
- DomainPrice
- DomainSuggestion
- DomainSummary
- DomainTransferability
- ExtraParam
- FilterCondition
- Nameserver
- OperationSummary
- PriceWithCurrency
- SortCondition
- Tag

# BillingRecord

Service: Amazon Route 53 domain registration

Information for one billing record.

## Contents

**BillDate**

The date that the operation was billed, in Unix format.

Type: Timestamp

Required: No

**DomainName**

The name of the domain that the billing record applies to. If the domain name contains characters other than a-z, 0-9, and - (hyphen), such as an internationalized domain name, then this value is in Punycode. For more information, see DNS Domain Name Format in the *Amazon Route 53 Developer Guide*.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**InvoiceId**

Deprecated property. This field is retained in report structure for backwards compatibility, but will appear blank.

Type: String

Required: No

**Operation**

The operation that you were charged for.

Type: String

Valid Values: `REGISTER_DOMAIN | DELETE_DOMAIN | TRANSFER_IN_DOMAIN | UPDATE_DOMAIN_CONTACT | UPDATE_NAMESERVER | CHANGE_PRIVACY_PROTECTION`

```
| DOMAIN_LOCK | ENABLE_AUTORENEW | DISABLE_AUTORENEW |
ADD_DNSSEC | REMOVE_DNSSEC | EXPIRE_DOMAIN | TRANSFER_OUT_DOMAIN
| CHANGE_DOMAIN_OWNER | RENEW_DOMAIN | PUSH_DOMAIN |
INTERNAL_TRANSFER_OUT_DOMAIN | INTERNAL_TRANSFER_IN_DOMAIN |
RELEASE_TO_GANDI | TRANSFER_ON_RENEW | RESTORE_DOMAIN
```

Required: No

**Price**

The price that you were charged for the operation, in US dollars.

Example value: 12.0

Type: Double

Valid Range: Minimum value of 0.0.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Consent

Service: Amazon Route 53 domain registration

The maximum amount that you agree to pay for an operation, and the currency for that amount.

## Contents

**Currency**

The currency for the `MaxPrice`.

Type: String

Length Constraints: Fixed length of 3.

Required: Yes

**MaxPrice**

The maximum amount that you agree to accept.

Type: Double

Valid Range: Minimum value of 0.0. Maximum value of 2000000000.0.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ContactDetail

Service: Amazon Route 53 domain registration

ContactDetail includes the following elements.

## Contents

**AddressLine1**

First line of the contact's address.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**AddressLine2**

Second line of contact's address, if any.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**City**

The city of the contact's address.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**ContactType**

Indicates whether the contact is a person, company, association, or public organization. Note the following:

- If you specify a value other than `PERSON`, you must also specify a value for `OrganizationName`.

- For some TLDs, the privacy protection available depends on the value that you specify for `Contact Type`. For the privacy protection settings for your TLD, see Domains that You Can Register with Amazon Route 53 in the *Amazon Route 53 Developer Guide*
- For .es domains, the value of `ContactType` must be `PERSON` for all three contacts.

Type: String

Valid Values: `PERSON | COMPANY | ASSOCIATION | PUBLIC_BODY | RESELLER`

Required: No

**CountryCode**

Code for the country of the contact's address.

Type: String

Valid Values: `AC | AD | AE | AF | AG | AI | AL | AM | AN | AO | AQ | AR | AS | AT | AU | AW | AX | AZ | BA | BB | BD | BE | BF | BG | BH | BI | BJ | BL | BM | BN | BO | BQ | BR | BS | BT | BV | BW | BY | BZ | CA | CC | CD | CF | CG | CH | CI | CK | CL | CM | CN | CO | CR | CU | CV | CW | CX | CY | CZ | DE | DJ | DK | DM | DO | DZ | EC | EE | EG | EH | ER | ES | ET | FI | FJ | FK | FM | FO | FR | GA | GB | GD | GE | GF | GG | GH | GI | GL | GM | GN | GP | GQ | GR | GS | GT | GU | GW | GY | HK | HM | HN | HR | HT | HU | ID | IE | IL | IM | IN | IO | IQ | IR | IS | IT | JE | JM | JO | JP | KE | KG | KH | KI | KM | KN | KP | KR | KW | KY | KZ | LA | LB | LC | LI | LK | LR | LS | LT | LU | LV | LY | MA | MC | MD | ME | MF | MG | MH | MK | ML | MM | MN | MO | MP | MQ | MR | MS | MT | MU | MV | MW | MX | MY | MZ | NA | NC | NE | NF | NG | NI | NL | NO | NP | NR | NU | NZ | OM | PA | PE | PF | PG | PH | PK | PL | PM | PN | PR | PS | PT | PW | PY | QA | RE | RO | RS | RU | RW | SA | SB | SC | SD | SE | SG | SH | SI | SJ | SK | SL | SM | SN | SO | SR | SS | ST | SV | SX | SY | SZ | TC | TD | TF | TG | TH | TJ | TK | TL | TM | TN | TO | TP | TR | TT | TV | TW | TZ | UA | UG | US | UY | UZ | VA | VC | VE | VG | VI | VN | VU | WF | WS | YE | YT | ZA | ZM | ZW`

Required: No

**Email**

Email address of the contact.

Type: String

Length Constraints: Maximum length of 254.

Required: No

**ExtraParams**

A list of name-value pairs for parameters required by certain top-level domains.

Type: Array of ExtraParam objects

Required: No

**Fax**

Fax number of the contact.

Constraints: Phone number must be specified in the format "+[country dialing code].[number including any area code]". For example, a US phone number might appear as `"+1.1234567890"`.

Type: String

Length Constraints: Maximum length of 30.

Required: No

**FirstName**

First name of contact.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**LastName**

Last name of contact.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**OrganizationName**

Name of the organization for contact types other than PERSON.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**PhoneNumber**

The phone number of the contact.

Constraints: Phone number must be specified in the format "+[country dialing code].[number including any area code>]". For example, a US phone number might appear as "+1.1234567890".

Type: String

Length Constraints: Maximum length of 30.

Required: No

**State**

The state or province of the contact's city.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**ZipCode**

The zip or postal code of the contact's address.

Type: String

Length Constraints: Maximum length of 255.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DnssecKey

Service: Amazon Route 53 domain registration

Information about the DNSSEC key.

You get this from your DNS provider and then give it to Route 53 (by using AssociateDelegationSignerToDomain) to pass it to the registry to establish the chain of trust.

## Contents

**Algorithm**

The number of the public key's cryptographic algorithm according to an IANA assignment.

If Route 53 is your DNS service, set this to 13.

For more information about enabling DNSSEC signing, see Enabling DNSSEC signing and establishing a chain of trust.

Type: Integer

Required: No

**Digest**

The delegation signer digest.

Digest is calculated from the public key provided using specified digest algorithm and this digest is the actual value returned from the registry nameservers as the value of DS records.

Type: String

Required: No

**DigestType**

The number of the DS digest algorithm according to an IANA assignment.

For more information, see IANA for DNSSEC Delegation Signer (DS) Resource Record (RR) Type Digest Algorithms.

Type: Integer

Required: No

**Flags**

The DNSKEY flags that indicate the key type. This field is deprecated; the `DnssecKey` response no longer returns the flags.

Type: Integer

Required: No

**Id**

An ID assigned to each DS record created by AssociateDelegationSignerToDomain.

Type: String

Required: No

**KeyTag**

A numeric identification of the DNSKEY record referred to by this DS record.

Type: Integer

Required: No

**PublicKey**

The base64-encoded public key of the key pair. This field is deprecated; the `DnssecKey` response no longer returns the public key.

Type: String

Length Constraints: Maximum length of 32768.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# DnssecSigningAttributes

Service: Amazon Route 53 domain registration

Information about a delegation signer (DS) record that was created in the registry by AssociateDelegationSignerToDomain.

## Contents

**Algorithm**

Algorithm which was used to generate the digest from the public key.

Type: Integer

Required: No

**Flags**

Defines the type of key. It can be either a KSK (key-signing-key, value 257) or ZSK (zone-signing-key, value 256). Using KSK is always encouraged. Only use ZSK if your DNS provider isn't Route 53 and you don’t have KSK available.

If you have KSK and ZSK keys, always use KSK to create a delegations signer (DS) record. If you have ZSK keys only – use ZSK to create a DS record.

Type: Integer

Required: No

**PublicKey**

The base64-encoded public key part of the key pair that is passed to the registry.

Type: String

Length Constraints: Maximum length of 32768.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DomainPrice

Service: Amazon Route 53 domain registration

Information about the prices associated with a TLD or a domain name.

## Contents

**ChangeOwnershipPrice**

The price for changing domain ownership.

Type: PriceWithCurrency object

Required: No

**Name**

The TLD or domain name that the prices apply to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**RegistrationPrice**

The price for domain registration with Route 53.

Type: PriceWithCurrency object

Required: No

**RenewalPrice**

The price for renewing domain registration with Route 53.

Type: PriceWithCurrency object

Required: No

**RestorationPrice**

The price for restoring the domain with Route 53.

Type: PriceWithCurrency object

Required: No

**TransferPrice**

The price for transferring the domain registration to Route 53.

Type: PriceWithCurrency object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DomainSuggestion

Service: Amazon Route 53 domain registration

Information about one suggested domain name.

## Contents

### Availability

Specifies whether the domain name is available for registering. This element is populated only if you specified `true` for `OnlyAvailable` in the request.

> **Note**
>
> You can register only the domains that are designated as `AVAILABLE`.

Valid values:

AVAILABLE

The domain name is available.

AVAILABLE_RESERVED

The domain name is reserved under specific conditions.

AVAILABLE_PREORDER

The domain name is available and can be preordered.

DONT_KNOW

The TLD registry didn't reply with a definitive answer about whether the domain name is available. Route 53 can return this response for a variety of reasons, for example, the registry is performing maintenance. Try again later.

PENDING

The TLD registry didn't return a response in the expected amount of time. When the response is delayed, it usually takes just a few extra seconds. You can resubmit the request immediately.

RESERVED

The domain name has been reserved for another person or organization.

UNAVAILABLE

The domain name is not available.

UNAVAILABLE_PREMIUM

The domain name is not available.

UNAVAILABLE_RESTRICTED

The domain name is forbidden.

Type: String

Required: No

**DomainName**

A suggested domain name.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**Price**

The price to register the suggested domain name, in the currency that `Currency` specifies. This element is populated only if you specified `true` for `OnlyAvailable` in the request.

Type: PriceWithCurrency object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DomainSummary

Service: Amazon Route 53 domain registration

Summary information about one domain.

## Contents

**AutoRenew**

Indicates whether the domain is automatically renewed upon expiration.

Type: Boolean

Required: No

**DomainName**

The name of the domain that the summary information applies to.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**Expiry**

Expiration date of the domain in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**TransferLock**

Indicates whether a domain is locked from unauthorized transfer to another party.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DomainTransferability

Service: Amazon Route 53 domain registration

A complex type that contains information about whether the specified domain can be transferred to Route 53.

## Contents

### Transferable

Whether the domain name can be transferred to Route 53.

> **Note**
>
> You can transfer only domains that have a value of TRANSFERABLE or `Transferable`.

Valid values:

TRANSFERABLE

The domain name can be transferred to Route 53.

UNTRANSFERRABLE

The domain name can't be transferred to Route 53.

DONT_KNOW

The TLD registry didn't reply with a definitive answer about whether the domain name can be transferred. Route 53 can return this response for a variety of reasons, for example, the registry is performing maintenance. Try again later.

PENDING

The TLD registry didn't return a response in the expected amount of time. When the response is delayed, it usually takes just a few extra seconds. You can resubmit the request immediately.

DOMAIN_IN_OWN_ACCOUNT

The domain already exists in the current AWS account.

DOMAIN_IN_ANOTHER_ACCOUNT

The domain exists in another AWS account.

PREMIUM_DOMAIN

Premium domain transfer is not supported.

Type: String

Valid Values: `TRANSFERABLE | UNTRANSFERABLE | DONT_KNOW | DOMAIN_IN_OWN_ACCOUNT | DOMAIN_IN_ANOTHER_ACCOUNT | PREMIUM_DOMAIN | PENDING`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ExtraParam

Service: Amazon Route 53 domain registration

ExtraParam includes the following elements.

## Contents

### Name

The name of an additional parameter that is required by a top-level domain. Here are the top-level domains that require additional parameters and the names of the parameters that they require:

.au, .com.au, and .net.au

- `AU_REGISTRANT_NAME`
- `AU_ID_NUMBER`
- `AU_ID_TYPE`

  Valid values include the following:

  - `ABN` (Australian business number)
  - `ACN` (Australian company number)
  - `TM` (Trademark number)
- `AU_ELIGIBILITY_TYPE`

  Valid values include the following:

  - CHARITABLE_TRUST (Charitable trust)
  - CHARITY (Charity)
  - CHILD_CARE_CENTRE (Child care centre)
  - CLUB (Club)
  - COMMERCIAL_STATUTORY_BODY (Commercial statutory body)
  - COMMONWEALTH_ENTITY (Commonwealth entity)
  - COMPANY (Company)
  - COMPANY_LIMITED_BY_GUARANTEE (Company limited by guarantee)
  - EDUCATIONAL_INSTITUTION (Educational institution)
  - GOVERNMENT_SCHOOL (Government school)

- HIGHER_EDUCATION_INSTITUTION (Higher education institution)
- INCORPORATED_ASSOCIATION (Incorporated association)
- INDIGENOUS_CORPORATION (Indigenous corporation)
- INDUSTRY_BODY (Industry body)
- INDUSTRY_ORGANISATION (Industry association)
- NATIONAL_BODY (National body)
- NON_DISTRIBUTING_COOPERATIVE (Non-distributing cooperative)
- NON_GOVERNMENT_SCHOOL (Non-government school)
- NON_PROFIT_ORGANISATION (Non-profit organisation)
- NON_TRADING_COOPERATIVE (Non-trading cooperative)
- NOT_FOR_PROFIT_COMMUNITY_GROUP (Not-for-profit community group)
- PARTNERSHIP (Partnership)
- PEAK_STATE_TERRITORY_BODY (Peak state/territory body)
- PENDING_TM_OWNER (Pending TM owner)
- POLITICAL_PARTY (Political party)
- PRESCHOOL (Pre-school)
- PUBLIC_PRIVATE_ANCILLARY_FUND (Public/private ancillary fund)
- REGISTERED_BUSINESS (Registered business)
- REGISTERED_ORGANISATION (Registered organisation)
- REGISTRABLE_BODY (Registrable body)
- RESEARCH_ORGANISATION (Research organisation)
- STATUTORY_BODY (Statutory body)
- TRADE_UNION (Trade union)
- TRADEMARK_OWNER (Trademark owner)
- TRADING_COOPERATIVE (Trading cooperative)
- TRAINING_ORGANISATION (Training organisation)
- TRUST (Trust)
- UNINCORPORATED_ASSOCIATION (Unincorporated association)
- EDUCATION_AND_CARE_SERVICES_CHILDCARE (Education and care services (child care))

- GOVERNMENT_BODY (Government body)
- PROVIDER_OF_NON_ACCREDITED_TRAINING (Provider of non-accredited training)
- RELIGIOUS_CHURCH_GROUP (Religious/church group)
- SOLE_TRADER (Sole trader)

- AU_POLICY_REASON

  Valid values include the following:

  - POLICY_REASON_1

    POLICY_REASON_2

.ca

- BRAND_NUMBER
- CA_BUSINESS_ENTITY_TYPE

  Valid values include the following:

  - BANK (Bank)
  - COMMERCIAL_COMPANY (Commercial company)
  - COMPANY (Company)
  - COOPERATION (Cooperation)
  - COOPERATIVE (Cooperative)
  - COOPRIX (Cooprix)
  - CORP (Corporation)
  - CREDIT_UNION (Credit union)
  - FOMIA (Federation of mutual insurance associations)
  - INC (Incorporated)
  - LTD (Limited)
  - LTEE (Limitée)
  - LLC (Limited liability corporation)
  - LLP (Limited liability partnership)
  - LTE (Lte.)
  - MBA (Mutual benefit association)
  - MIC (Mutual insurance company)

- NFP (Not-for-profit corporation)
- SA (S.A.)
- SAVINGS_COMPANY (Savings company)
- SAVINGS_UNION (Savings union)
- SARL (Société à responsabilité limitée)
- TRUST (Trust)
- ULC (Unlimited liability corporation)

- CA_LEGAL_TYPE

  When ContactType is PERSON, valid values include the following:

  - ABO (Aboriginal Peoples indigenous to Canada)
  - CCT (Canadian citizen)
  - LGR (Legal Representative of a Canadian Citizen or Permanent Resident)
  - RES (Permanent resident of Canada)

  When ContactType is a value other than PERSON, valid values include the following:

  - ASS (Canadian unincorporated association)
  - CCO (Canadian corporation)
  - EDU (Canadian educational institution)
  - GOV (Government or government entity in Canada)
  - HOP (Canadian Hospital)
  - INB (Indian Band recognized by the Indian Act of Canada)
  - LAM (Canadian Library, Archive, or Museum)
  - MAJ (Her/His Majesty the Queen/King)
  - OMK (Official mark registered in Canada)
  - PLT (Canadian Political Party)
  - PRT (Partnership Registered in Canada)
  - TDM (Trademark registered in Canada)
  - TRD (Canadian Trade Union)
  - TRS (Trust established in Canada)

.es

- ES_IDENTIFICATION

  The value of ES_IDENTIFICATION depends on the following values:

  - The value of ES_LEGAL_FORM
  - The value of ES_IDENTIFICATION_TYPE

  **If ES_LEGAL_FORM is any value other than INDIVIDUAL:**

  - Specify 1 letter + 8 numbers (CIF [Certificado de Identificación Fiscal])
  - Example: B12345678

  **If ES_LEGAL_FORM is INDIVIDUAL, the value that you specify for ES_IDENTIFICATION depends on the value of ES_IDENTIFICATION_TYPE:**

  - If ES_IDENTIFICATION_TYPE is DNI_AND_NIF (for Spanish contacts):
    - Specify 8 numbers + 1 letter (DNI [Documento Nacional de Identidad], NIF [Número de Identificación Fiscal])
    - Example: 12345678M
  - If ES_IDENTIFICATION_TYPE is NIE (for foreigners with legal residence):
    - Specify 1 letter + 7 numbers + 1 letter ( NIE [Número de Identidad de Extranjero])
    - Example: Y1234567X
  - If ES_IDENTIFICATION_TYPE is OTHER (for contacts outside of Spain):
    - Specify a passport number, drivers license number, or national identity card number
- ES_IDENTIFICATION_TYPE

  Valid values include the following:

  - DNI_AND_NIF (For Spanish contacts)
  - NIE (For foreigners with legal residence)
  - OTHER (For contacts outside of Spain)
- ES_LEGAL_FORM

  Valid values include the following:

  - ASSOCIATION
  - CENTRAL_GOVERNMENT_BODY
  - CIVIL_SOCIETY

- COMMUNITY_OF_OWNERS
- COMMUNITY_PROPERTY
- CONSULATE
- COOPERATIVE
- DESIGNATION_OF_ORIGIN_SUPERVISORY_COUNCIL
- ECONOMIC_INTEREST_GROUP
- EMBASSY
- ENTITY_MANAGING_NATURAL_AREAS
- FARM_PARTNERSHIP
- FOUNDATION
- GENERAL_AND_LIMITED_PARTNERSHIP
- GENERAL_PARTNERSHIP
- INDIVIDUAL
- LIMITED_COMPANY
- LOCAL_AUTHORITY
- LOCAL_PUBLIC_ENTITY
- MUTUAL_INSURANCE_COMPANY
- NATIONAL_PUBLIC_ENTITY
- ORDER_OR_RELIGIOUS_INSTITUTION
- OTHERS (Only for contacts outside of Spain)
- POLITICAL_PARTY
- PROFESSIONAL_ASSOCIATION
- PUBLIC_LAW_ASSOCIATION
- PUBLIC_LIMITED_COMPANY
- REGIONAL_GOVERNMENT_BODY
- REGIONAL_PUBLIC_ENTITY
- SAVINGS_BANK
- SPANISH_OFFICE
- SPORTS_ASSOCIATION
- SPORTS_FEDERATION

- SPORTS_LIMITED_COMPANY
- TEMPORARY_ALLIANCE_OF_ENTERPRISES
- TRADE_UNION
- WORKER_OWNED_COMPANY
- WORKER_OWNED_LIMITED_COMPANY

.eu

- EU_COUNTRY_OF_CITIZENSHIP

.fi

- BIRTH_DATE_IN_YYYY_MM_DD
- FI_BUSINESS_NUMBER
- FI_ID_NUMBER
- FI_NATIONALITY

  Valid values include the following:

  - FINNISH
  - NOT_FINNISH
- FI_ORGANIZATION_TYPE

  Valid values include the following:

  - COMPANY
  - CORPORATION
  - GOVERNMENT
  - INSTITUTION
  - POLITICAL_PARTY
  - PUBLIC_COMMUNITY
  - TOWNSHIP

.it

- IT_NATIONALITY
- IT_PIN
- IT_REGISTRANT_ENTITY_TYPE

  Valid values include the following:

- FOREIGNERS
- FREELANCE_WORKERS (Freelance workers and professionals)
- ITALIAN_COMPANIES (Italian companies and one-person companies)
- NON_PROFIT_ORGANIZATIONS
- OTHER_SUBJECTS
- PUBLIC_ORGANIZATIONS

.ru

- BIRTH_DATE_IN_YYYY_MM_DD
- RU_PASSPORT_DATA

.se

- BIRTH_COUNTRY
- SE_ID_NUMBER

.sg

- SG_ID_NUMBER

.uk, .co.uk, .me.uk, and .org.uk

- UK_CONTACT_TYPE

  Valid values include the following:

  - CRC (UK Corporation by Royal Charter)
  - FCORP (Non-UK Corporation)
  - FIND (Non-UK Individual, representing self)
  - FOTHER (Non-UK Entity that does not fit into any other category)
  - GOV (UK Government Body)
  - IND (UK Individual (representing self))
  - IP (UK Industrial/Provident Registered Company)
  - LLP (UK Limited Liability Partnership)
  - LTD (UK Limited Company)
  - OTHER (UK Entity that does not fit into any other category)
  - PLC (UK Public Limited Company)
  - PTNR (UK Partnership)
  - RCHAR (UK Registered Charity)

- SCH (UK School)
- STAT (UK Statutory Body)
- STRA (UK Sole Trader)

- UK_COMPANY_NUMBER

In addition, many TLDs require a VAT_NUMBER.

Type: String

Valid Values: DUNS_NUMBER | BRAND_NUMBER | BIRTH_DEPARTMENT | BIRTH_DATE_IN_YYYY_MM_DD | BIRTH_COUNTRY | BIRTH_CITY | DOCUMENT_NUMBER | AU_ID_NUMBER | AU_ID_TYPE | CA_LEGAL_TYPE | CA_BUSINESS_ENTITY_TYPE | CA_LEGAL_REPRESENTATIVE | CA_LEGAL_REPRESENTATIVE_CAPACITY | ES_IDENTIFICATION | ES_IDENTIFICATION_TYPE | ES_LEGAL_FORM | FI_BUSINESS_NUMBER | FI_ID_NUMBER | FI_NATIONALITY | FI_ORGANIZATION_TYPE | IT_NATIONALITY | IT_PIN | IT_REGISTRANT_ENTITY_TYPE | RU_PASSPORT_DATA | SE_ID_NUMBER | SG_ID_NUMBER | VAT_NUMBER | UK_CONTACT_TYPE | UK_COMPANY_NUMBER | EU_COUNTRY_OF_CITIZENSHIP | AU_PRIORITY_TOKEN | AU_ELIGIBILITY_TYPE | AU_POLICY_REASON | AU_REGISTRANT_NAME

Required: Yes

**Value**

The value that corresponds with the name of an extra parameter.

Type: String

Length Constraints: Maximum length of 2048.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FilterCondition

Service: Amazon Route 53 domain registration

Information for the filtering of a list of domains returned by ListDomains.

## Contents

### Name

Name of the field which should be used for filtering the list of domains.

Type: String

Valid Values: `DomainName | Expiry`

Required: Yes

### Operator

The operator values for filtering domain names. The values can be:

- `LE`: Less than, or equal to
- `GE`: Greater than, or equal to
- `BEGINS_WITH`: Begins with

Type: String

Valid Values: `LE | GE | BEGINS_WITH`

Required: Yes

### Values

An array of strings presenting values to compare. Only 1 item in the list is currently supported.

Type: Array of strings

Array Members: Fixed number of 1 item.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Nameserver

Service: Amazon Route 53 domain registration

Name server includes the following elements.

## Contents

**Name**

The fully qualified host name of the name server.

Constraint: Maximum 255 characters

Type: String

Length Constraints: Maximum length of 255.

Pattern: `[a-zA-Z0-9_\-.]*`

Required: Yes

**GlueIps**

Glue IP address of a name server entry. Glue IP addresses are required only when the name of the name server is a subdomain of the domain. For example, if your domain is example.com and the name server for the domain is ns.example.com, you need to specify the IP address for ns.example.com.

Constraints: The list can contain only one IPv4 and one IPv6 address.

Type: Array of strings

Length Constraints: Maximum length of 45.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

# OperationSummary

Service: Amazon Route 53 domain registration

OperationSummary includes the following elements.

## Contents

**DomainName**

Name of the domain.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**LastUpdatedDate**

The date when the last change was made in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Message**

Message about the operation.

Type: String

Required: No

**OperationId**

Identifier returned to track the requested action.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**Status**

The current status of the requested operation in the system.

Type: String

Valid Values: `SUBMITTED | IN_PROGRESS | ERROR | SUCCESSFUL | FAILED`

Required: No

**StatusFlag**

Automatically checks whether there are no outstanding operations on domains that need customer attention.

Valid values are:

- `PENDING_ACCEPTANCE`: The operation is waiting for acceptance from the account that is receiving the domain.
- `PENDING_CUSTOMER_ACTION`: The operation is waiting for customer action, for example, returning an email.
- `PENDING_AUTHORIZATION`: The operation is waiting for the form of authorization. For more information, see ResendOperationAuthorization.
- `PENDING_PAYMENT_VERIFICATION`: The operation is waiting for the payment method to validate.
- `PENDING_SUPPORT_CASE`: The operation includes a support case and is waiting for its resolution.

Type: String

Valid Values: `PENDING_ACCEPTANCE | PENDING_CUSTOMER_ACTION | PENDING_AUTHORIZATION | PENDING_PAYMENT_VERIFICATION | PENDING_SUPPORT_CASE`

Required: No

**SubmittedDate**

The date when the request was submitted.

Type: Timestamp

Required: No

**Type**

Type of the action requested.

Type: String

Valid Values: `REGISTER_DOMAIN | DELETE_DOMAIN | TRANSFER_IN_DOMAIN | UPDATE_DOMAIN_CONTACT | UPDATE_NAMESERVER | CHANGE_PRIVACY_PROTECTION | DOMAIN_LOCK | ENABLE_AUTORENEW | DISABLE_AUTORENEW | ADD_DNSSEC | REMOVE_DNSSEC | EXPIRE_DOMAIN | TRANSFER_OUT_DOMAIN | CHANGE_DOMAIN_OWNER | RENEW_DOMAIN | PUSH_DOMAIN | INTERNAL_TRANSFER_OUT_DOMAIN | INTERNAL_TRANSFER_IN_DOMAIN | RELEASE_TO_GANDI | TRANSFER_ON_RENEW | RESTORE_DOMAIN`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# PriceWithCurrency

Service: Amazon Route 53 domain registration

Currency-specific price information.

## Contents

**Currency**

The currency specifier.

Type: String

Length Constraints: Fixed length of 3.

Required: Yes

**Price**

The price of a domain, in a specific currency.

Type: Double

Valid Range: Minimum value of 0.0.

Required: Yes

**PriceType**

Indicates whether the domain has standard or premium pricing. A value of `STANDARD` means the domain is priced at the regular rate for its TLD. A value of `REGISTRY_PREMIUM` means the domain has registry premium pricing, which may be different than the standard rate.

Type: String

Valid Values: `STANDARD | REGISTRY_PREMIUM`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SortCondition

Service: Amazon Route 53 domain registration

Information for sorting a list of domains.

## Contents

**Name**

Field to be used for sorting the list of domains. It can be either the name or the expiration for a domain. Note that if `filterCondition` is used in the same ListDomains call, the field used for sorting has to be the same as the field used for filtering.

Type: String

Valid Values: `DomainName | Expiry`

Required: Yes

**SortOrder**

The sort order for a list of domains. Either ascending (ASC) or descending (DES).

Type: String

Valid Values: `ASC | DESC`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Tag

Service: Amazon Route 53 domain registration

Each tag includes the following elements.

## Contents

### Key

The key (name) of a tag.

Valid values: A-Z, a-z, 0-9, space, ".:/=+\-@"

Constraints: Each key can be 1-128 characters long.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: No

### Value

The value of a tag.

Valid values: A-Z, a-z, 0-9, space, ".:/=+\-@"

Constraints: Each value can be 0-256 characters long.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

# Amazon Route 53 Global Resolver

The following data types are supported by Amazon Route 53 Global Resolver:

- AccessSourcesItem
- AccessTokenItem
- BatchCreateFirewallRuleInputItem
- BatchCreateFirewallRuleOutputItem
- BatchCreateFirewallRuleResult
- BatchDeleteFirewallRuleInputItem
- BatchDeleteFirewallRuleOutputItem
- BatchDeleteFirewallRuleResult
- BatchUpdateFirewallRuleInputItem
- BatchUpdateFirewallRuleOutputItem
- BatchUpdateFirewallRuleResult
- DNSViewSummary
- FirewallDomainListsItem
- FirewallRulesItem
- GlobalResolversItem
- HostedZoneAssociationSummary
- ManagedFirewallDomainListsItem
- ValidationExceptionField

# AccessSourcesItem

Service: Amazon Route 53 Global Resolver

Summary information about an access source.

## Contents

**arn**

The Amazon Resource Name (ARN) of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**cidr**

The CIDR block that defines the IP address range for the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 43.

Required: Yes

**createdAt**

The date and time when the access source was created.

Type: Timestamp

Required: Yes

**dnsViewId**

The ID of the DNS view that the access source is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**id**

The unique identifier of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**ipAddressType**

The IP address type of the access source.

Type: String

Valid Values: `IPV4 | IPV6`

Required: Yes

**protocol**

The protocol used by the access source.

Type: String

Valid Values: `DO53 | DOH | DOT`

Required: Yes

**status**

The current status of the access source.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: Yes

**updatedAt**

The date and time when the access source was last updated.

Type: Timestamp

Required: Yes

**name**

The name of the access source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# AccessTokenItem

Service: Amazon Route 53 Global Resolver

Summary information about a token.

## Contents

**arn**

The Amazon Resource Name (ARN) of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**createdAt**

The date and time when the token was created.

Type: Timestamp

Required: Yes

**dnsViewId**

The ID of the DNS view associated with the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**expiresAt**

The date and time when the token expires.

Type: Timestamp

Required: Yes

**globalResolverId**

The ID of the global resolver associated with the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**id**

The unique identifier of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**status**

The current status of the token.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

Required: Yes

**updatedAt**

The date and time when the token was last updated.

Type: Timestamp

Required: Yes

**name**

The name of the token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchCreateFirewallRuleInputItem

Service: Amazon Route 53 Global Resolver

Information about a DNS Firewall rule to create in a batch operation.

## Contents

**action**

The action to take when a DNS query matches the firewall rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: Yes

**clientToken**

A unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

**dnsViewId**

The ID of the DNS view to associate the firewall rule with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**name**

A name for the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**blockOverrideDnsType**

The DNS record type for the custom response when the action is BLOCK.

Type: String

Valid Values: `CNAME`

Required: No

**blockOverrideDomain**

The custom domain name for the BLOCK response.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: No

**blockOverrideTtl**

The TTL value for the custom response when the action is BLOCK.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**blockResponse**

The type of block response to return when the action is BLOCK.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**confidenceThreshold**

The confidence threshold for advanced threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**description**

A description of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnsAdvancedProtection**

Whether to enable advanced DNS threat protection for the firewall rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**firewallDomainListId**

The ID of the firewall domain list to associate with the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**priority**

The priority of the firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

**qType**

The DNS query type that the firewall rule should match.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchCreateFirewallRuleOutputItem

Service: Amazon Route 53 Global Resolver

Information about the result of creating a DNS Firewall rule in a batch operation.

## Contents

**code**

The HTTP response code for the batch operation result.

Type: Integer

Required: Yes

**firewallRule**

The firewall rule that was created in the batch operation.

Type: BatchCreateFirewallRuleResult object

Required: Yes

**message**

A message describing the result of the batch operation, including error details if applicable.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchCreateFirewallRuleResult

Service: Amazon Route 53 Global Resolver

The result of creating a firewall rule in a batch operation.

## Contents

**action**

The action configured for the created firewall rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: Yes

**clientToken**

The unique string that identified the request and ensured idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

**dnsViewId**

The ID of the DNS view associated with the created firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**name**

The name of the created firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**blockOverrideDnsType**

The DNS record type configured for the created firewall rule's custom response.

Type: String

Valid Values: `CNAME`

Required: No

**blockOverrideDomain**

The custom domain name configured for the created firewall rule's BLOCK response.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: No

**blockOverrideTtl**

The TTL value configured for the created firewall rule's custom response.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**blockResponse**

The type of block response configured for the created firewall rule.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**confidenceThreshold**

The confidence threshold configured for the created firewall rule's advanced threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**createdAt**

The date and time when the firewall rule was created.

Type: Timestamp

Required: No

**description**

The description of the created firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnsAdvancedProtection**

Whether advanced DNS threat protection is enabled for the created firewall rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**firewallDomainListId**

The ID of the firewall domain list associated with the created firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**id**

The unique identifier of the created firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**managedDomainListName**

The name of the managed domain list associated with the created firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**priority**

The priority of the created firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

**queryType**

The DNS query type that the created firewall rule matches.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Required: No

**status**

The current status of the created firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: No

**updatedAt**

The date and time when the firewall rule was last updated.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchDeleteFirewallRuleInputItem

Service: Amazon Route 53 Global Resolver

Information about a DNS Firewall rule to delete in a batch operation.

## Contents

### firewallRuleId

The ID of the DNS Firewall rule to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchDeleteFirewallRuleOutputItem

Service: Amazon Route 53 Global Resolver

The result of deleting a firewall rule in a batch operation.

## Contents

**code**

The response code for the delete operation.

Type: Integer

Required: Yes

**firewallRule**

The firewall rule that was deleted in the batch operation.

Type: BatchDeleteFirewallRuleResult object

Required: Yes

**message**

The response message for the delete operation.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchDeleteFirewallRuleResult

Service: Amazon Route 53 Global Resolver

Information about a firewall rule that was deleted in a batch operation.

## Contents

**id**

The unique identifier of the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**clientToken**

The unique string that identified the request and ensured idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**name**

The name of the deleted firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**status**

The final status of the deleted firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchUpdateFirewallRuleInputItem

Service: Amazon Route 53 Global Resolver

Information for updating a firewall rule in a batch operation.

## Contents

**firewallRuleId**

The unique identifier of the firewall rule to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**action**

The action to take when a DNS query matches the firewall rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: No

**blockOverrideDnsType**

The DNS record type for the custom response when the action is BLOCK.

Type: String

Valid Values: `CNAME`

Required: No

**blockOverrideDomain**

The custom domain name for the BLOCK response.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: No

**blockOverrideTtl**

The TTL value for the custom response when the action is BLOCK.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**blockResponse**

The type of block response to return when the action is BLOCK.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**confidenceThreshold**

The confidence threshold for advanced threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**description**

A description of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnsAdvancedProtection**

Whether to enable advanced DNS threat protection for the firewall rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**name**

A name for the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**priority**

The priority of the firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchUpdateFirewallRuleOutputItem

Service: Amazon Route 53 Global Resolver

The result of updating a firewall rule in a batch operation.

## Contents

**code**

The response code for the update operation.

Type: Integer

Required: Yes

**firewallRule**

The firewall rule that was updated in the batch operation.

Type: BatchUpdateFirewallRuleResult object

Required: Yes

**message**

The response message for the update operation.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchUpdateFirewallRuleResult

Service: Amazon Route 53 Global Resolver

Information about a firewall rule that was updated in a batch operation.

## Contents

**id**

The unique identifier of the updated firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**action**

The action configured for the updated firewall rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: No

**blockOverrideDnsType**

The DNS record type configured for the updated firewall rule's custom response.

Type: String

Valid Values: `CNAME`

Required: No

**blockOverrideDomain**

The custom domain name configured for the updated firewall rule's BLOCK response.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `\*?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+`

Required: No

**blockOverrideTtl**

The TTL value configured for the updated firewall rule's custom response.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**blockResponse**

The type of block response configured for the updated firewall rule.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**clientToken**

The unique string that identified the request and ensured idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**confidenceThreshold**

The confidence threshold configured for the updated firewall rule's advanced threat detection.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**createdAt**

The date and time when the firewall rule was originally created.

Type: Timestamp

Required: No

**description**

The description of the updated firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnsAdvancedProtection**

Whether advanced DNS threat protection is enabled for the updated firewall rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**dnsViewId**

The ID of the DNS view associated with the updated firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**firewallDomainListId**

The ID of the firewall domain list associated with the updated firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**name**

The name of the updated firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: No

**priority**

The priority of the updated firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

**queryType**

The DNS query type that the updated firewall rule matches.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Required: No

**status**

The current status of the updated firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: No

**updatedAt**

The date and time when the firewall rule was last updated.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DNSViewSummary

Service: Amazon Route 53 Global Resolver

Summary information about a DNS view.

## Contents

**arn**

The Amazon Resource Name (ARN) of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

**createdAt**

The date and time when the DNS view was created.

Type: Timestamp

Required: Yes

**dnssecValidation**

Whether DNSSEC validation is enabled for the DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: Yes

**ednsClientSubnet**

Whether EDNS Client Subnet injection is enabled for the DNS view.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: Yes

**firewallRulesFailOpen**

Whether firewall rules fail open when they cannot be evaluated.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: Yes

**globalResolverId**

The ID of the global resolver that the DNS view is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**id**

The unique identifier of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**name**

The name of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**status**

The current status of the DNS view.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | ENABLING | DISABLING | DISABLED | DELETING`

Required: Yes

**updatedAt**

The date and time when the DNS view was last updated.

Type: Timestamp

Required: Yes

**description**

A description of the DNS view.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallDomainListsItem

Service: Amazon Route 53 Global Resolver

Summary information about a firewall domain list.

## Contents

**arn**

The Amazon Resource Name (ARN) of the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**createdAt**

The date and time when the firewall domain list was created.

Type: Timestamp

Required: Yes

**globalResolverId**

The ID of the global resolver that the firewall domain list is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**id**

The unique identifier of the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**name**

The name of the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**status**

The current status of the firewall domain list.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: Yes

**updatedAt**

The date and time when the firewall domain list was last updated.

Type: Timestamp

Required: Yes

**description**

A description of the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRulesItem

Service: Amazon Route 53 Global Resolver

Summary information about a firewall rule.

## Contents

**action**

The action configured for the firewall rule.

Type: String

Valid Values: `ALLOW | ALERT | BLOCK`

Required: Yes

**createdAt**

The date and time when the firewall rule was created.

Type: Timestamp

Required: Yes

**dnsViewId**

The ID of the DNS view associated with the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**id**

The unique identifier of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**name**

The name of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**priority**

The priority of the firewall rule.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: Yes

**status**

The current status of the firewall rule.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: Yes

**updatedAt**

The date and time when the firewall rule was last updated.

Type: Timestamp

Required: Yes

**blockOverrideDnsType**

The DNS record type configured for the firewall rule's custom response.

Type: String

Valid Values: CNAME

Required: No

**blockOverrideDomain**

The custom domain name configured for the firewall rule's BLOCK response.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: *?[a-zA-Z0-9!"#$%&'()*+,./:;<=>?@\[\\\]^_`{|}~-]+

Required: No

**blockOverrideTtl**

The TTL value configured for the firewall rule's custom response.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**blockResponse**

The type of block response configured for the firewall rule.

Type: String

Valid Values: NODATA | NXDOMAIN | OVERRIDE

Required: No

**confidenceThreshold**

The confidence threshold configured for the firewall rule's advanced threat detection.

Type: String

Valid Values: LOW | MEDIUM | HIGH

Required: No

**description**

The description of the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**dnsAdvancedProtection**

Whether advanced DNS threat protection is enabled for the firewall rule.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**firewallDomainListId**

The ID of the firewall domain list associated with the firewall rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: No

**queryType**

The DNS query type that the firewall rule matches.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# GlobalResolversItem

Service: Amazon Route 53 Global Resolver

Summary information about a global resolver.

## Contents

**arn**

The Amazon Resource Name (ARN) of the global resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**clientToken**

The unique string that identifies the request and ensures idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

**createdAt**

The date and time when the global resolver was created.

Type: Timestamp

Required: Yes

**dnsName**

The DNS name of the global resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

**id**

The unique identifier of the global resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**ipv4Addresses**

The IPv4 addresses assigned to the global resolver.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 15.

Pattern: `((25[0-5]|(2[0-4]|1\d|[1-9]|)\d)\.?\b){4}`

Required: Yes

**name**

The name of the global resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**regions**

The AWS Regions where the global resolver is deployed.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 32.

Required: Yes

**status**

The current status of the global resolver.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING`

Required: Yes

**updatedAt**

The date and time when the global resolver was last updated.

Type: Timestamp

Required: Yes

**description**

A description of the global resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**ipAddressType**

The IP address type configured for the global resolver.

Type: String

Valid Values: `IPV4 | DUAL_STACK`

Required: No

**ipv6Addresses**

The IPv6 addresses assigned to the global resolver. This field is only populated when ipAddressType is DUAL_STACK.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 39.

Pattern: `(?:[A-Fa-f0-9]{0,4}:){2,7}[A-Fa-f0-9]{1,4}`

Required: No

**observabilityRegion**

The AWS Region where observability data is collected for the global resolver.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 32.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# HostedZoneAssociationSummary

Service: Amazon Route 53 Global Resolver

Summary information about a hosted zone association.

## Contents

**createdAt**

The date and time when the hosted zone association was created.

Type: Timestamp

Required: Yes

**hostedZoneId**

The ID of the hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: Yes

**hostedZoneName**

The name of the hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: Yes

**id**

The unique identifier of the hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**name**

The name of the hosted zone association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**resourceArn**

The Amazon Resource Name (ARN) of the resource associated with the hosted zone.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:[-.a-z0-9]{1,63}:[-.a-z0-9]{1,63}:[-.a-z0-9]{0,63}:[-.a-z0-9]{0,63}:[^/].{0,1023}`

Required: Yes

**status**

The current status of the hosted zone association.

Type: String

Valid Values: `CREATING | OPERATIONAL | DELETING`

Required: Yes

**updatedAt**

The date and time when the hosted zone association was last updated.

Type: Timestamp

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ManagedFirewallDomainListsItem

Service: Amazon Route 53 Global Resolver

Summary information about a managed firewall domain list.

## Contents

**id**

The unique identifier of the managed firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[-.a-zA-Z0-9]+`

Required: Yes

**managedListType**

The type of the managed firewall domain list.

Type: String

Required: Yes

**name**

The name of the managed firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9-_/' ']+)`

Required: Yes

**description**

A description of the managed firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

## ValidationExceptionField

Service: Amazon Route 53 Global Resolver

Information about a field that failed validation.

### Contents

**message**

The validation error message for the field.

Type: String

Required: Yes

**name**

The name of the field that failed validation.

Type: String

Required: Yes

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Route 53 Profiles

The following data types are supported by Route 53 Profiles:

- Profile
- ProfileAssociation
- ProfileResourceAssociation

- ProfileSummary
- Tag

# Profile

Service: Route 53 Profiles

A complex type that includes settings for a Route 53 Profile.

## Contents

**Arn**

The Amazon Resource Name (ARN) of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**ClientToken**

The `ClientToken` value that was assigned when the Profile was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreationTime**

The date and time that the Profile was created, in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Id**

ID of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ModificationTime**

The date and time that the Profile was modified, in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Name**

Name of the Profile.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

AWS account ID of the Profile owner.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ShareStatus**

Sharing status for the Profile.

Type: String

Valid Values: `NOT_SHARED | SHARED_WITH_ME | SHARED_BY_ME`

Required: No

**Status**

The status for the Profile.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING | CREATING | DELETED | FAILED`

Required: No

**StatusMessage**

Status message that includes additiona information about the Profile.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ProfileAssociation

Service: Route 53 Profiles

An association between a Route 53 Profile and a VPC.

## Contents

**CreationTime**

The date and time that the Profile association was created, in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Id**

ID of the Profile association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ModificationTime**

The date and time that the Profile association was modified, in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Name**

Name of the Profile association.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

AWS account ID of the Profile association owner.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**Priority**

The priority of the Profile association. Route 53 VPC Resolver evaluates the Profile associations for a VPC in priority order, starting with the lowest value. Associations created without a priority have priority 100.

Type: Integer

Valid Range: Minimum value of 100. Maximum value of 9900.

Required: No

**ProfileId**

ID of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ResourceId**

The Amazon Resource Name (ARN) of the VPC.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Status**

Status of the Profile association.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING | CREATING | DELETED | FAILED`

Required: No

**StatusMessage**

Additional information about the Profile association.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ProfileResourceAssociation

Service: Route 53 Profiles

The association between a Route 53 Profile and resources.

## Contents

**CreationTime**

The date and time that the Profile resource association was created, in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Id**

ID of the Profile resource association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ModificationTime**

The date and time that the Profile resource association was modified, in Unix time format and Coordinated Universal Time (UTC).

Type: Timestamp

Required: No

**Name**

Name of the Profile resource association.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

AWS account ID of the Profile resource association owner.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ProfileId**

Profile ID of the Profile that the resources are associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ResourceArn**

The Amazon Resource Name (ARN) of the resource association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**ResourceProperties**

If the DNS resource is a DNS Firewall rule group, this indicates the priority.

Type: String

Required: No

**ResourceType**

Resource type, such as a private hosted zone, interface VPC endpoint, Resolver query log configuration, or DNS Firewall rule group.

Type: String

Required: No

**Status**

Status of the Profile resource association.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING | CREATING | DELETED | FAILED`

Required: No

**StatusMessage**

Additional information about the Profile resource association.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ProfileSummary

Service: Route 53 Profiles

Summary information about a Route 53 Profile.

## Contents

**Arn**

The Amazon Resource Name (ARN) of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Id**

ID of the Profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Name**

Name of the Profile.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**ShareStatus**

Share status of the Profile.

Type: String

Valid Values: `NOT_SHARED | SHARED_WITH_ME | SHARED_BY_ME`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

## Tag

Service: Route 53 Profiles

Tag for the Profile.

### Contents

**Key**

Key associated with the Tag.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

**Value**

Value for the Tag.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: Yes

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Amazon Route 53 Resolver

The following data types are supported by Amazon Route 53 Resolver:

- BatchCreateFirewallRuleError

- BatchDeleteFirewallRuleError
- BatchUpdateFirewallRuleError
- CreateFirewallRuleEntry
- DeleteFirewallRuleEntry
- DnsThreatProtectionRuleTypeConfig
- Filter
- FirewallAdvancedContentCategoryConfig
- FirewallAdvancedThreatCategoryConfig
- FirewallConfig
- FirewallDomainList
- FirewallDomainListMetadata
- FirewallRule
- FirewallRuleGroup
- FirewallRuleGroupAssociation
- FirewallRuleGroupMetadata
- FirewallRuleType
- FirewallRuleTypeDefinition
- IpAddressRequest
- IpAddressResponse
- IpAddressUpdate
- OutpostResolver
- PartnerThreatProtectionConfig
- ResolverConfig
- ResolverDnssecConfig
- ResolverEndpoint
- ResolverQueryLogConfig
- ResolverQueryLogConfigAssociation
- ResolverRule
- ResolverRuleAssociation
- ResolverRuleConfig

- SubscriptionInfo
- Tag
- TargetAddress
- UpdateFirewallRuleEntry
- UpdateIpAddress

# BatchCreateFirewallRuleError

Service: Amazon Route 53 Resolver

An error that occurred while creating a firewall rule in a batch operation.

## Contents

**Code**

The error code for the failure.

Type: String

Required: No

**FirewallRule**

The firewall rule entry that caused the error.

Type: CreateFirewallRuleEntry object

Required: No

**Message**

A message that provides details about the error.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchDeleteFirewallRuleError

Service: Amazon Route 53 Resolver

An error that occurred while deleting a firewall rule in a batch operation.

## Contents

**Code**

The error code for the failure.

Type: String

Required: No

**FirewallRule**

The firewall rule entry that caused the error.

Type: DeleteFirewallRuleEntry object

Required: No

**Message**

A message that provides details about the error.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# BatchUpdateFirewallRuleError

Service: Amazon Route 53 Resolver

An error that occurred while updating a firewall rule in a batch operation.

## Contents

**Code**

The error code for the failure.

Type: String

Required: No

**FirewallRule**

The firewall rule entry that caused the error.

Type: UpdateFirewallRuleEntry object

Required: No

**Message**

A message that provides details about the error.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# CreateFirewallRuleEntry

Service: Amazon Route 53 Resolver

The details for creating a single firewall rule in a batch operation.

## Contents

### Action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule:

- `ALLOW` - Permit the request to go through. Not available for DNS Firewall Advanced rules.
- `ALERT` - Permit the request and send metrics and logs to CloudWatch.
- `BLOCK` - Disallow the request. This option requires additional details in the rule's `BlockResponse`.

Type: String

Valid Values: `ALLOW | BLOCK | ALERT`

Required: Yes

### CreatorRequestId

A unique string that identifies the request and that allows you to retry failed requests without the risk of running the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: Yes

### FirewallRuleGroupId

The unique identifier of the firewall rule group where you want to create the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**Name**

A name that lets you identify the rule in the rule group.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: Yes

**Priority**

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Integer

Required: Yes

**BlockOverrideDnsType**

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: `CNAME`

Required: No

**BlockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**BlockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

This setting is required if the `BlockResponse` setting is `OVERRIDE`.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**BlockResponse**

The way that you want DNS Firewall to block the request, used with the rule action setting `BLOCK`.

- `NODATA` - Respond indicating that the query was successful, but no response is available for it.
- `NXDOMAIN` - Respond indicating that the domain name that's in the query doesn't exist.
- `OVERRIDE` - Provide a custom override in the response. This option requires custom handling details in the rule's `BlockOverride*` settings.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**ConfidenceThreshold**

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create or update a DNS Firewall Advanced rule. The confidence level values mean:

- `LOW`: Provides the highest detection rate for threats, but also increases false positives.
- `MEDIUM`: Provides a balance between detecting threats and false positives.
- `HIGH`: Detects only the most well corroborated threats with a low rate of false positives.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**DnsThreatProtection**

The type of the DNS Firewall Advanced rule. This setting is mutually exclusive with `FirewallDomainListId` and `FirewallRuleType`. Valid values are:

- `DGA`: Domain generation algorithms detection. DGAs are used by attackers to generate a large number of domains to launch malware attacks.
- `DNS_TUNNELING`: DNS tunneling detection. DNS tunneling is used by attackers to exfiltrate data from the client by using the DNS tunnel without making a network connection to the client.
- `DICTIONARY_DGA`: Dictionary-based domain generation algorithms detection. Dictionary DGAs use wordlists to generate domains that appear more legitimate, making them harder to detect than traditional DGAs.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**FirewallDomainListId**

The ID of the domain list that you want to use in the rule. This setting is mutually exclusive with `DnsThreatProtection` and `FirewallRuleType`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallDomainRedirectionAction**

How you want the rule to evaluate DNS redirection in the DNS redirection chain, such as CNAME or DNAME.

`INSPECT_REDIRECTION_DOMAIN`: (Default) inspects all domains in the redirection chain. The individual domains in the redirection chain must be added to the domain list.

`TRUST_REDIRECTION_DOMAIN`: Inspects only the first domain in the redirection chain. You don't need to add the subsequent domains in the redirection list to the domain list.

Type: String

Valid Values: `INSPECT_REDIRECTION_DOMAIN | TRUST_REDIRECTION_DOMAIN`

Required: No

**FirewallRuleType**

The rule type configuration for the firewall rule. This is a tagged union — set exactly one of its members. This setting is mutually exclusive with the top-level `FirewallDomainListId` and `DnsThreatProtection` fields. Use one of:

- `FirewallAdvancedContentCategory` — match an AWS-managed content category (for example, `VIOLENCE_AND_HATE_SPEECH`).
- `FirewallAdvancedThreatCategory` — match an AWS-managed advanced threat category (for example, `PHISHING`).
- `DnsThreatProtection` — match a built-in DNS Firewall Advanced threat detector (`DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`).
- `PartnerThreatProtection` — match a third-party threat feed delivered through AWS Marketplace. The selected partner must be an active subscription on the calling account.

To enumerate the values supported in your account, call ListFirewallRuleTypes.

Type: FirewallRuleType object

Required: No

**Qtype**

The DNS query type you want the rule to evaluate. Allowed values are:

- A: Returns an IPv4 address.
- AAAA: Returns an IPv6 address.
- CAA: Restricts CAs that can create SSL/TLS certifications for the domain.
- CNAME: Returns another domain name.
- DS: Record that identifies the DNSSEC signing key of a delegated zone.
- MX: Specifies mail servers.
- NAPTR: Regular-expression-based rewriting of domain names.
- NS: Authoritative name servers.
- PTR: Maps an IP address to a domain name.
- SOA: Start of authority record for the zone.

- SPF: Lists the servers authorized to send emails from a domain.
- SRV: Application specific values that identify servers.
- TXT: Verifies email senders and application-specific values.
- A query type you define by using the DNS type ID, for example 28 for AAAA. The values must be defined as TYPENUMBER, where the NUMBER can be 1-65534, for example, TYPE28. For more information, see List of DNS record types.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DeleteFirewallRuleEntry

Service: Amazon Route 53 Resolver

The details for deleting a single firewall rule in a batch operation.

## Contents

**FirewallRuleGroupId**

The unique identifier of the firewall rule group for the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**FirewallDomainListId**

The ID of the domain list that's used in the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallThreatProtectionId**

The ID of the DNS Firewall Advanced rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Qtype**

The DNS query type that the rule evaluates.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# DnsThreatProtectionRuleTypeConfig

Service: Amazon Route 53 Resolver

The configuration for a DNS threat protection rule type within the rule type framework.

## Contents

### ConfidenceThreshold

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create or update a DNS Firewall Advanced rule. The confidence level values mean:

- `LOW`: Provides the highest detection rate for threats, but also increases false positives.
- `MEDIUM`: Provides a balance between detecting threats and false positives.
- `HIGH`: Detects only the most well corroborated threats with a low rate of false positives.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: Yes

### Value

The type of DNS threat protection. Valid values are:

- `DGA`: Domain generation algorithms detection. DGAs are used by attackers to generate a large number of domains to launch malware attacks.
- `DNS_TUNNELING`: DNS tunneling detection. DNS tunneling is used by attackers to exfiltrate data from the client by using the DNS tunnel without making a network connection to the client.
- `DICTIONARY_DGA`: Dictionary-based domain generation algorithms detection. Dictionary DGAs use wordlists to generate domains that appear more legitimate, making them harder to detect than traditional DGAs.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Filter

Service: Amazon Route 53 Resolver

For Resolver list operations (ListResolverEndpoints, ListResolverRules, ListResolverRuleAssociations, ListResolverQueryLogConfigs, ListResolverQueryLogConfigAssociations), and ListResolverDnssecConfigs), an optional specification to return a subset of objects.

To filter objects, such as Resolver endpoints or Resolver rules, you specify `Name` and `Values`. For example, to list only inbound Resolver endpoints, specify `Direction` for `Name` and specify `INBOUND` for `Values`.

## Contents

### Name

The name of the parameter that you want to use to filter objects.

The valid values for `Name` depend on the action that you're including the filter in, ListResolverEndpoints, ListResolverRules, ListResolverRuleAssociations, ListResolverQueryLogConfigs, or ListResolverQueryLogConfigAssociations.

> **Note**
>
> In early versions of Resolver, values for `Name` were listed as uppercase, with underscore (_) delimiters. For example, `CreatorRequestId` was originally listed as `CREATOR_REQUEST_ID`. Uppercase values for `Name` are still supported.

#### ListResolverEndpoints

Valid values for `Name` include the following:

- `CreatorRequestId`: The value that you specified when you created the Resolver endpoint.
- `Direction`: Whether you want to return inbound or outbound Resolver endpoints. If you specify `DIRECTION` for `Name`, specify `INBOUND` or `OUTBOUND` for `Values`.
- `HostVPCId`: The ID of the VPC that inbound DNS queries pass through on the way from your network to your VPCs in a region, or the VPC that outbound queries pass through on the way from your VPCs to your network. In a CreateResolverEndpoint request, `SubnetId` indirectly identifies the VPC. In a GetResolverEndpoint request, the VPC ID for a Resolver endpoint is returned in the `HostVPCId` element.

- `IpAddressCount`: The number of IP addresses that you have associated with the Resolver endpoint.
- `Name`: The name of the Resolver endpoint.
- `SecurityGroupIds`: The IDs of the VPC security groups that you specified when you created the Resolver endpoint.
- `Status`: The status of the Resolver endpoint. If you specify `Status` for `Name`, specify one of the following status codes for `Values`: `CREATING`, `OPERATIONAL`, `UPDATING`, `AUTO_RECOVERING`, `ACTION_NEEDED`, or `DELETING`. For more information, see `Status` in ResolverEndpoint.

**ListResolverRules**

Valid values for `Name` include the following:

- `CreatorRequestId`: The value that you specified when you created the Resolver rule.
- `DomainName`: The domain name for which Resolver is forwarding DNS queries to your network. In the value that you specify for `Values`, include a trailing dot (.) after the domain name. For example, if the domain name is example.com, specify the following value. Note the "." after `com`:

  `example.com.`
- `Name`: The name of the Resolver rule.
- `ResolverEndpointId`: The ID of the Resolver endpoint that the Resolver rule is associated with.

  > **Note**
  >
  > You can filter on the Resolver endpoint only for rules that have a value of `FORWARD` for `RuleType`.

- `Status`: The status of the Resolver rule. If you specify `Status` for `Name`, specify one of the following status codes for `Values`: `COMPLETE`, `DELETING`, `UPDATING`, or `FAILED`.
- `Type`: The type of the Resolver rule. If you specify `TYPE` for `Name`, specify `FORWARD` or `SYSTEM` for `Values`.

**ListResolverRuleAssociations**

Valid values for `Name` include the following:

- Name: The name of the Resolver rule association.
- ResolverRuleId: The ID of the Resolver rule that is associated with one or more VPCs.
- Status: The status of the Resolver rule association. If you specify Status for Name, specify one of the following status codes for Values: CREATING, COMPLETE, DELETING, or FAILED.
- VPCId: The ID of the VPC that the Resolver rule is associated with.

**ListResolverQueryLogConfigs**

Valid values for Name include the following:

- Arn: The ARN for the query logging configuration.
- AssociationCount: The number of VPCs that are associated with the query logging configuration.
- CreationTime: The date and time that the query logging configuration was created, in Unix time format and Coordinated Universal Time (UTC).
- CreatorRequestId: A unique string that identifies the request that created the query logging configuration.
- Destination: The AWS service that you want to forward query logs to. Valid values include the following:
  - S3
  - CloudWatchLogs
  - KinesisFirehose
- DestinationArn: The ARN of the location that Resolver is sending query logs to. This value can be the ARN for an S3 bucket, a CloudWatch Logs log group, or a Kinesis Data Firehose delivery stream.
- Id: The ID of the query logging configuration
- Name: The name of the query logging configuration
- OwnerId: The AWS account ID for the account that created the query logging configuration.
- ShareStatus: An indication of whether the query logging configuration is shared with other AWS accounts, or was shared with the current account by another AWS account. Valid values include: NOT_SHARED, SHARED_WITH_ME, or SHARED_BY_ME.
- Status: The status of the query logging configuration. If you specify Status for Name, specify the applicable status code for Values: CREATING, CREATED, DELETING, or FAILED. For more information, see Status.

**ListResolverQueryLogConfigAssociations**

Valid values for `Name` include the following:

- `CreationTime`: The date and time that the VPC was associated with the query logging configuration, in Unix time format and Coordinated Universal Time (UTC).
- `Error`: If the value of `Status` is `FAILED`, specify the cause: `DESTINATION_NOT_FOUND` or `ACCESS_DENIED`.
- `Id`: The ID of the query logging association.
- `ResolverQueryLogConfigId`: The ID of the query logging configuration that a VPC is associated with.
- `ResourceId`: The ID of the Amazon VPC that is associated with the query logging configuration.
- `Status`: The status of the query logging association. If you specify `Status` for `Name`, specify the applicable status code for `Values`: `CREATING`, `CREATED`, `DELETING`, or `FAILED`. For more information, see Status.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Values**

When you're using a `List` operation and you want the operation to return a subset of objects, such as Resolver endpoints or Resolver rules, the value of the parameter that you want to use to filter objects. For example, to list only inbound Resolver endpoints, specify `Direction` for `Name` and specify `INBOUND` for `Values`.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 600.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallAdvancedContentCategoryConfig

Service: Amazon Route 53 Resolver

The configuration for a content category-based filtering rule. This specifies which content category to use for DNS query evaluation.

## Contents

### Category

The content category identifier. To retrieve the list of available content categories, call ListFirewallRuleTypes with `RuleType` set to `FirewallAdvancedContentCategory`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallAdvancedThreatCategoryConfig

Service: Amazon Route 53 Resolver

The configuration for a threat category-based filtering rule. This specifies which threat category to use for DNS query evaluation.

## Contents

### Category

The threat category identifier. To retrieve the list of available threat categories, call ListFirewallRuleTypes with `RuleType` set to `FirewallAdvancedThreatCategory`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallConfig

Service: Amazon Route 53 Resolver

Configuration of the firewall behavior provided by DNS Firewall for a single VPC from Amazon Virtual Private Cloud (Amazon VPC).

## Contents

**FirewallFailOpen**

Determines how DNS Firewall operates during failures, for example when all traffic that is sent to DNS Firewall fails to receive a reply.

- By default, fail open is disabled, which means the failure mode is closed. This approach favors security over availability. DNS Firewall returns a failure error when it is unable to properly evaluate a query.
- If you enable this option, the failure mode is open. This approach favors availability over security. DNS Firewall allows queries to proceed if it is unable to properly evaluate them.

This behavior is only enforced for VPCs that have at least one DNS Firewall rule group association.

Type: String

Valid Values: `ENABLED | DISABLED | USE_LOCAL_RESOURCE_SETTING`

Required: No

**Id**

The ID of the firewall configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**OwnerId**

The AWS account ID of the owner of the VPC that this firewall configuration applies to.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ResourceId**

The ID of the VPC that this firewall configuration applies to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallDomainList

Service: Amazon Route 53 Resolver

High-level information about a list of firewall domains for use in a FirewallRule. This is returned by GetFirewallDomainList.

To retrieve the domains that are defined for this domain list, call ListFirewallDomains.

## Contents

**Arn**

The Amazon Resource Name (ARN) of the firewall domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Category**

The category of the domain list.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**CreationTime**

The date and time that the domain list was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of running the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**DomainCount**

The number of domain names that are specified in the domain list.

Type: Integer

Required: No

**Id**

The ID of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ManagedListType**

The type of the managed domain list, for example `THREAT`.

Type: String

Valid Values: `THREAT | CONTENT`

Required: No

**ManagedOwnerName**

The owner of the list, used only for lists that are not managed by you. For example, the managed domain list `AWSManagedDomainsMalwareDomainList` has the managed owner name `Route 53 Resolver DNS Firewall`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

**ModificationTime**

The date and time that the domain list was last modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Name**

The name of the domain list.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**Status**

The status of the domain list.

Type: String

Valid Values: `COMPLETE | COMPLETE_IMPORT_FAILED | IMPORTING | DELETING | UPDATING`

Required: No

**StatusMessage**

Additional information about the status of the list, if available.

Type: String

Length Constraints: Maximum length of 255.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallDomainListMetadata

Service: Amazon Route 53 Resolver

Minimal high-level information for a firewall domain list. The action ListFirewallDomainLists returns an array of these objects.

To retrieve full information for a firewall domain list, call GetFirewallDomainList and ListFirewallDomains.

## Contents

**Arn**

The Amazon Resource Name (ARN) of the firewall domain list metadata.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Category**

The category of the domain list.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**CreatorRequestId**

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of running the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Id**

The ID of the domain list.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ManagedListType**

The type of the managed domain list, for example `THREAT`.

Type: String

Valid Values: `THREAT | CONTENT`

Required: No

**ManagedOwnerName**

The owner of the list, used only for lists that are not managed by you. For example, the managed domain list `AWSManagedDomainsMalwareDomainList` has the managed owner name `Route 53 Resolver DNS Firewall`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

**Name**

The name of the domain list.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRule

Service: Amazon Route 53 Resolver

A single firewall rule in a rule group.

## Contents

### Action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule:

- `ALLOW` - Permit the request to go through. Not available for DNS Firewall Advanced rules.
- `ALERT` - Permit the request to go through but send an alert to the logs.
- `BLOCK` - Disallow the request. If this is specified, additional handling details are provided in the rule's `BlockResponse` setting.

Type: String

Valid Values: `ALLOW | BLOCK | ALERT`

Required: No

### BlockOverrideDnsType

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: `CNAME`

Required: No

### BlockOverrideDomain

The custom DNS record to send back in response to the query. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**BlockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: Integer

Required: No

**BlockResponse**

The way that you want DNS Firewall to block the request. Used for the rule action setting `BLOCK`.

- `NODATA` - Respond indicating that the query was successful, but no response is available for it.
- `NXDOMAIN` - Respond indicating that the domain name that's in the query doesn't exist.
- `OVERRIDE` - Provide a custom override in the response. This option requires custom handling details in the rule's `BlockOverride*` settings.

Type: String

Valid Values: `NODATA | NXDOMAIN | OVERRIDE`

Required: No

**ConfidenceThreshold**

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create a DNS Firewall Advanced rule. The confidence level values mean:

- `LOW`: Provides the highest detection rate for threats, but also increases false positives.
- `MEDIUM`: Provides a balance between detecting threats and false positives.
- `HIGH`: Detects only the most well corroborated threats with a low rate of false positives.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**CreationTime**

The date and time that the rule was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of executing the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**DnsThreatProtection**

The type of the DNS Firewall Advanced rule. Valid values are:

- `DGA`: Domain generation algorithms detection. DGAs are used by attackers to generate a large number of domains to launch malware attacks.
- `DNS_TUNNELING`: DNS tunneling detection. DNS tunneling is used by attackers to exfiltrate data from the client by using the DNS tunnel without making a network connection to the client.
- `DICTIONARY_DGA`: Dictionary-based domain generation algorithms detection. Dictionary DGAs use wordlists to generate domains that appear more legitimate, making them harder to detect than traditional DGAs.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**FirewallDomainListId**

The ID of the domain list that's used in the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallDomainRedirectionAction**

How you want the the rule to evaluate DNS redirection in the DNS redirection chain, such as CNAME or DNAME.

`INSPECT_REDIRECTION_DOMAIN`: (Default) inspects all domains in the redirection chain. The individual domains in the redirection chain must be added to the domain list.

`TRUST_REDIRECTION_DOMAIN`: Inspects only the first domain in the redirection chain. You don't need to add the subsequent domains in the domain in the redirection list to the domain list.

Type: String

Valid Values: `INSPECT_REDIRECTION_DOMAIN | TRUST_REDIRECTION_DOMAIN`

Required: No

**FirewallRuleGroupId**

The unique identifier of the Firewall rule group of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallRuleType**

The rule type configuration for the firewall rule. This is a tagged union — exactly one of its members will be populated. Possible members are:

- `FirewallAdvancedContentCategory` — an AWS-managed content category (for example, `VIOLENCE_AND_HATE_SPEECH`).
- `FirewallAdvancedThreatCategory` — an AWS-managed advanced threat category (for example, `PHISHING`).
- `DnsThreatProtection` — a built-in DNS Firewall Advanced threat detector (`DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`).

- `PartnerThreatProtection` — a third-party threat feed delivered through AWS Marketplace.

To enumerate the values supported in your account, call ListFirewallRuleTypes.

Type: FirewallRuleType object

Required: No

**FirewallThreatProtectionId**

ID of the DNS Firewall Advanced rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ModificationTime**

The date and time that the rule was last modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Name**

The name of the rule.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**Priority**

The priority of the rule in the rule group. This value must be unique within the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Integer

Required: No

**Qtype**

The DNS query type you want the rule to evaluate. Allowed values are;

- A: Returns an IPv4 address.
- AAAA: Returns an Ipv6 address.
- CAA: Restricts CAs that can create SSL/TLS certifications for the domain.
- CNAME: Returns another domain name.
- DS: Record that identifies the DNSSEC signing key of a delegated zone.
- MX: Specifies mail servers.
- NAPTR: Regular-expression-based rewriting of domain names.
- NS: Authoritative name servers.
- PTR: Maps an IP address to a domain name.
- SOA: Start of authority record for the zone.
- SPF: Lists the servers authorized to send emails from a domain.
- SRV: Application specific values that identify servers.
- TXT: Verifies email senders and application-specific values.
- A query type you define by using the DNS type ID, for example 28 for AAAA. The values must be defined as TYPENUMBER, where the NUMBER can be 1-65534, for example, TYPE28. For more information, see List of DNS record types.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

**Status**

The lifecycle state of the firewall rule. Possible values:

- `CREATING` — DNS Firewall is provisioning the rule. Rules created with the `PartnerThreatProtection` rule type begin in this state while DNS Firewall verifies the calling account's AWS Marketplace entitlement.
- `COMPLETE` — The rule is provisioned and enforcing matches.

- `CREATION_FAILED` — Provisioning failed. `StatusMessage` contains a human-readable reason. A rule in this state is immutable: UpdateFirewallRule rejects the request, and the rule must be removed with DeleteFirewallRule.

For rules that do not require asynchronous provisioning, this field may be absent.

Type: String

Length Constraints: Maximum length of 32.

Required: No

**StatusMessage**

An additional message about the rule's lifecycle state. Populated when `Status` is `CREATION_FAILED` to describe why provisioning failed.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRuleGroup

Service: Amazon Route 53 Resolver

High-level information for a firewall rule group. A firewall rule group is a collection of rules that DNS Firewall uses to filter DNS network traffic for a VPC. To retrieve the rules for the rule group, call ListFirewallRules.

## Contents

**Arn**

The ARN (Amazon Resource Name) of the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreationTime**

The date and time that the rule group was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of running the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Id**

The ID of the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ModificationTime**

The date and time that the rule group was last modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Name**

The name of the rule group.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

The AWS account ID for the account that created the rule group. When a rule group is shared with your account, this is the account that has shared the rule group with you.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**RuleCount**

The number of rules in the rule group.

Type: Integer

Required: No

**ShareStatus**

Whether the rule group is shared with other AWS accounts, or was shared with the current account by another AWS account. Sharing is configured through AWS Resource Access Manager (AWS RAM).

Type: String

Valid Values: `NOT_SHARED | SHARED_WITH_ME | SHARED_BY_ME`

Required: No

**Status**

The status of the domain list.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING`

Required: No

**StatusMessage**

Additional information about the status of the rule group, if available.

Type: String

Length Constraints: Maximum length of 255.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRuleGroupAssociation

Service: Amazon Route 53 Resolver

An association between a firewall rule group and a VPC, which enables DNS filtering for the VPC.

## Contents

**Arn**

The Amazon Resource Name (ARN) of the firewall rule group association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreationTime**

The date and time that the association was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of running the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**FirewallRuleGroupId**

The unique identifier of the firewall rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Id**

The identifier for the association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ManagedOwnerName**

The owner of the association, used only for associations that are not managed by you. If you use AWS Firewall Manager to manage your DNS Firewalls, then this reports Firewall Manager as the managed owner.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

**ModificationTime**

The date and time that the association was last modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**MutationProtection**

If enabled, this setting disallows modification or removal of the association, to help prevent against accidentally altering DNS firewall protections.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

**Name**

The name of the association.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**Priority**

The setting that determines the processing order of the rule group among the rule groups that are associated with a single VPC. DNS Firewall filters VPC traffic starting from rule group with the lowest numeric priority setting.

Type: Integer

Required: No

**Status**

The current status of the association.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING`

Required: No

**StatusMessage**

Additional information about the status of the response, if available.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**VpcId**

The unique identifier of the VPC that is associated with the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRuleGroupMetadata

Service: Amazon Route 53 Resolver

Minimal high-level information for a firewall rule group. The action ListFirewallRuleGroups returns an array of these objects.

To retrieve full information for a firewall rule group, call GetFirewallRuleGroup and ListFirewallRules.

## Contents

**Arn**

The ARN (Amazon Resource Name) of the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreatorRequestId**

A unique string defined by you to identify the request. This allows you to retry failed requests without the risk of running the operation twice. This can be any unique string, for example, a timestamp.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Id**

The ID of the rule group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Name**

The name of the rule group.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

The AWS account ID for the account that created the rule group. When a rule group is shared with your account, this is the account that has shared the rule group with you.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ShareStatus**

Whether the rule group is shared with other AWS accounts, or was shared with the current account by another AWS account. Sharing is configured through AWS Resource Access Manager (AWS RAM).

Type: String

Valid Values: `NOT_SHARED | SHARED_WITH_ME | SHARED_BY_ME`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRuleType

Service: Amazon Route 53 Resolver

The rule-type configuration for a DNS Firewall rule. `FirewallRuleType` is a tagged union — exactly one member must be set per rule, and the member determines what the rule matches against. This shape is mutually exclusive with the top-level `FirewallDomainListId` and `DnsThreatProtection` fields on CreateFirewallRule and UpdateFirewallRule.

Call ListFirewallRuleTypes to discover which rule-type variants and which values within each variant are available in your account and Region.

## Contents

**DnsThreatProtection**

Configures the rule to match a built-in DNS Firewall Advanced threat detector — `DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`. See DnsThreatProtectionRuleTypeConfig.

Type: DnsThreatProtectionRuleTypeConfig object

Required: No

**FirewallAdvancedContentCategory**

Configures the rule to match an AWS-managed content category (for example, `VIOLENCE_AND_HATE_SPEECH`). See FirewallAdvancedContentCategoryConfig.

Type: FirewallAdvancedContentCategoryConfig object

Required: No

**FirewallAdvancedThreatCategory**

Configures the rule to match an AWS-managed advanced threat category (for example, `PHISHING`). See FirewallAdvancedThreatCategoryConfig.

Type: FirewallAdvancedThreatCategoryConfig object

Required: No

**PartnerThreatProtection**

Configures the rule to match a third-party threat feed delivered through AWS Marketplace. The calling account must hold an active subscription to the partner product named in `Partner`; if

the subscription is missing or revoked, the rule is created with `Status` `CREATION_FAILED` and cannot be modified — only deleted. See PartnerThreatProtectionConfig.

Type: PartnerThreatProtectionConfig object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# FirewallRuleTypeDefinition

Service: Amazon Route 53 Resolver

The definition of an available rule type that can be used in DNS Firewall rules. This is returned by ListFirewallRuleTypes.

## Contents

**Description**

A description of the rule type.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

**DisplayName**

The display name of the rule type.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**RuleType**

The category or class of the rule type, such as `FirewallAdvancedContentCategory` or `FirewallAdvancedThreatCategory`.

Type: String

Length Constraints: Maximum length of 128.

Required: No

**SubscriptionInfo**

For rule types that require an external subscription (today, only the `PartnerThreatProtection` variant), describes the AWS Marketplace product that backs the rule type. Absent for rule types that are managed by AWS and do not require a separate subscription. See SubscriptionInfo.

Type: SubscriptionInfo object

Required: No

**Value**

The specific identifier within the rule type category, such as `VIOLENCE_AND_HATE_SPEECH` or `PHISHING`.

Type: String

Length Constraints: Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# IpAddressRequest

Service: Amazon Route 53 Resolver

In a CreateResolverEndpoint request, the IP address that DNS queries originate from (for outbound endpoints) or that you forward DNS queries to (for inbound endpoints). `IpAddressRequest` also includes the ID of the subnet that contains the IP address.

## Contents

### SubnetId

The ID of the subnet that contains the IP address.

We recommend using VPC Resolver on AWS Outposts to create endpoints on AWS Outposts Racks.

> **Important**
>
> Outposts subnets with Local Network Interface (LNI) enabled are not compatible with Route 53 Resolver endpoints. If you enable LNI on a subnet that contains Route 53 Resolver endpoint elastic network interfaces (ENIs), those ENIs will stop functioning. For more information, see Subnet compatibility for Resolver endpoints in the *Amazon Route 53 Developer Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: Yes

### Ip

The IPv4 address that you want to use for DNS queries.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 36.

Required: No

### Ipv6

The IPv6 address that you want to use for DNS queries.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 39.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# IpAddressResponse

Service: Amazon Route 53 Resolver

In the response to a GetResolverEndpoint request, information about the IP addresses that the Resolver endpoint uses for DNS queries.

## Contents

**CreationTime**

The date and time that the IP address was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Ip**

One IPv4 address that the Resolver endpoint uses for DNS queries.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 36.

Required: No

**IpId**

The ID of one IP address.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Ipv6**

One IPv6 address that the Resolver endpoint uses for DNS queries.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 39.

Required: No

**ModificationTime**

The date and time that the IP address was last modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Status**

A status code that gives the current status of the request.

Type: String

Valid Values: `CREATING | FAILED_CREATION | FAILED_CREATION_INSUFFICIENT_EC2_CAPACITY_IN_OUTPOST | ATTACHING | ATTACHED | REMAP_DETACHING | REMAP_ATTACHING | DETACHING | FAILED_RESOURCE_GONE | DELETING | DELETE_FAILED_FAS_EXPIRED | UPDATING | UPDATE_FAILED | ISOLATED`

Required: No

**StatusMessage**

A message that provides additional information about the status of the request.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**SubnetId**

The ID of one subnet.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# IpAddressUpdate

Service: Amazon Route 53 Resolver

In an UpdateResolverEndpoint request, information about an IP address to update.

## Contents

**Ip**

The new IPv4 address.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 36.

Required: No

**IpId**

*Only when removing an IP address from a Resolver endpoint*: The ID of the IP address that you want to remove. To get this ID, use GetResolverEndpoint.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Ipv6**

The new IPv6 address.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 39.

Required: No

**SubnetId**

The ID of the subnet that includes the IP address that you want to update. To get this ID, use GetResolverEndpoint.

We recommend using VPC Resolver on AWS Outposts to create endpoints on AWS Outposts Racks.

> **Important**
>
> Outposts subnets with Local Network Interface (LNI) enabled are not compatible with Route 53 Resolver endpoints. If you enable LNI on a subnet that contains Route 53 Resolver endpoint elastic network interfaces (ENIs), those ENIs will stop functioning. For more information, see Subnet compatibility for Resolver endpoints in the *Amazon Route 53 Developer Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# OutpostResolver

Service: Amazon Route 53 Resolver

A complex type that contains settings for an existing Resolver on an Outpost.

## Contents

**Arn**

The ARN (Amazon Resource Name) for the Resolver on an Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreationTime**

The date and time that the Outpost Resolver was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string that identifies the request that created the Resolver endpoint. The `CreatorRequestId` allows failed requests to be retried without the risk of running the operation twice.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Id**

The ID of the Resolver on Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**InstanceCount**

Amazon EC2 instance count for the Resolver on the Outpost.

Type: Integer

Required: No

**ModificationTime**

The date and time that the Outpost Resolver was modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Name**

Name of the Resolver.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**OutpostArn**

The ARN (Amazon Resource Name) for the Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^arn:aws([a-z-]+)?:outposts:[a-z\d-]+:\d{12}:outpost/op-[a-f0-9]{17}$`

Required: No

**PreferredInstanceType**

The Amazon EC2 instance type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Status**

Status of the Resolver.

Type: String

Valid Values: `CREATING | OPERATIONAL | UPDATING | DELETING | ACTION_NEEDED | FAILED_CREATION | FAILED_DELETION`

Required: No

**StatusMessage**

A detailed description of the Resolver.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# PartnerThreatProtectionConfig

Service: Amazon Route 53 Resolver

The configuration for a partner threat-protection rule. To enumerate the partners available in your account, call ListFirewallRuleTypes with `RuleType` set to `PartnerThreatProtection` — each returned FirewallRuleTypeDefinition includes a SubscriptionInfo identifying the AWS Marketplace product that backs it.

## Contents

### Partner

The identifier of the partner threat-protection product, exactly as returned in the `Value` field of a FirewallRuleTypeDefinition with `RuleType` set to `PartnerThreatProtection`. The calling account must hold an active AWS Marketplace subscription to this product.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverConfig

Service: Amazon Route 53 Resolver

A complex type that contains information about a Resolver configuration for a VPC.

## Contents

**AutodefinedReverse**

The status of whether or not the Resolver will create autodefined rules for reverse DNS lookups. This is enabled by default. The status can be one of following:

- **ENABLING:** Autodefined rules for reverse DNS lookups are being enabled but are not complete.
- **ENABLED:** Autodefined rules for reverse DNS lookups are enabled.
- **DISABLING:** Autodefined rules for reverse DNS lookups are being disabled but are not complete.
- **DISABLED:** Autodefined rules for reverse DNS lookups are disabled.

Type: String

Valid Values: `ENABLING | ENABLED | DISABLING | DISABLED | UPDATING_TO_USE_LOCAL_RESOURCE_SETTING | USE_LOCAL_RESOURCE_SETTING`

Required: No

**Id**

ID for the Resolver configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**OwnerId**

The owner account ID of the Amazon Virtual Private Cloud VPC.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ResourceId**

The ID of the Amazon Virtual Private Cloud VPC or a Route 53 Profile that you're configuring Resolver for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverDnssecConfig

Service: Amazon Route 53 Resolver

A complex type that contains information about a configuration for DNSSEC validation.

## Contents

**Id**

The ID for a configuration for DNSSEC validation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**OwnerId**

The owner account ID of the virtual private cloud (VPC) for a configuration for DNSSEC validation.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ResourceId**

The ID of the virtual private cloud (VPC) that you're configuring the DNSSEC validation status for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ValidationStatus**

The validation status for a DNSSEC configuration. The status can be one of the following:

- **ENABLING:** DNSSEC validation is being enabled but is not complete.
- **ENABLED:** DNSSEC validation is enabled.

- **DISABLING:** DNSSEC validation is being disabled but is not complete.
- **DISABLED** DNSSEC validation is disabled.

Type: String

Valid Values: `ENABLING | ENABLED | DISABLING | DISABLED | UPDATING_TO_USE_LOCAL_RESOURCE_SETTING | USE_LOCAL_RESOURCE_SETTING`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverEndpoint

Service: Amazon Route 53 Resolver

In the response to a CreateResolverEndpoint, DeleteResolverEndpoint, GetResolverEndpoint, Updates the name, or ResolverEndpointType for an endpoint, or UpdateResolverEndpoint request, a complex type that contains settings for an existing inbound or outbound Resolver endpoint.

## Contents

**Arn**

The ARN (Amazon Resource Name) for the Resolver endpoint.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreationTime**

The date and time that the endpoint was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string that identifies the request that created the Resolver endpoint. The `CreatorRequestId` allows failed requests to be retried without the risk of running the operation twice.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Direction**

Indicates whether the Resolver endpoint allows inbound or outbound DNS queries:

- INBOUND: allows DNS queries to your VPC from your network
- OUTBOUND: allows DNS queries from your VPC to your network
- INBOUND_DELEGATION: Resolver delegates queries to Route 53 private hosted zones from your network.

Type: String

Valid Values: INBOUND | OUTBOUND | INBOUND_DELEGATION

Required: No

**Dns64Enabled**

Indicates whether DNS64 is enabled for the inbound Resolver endpoint. When true, Route 53 Resolver synthesizes AAAA (IPv6) records for IPv4-only services by prepending the 64:ff9b::/96 prefix to the IPv4 address.

Type: Boolean

Required: No

**HostVPCId**

The ID of the VPC that you want to create the Resolver endpoint in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Id**

The ID of the Resolver endpoint.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**IpAddressCount**

The number of IP addresses that the Resolver endpoint can use for DNS queries.

Type: Integer

Required: No

**Ipv6InternetAccessEnabled**

Indicates whether IPv6 internet access is enabled for the outbound Resolver endpoint. When `true`, the endpoint elastic network interfaces (ENIs) can forward DNS queries to public IPv6 targets through an internet gateway.

Type: Boolean

Required: No

**ModificationTime**

The date and time that the endpoint was last modified, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Name**

The name that you assigned to the Resolver endpoint when you submitted a CreateResolverEndpoint request.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OutpostArn**

The ARN (Amazon Resource Name) for the Outpost.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^arn:aws([a-z-]+)?:outposts:[a-z\d-]+:\d{12}:outpost/op-[a-f0-9]{17}$`

Required: No

**PreferredInstanceType**

The Amazon EC2 instance type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Protocols**

Protocols used for the endpoint. DoH-FIPS is applicable for a default inbound endpoints only.

For an inbound endpoint you can apply the protocols as follows:

- Do53 and DoH in combination.
- Do53 and DoH-FIPS in combination.
- Do53 alone.
- DoH alone.
- DoH-FIPS alone.
- None, which is treated as Do53.

For a delegation inbound endpoint you can use Do53 only.

For an outbound endpoint you can apply the protocols as follows:

- Do53 and DoH in combination.
- Do53 alone.
- DoH alone.
- None, which is treated as Do53.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: `DoH | Do53 | DoH-FIPS`

Required: No

**ResolverEndpointType**

The Resolver endpoint IP address type.

Type: String

Valid Values: `IPV6 | IPV4 | DUALSTACK`

Required: No

**RniEnhancedMetricsEnabled**

Indicates whether RNI enhanced metrics are enabled for the Resolver endpoint. When enabled, one-minute granular metrics are published in CloudWatch for each RNI associated with this endpoint. When disabled, these metrics are not published.

Type: Boolean

Required: No

**SecurityGroupIds**

The ID of one or more security groups that control access to this VPC. The security group must include one or more inbound rules (for inbound endpoints) or outbound rules (for outbound endpoints). Inbound and outbound rules must allow TCP and UDP access. For inbound access, open port 53. For outbound access, open the port that you're using for DNS queries on your network.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Status**

A code that specifies the current status of the Resolver endpoint. Valid values include the following:

- `CREATING`: Resolver is creating and configuring one or more Amazon VPC network interfaces for this endpoint.
- `OPERATIONAL`: The Amazon VPC network interfaces for this endpoint are correctly configured and able to pass inbound or outbound DNS queries between your network and Resolver.

- UPDATING: Resolver is associating or disassociating one or more network interfaces with this endpoint.
- AUTO_RECOVERING: Resolver is trying to recover one or more of the network interfaces that are associated with this endpoint. During the recovery process, the endpoint functions with limited capacity because of the limit on the number of DNS queries per IP address (per network interface). For the current limit, see Limits on Route 53 Resolver.
- ACTION_NEEDED: This endpoint is unhealthy, and Resolver can't automatically recover it. To resolve the problem, we recommend that you check each IP address that you associated with the endpoint. For each IP address that isn't available, add another IP address and then delete the IP address that isn't available. (An endpoint must always include at least two IP addresses.) A status of ACTION_NEEDED can have a variety of causes. Here are two common causes:
  - One or more of the network interfaces that are associated with the endpoint were deleted using Amazon VPC.
  - The network interface couldn't be created for some reason that's outside the control of Resolver.
- DELETING: Resolver is deleting this endpoint and the associated network interfaces.

Type: String

Valid Values: CREATING | OPERATIONAL | UPDATING | AUTO_RECOVERING | ACTION_NEEDED | DELETING

Required: No

**StatusMessage**

A detailed description of the status of the Resolver endpoint.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**TargetNameServerMetricsEnabled**

Indicates whether target name server metrics are enabled for the outbound Resolver endpoint. When enabled, one-minute granular metrics are published in CloudWatch for each target name

server associated with this endpoint. When disabled, these metrics are not published. This feature is not supported for inbound Resolver endpoint.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverQueryLogConfig

Service: Amazon Route 53 Resolver

In the response to a CreateResolverQueryLogConfig, DeleteResolverQueryLogConfig, GetResolverQueryLogConfig, or ListResolverQueryLogConfigs request, a complex type that contains settings for one query logging configuration.

## Contents

**Arn**

The ARN for the query logging configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**AssociationCount**

The number of VPCs that are associated with the query logging configuration.

Type: Integer

Required: No

**CreationTime**

The date and time that the query logging configuration was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string that identifies the request that created the query logging configuration. The `CreatorRequestId` allows failed requests to be retried without the risk of running the operation twice.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**DestinationArn**

The ARN of the resource that you want Resolver to send query logs: an Amazon S3 bucket, a CloudWatch Logs log group, or a Kinesis Data Firehose delivery stream.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 600.

Required: No

**Id**

The ID for the query logging configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Name**

The name of the query logging configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

The AWS account ID for the account that created the query logging configuration.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ShareStatus**

An indication of whether the query logging configuration is shared with other AWS accounts, or was shared with the current account by another AWS account. Sharing is configured through AWS Resource Access Manager (AWS RAM).

Type: String

Valid Values: `NOT_SHARED | SHARED_WITH_ME | SHARED_BY_ME`

Required: No

**Status**

The status of the specified query logging configuration. Valid values include the following:

- `CREATING`: Resolver is creating the query logging configuration.
- `CREATED`: The query logging configuration was successfully created. Resolver is logging queries that originate in the specified VPC.
- `DELETING`: Resolver is deleting this query logging configuration.
- `FAILED`: Resolver can't deliver logs to the location that is specified in the query logging configuration. Here are two common causes:
  - The specified destination (for example, an Amazon S3 bucket) was deleted.
  - Permissions don't allow sending logs to the destination.

Type: String

Valid Values: `CREATING | CREATED | DELETING | FAILED`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverQueryLogConfigAssociation

Service: Amazon Route 53 Resolver

In the response to an AssociateResolverQueryLogConfig, DisassociateResolverQueryLogConfig, GetResolverQueryLogConfigAssociation, or ListResolverQueryLogConfigAssociations, request, a complex type that contains settings for a specified association between an Amazon VPC and a query logging configuration.

## Contents

**CreationTime**

The date and time that the VPC was associated with the query logging configuration, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Error**

If the value of `Status` is `FAILED`, the value of `Error` indicates the cause:

- `DESTINATION_NOT_FOUND`: The specified destination (for example, an Amazon S3 bucket) was deleted.
- `ACCESS_DENIED`: Permissions don't allow sending logs to the destination.

If the value of `Status` is a value other than `FAILED`, `Error` is null.

Type: String

Valid Values: `NONE | DESTINATION_NOT_FOUND | ACCESS_DENIED | INTERNAL_SERVICE_ERROR`

Required: No

**ErrorMessage**

Contains additional information about the error. If the value or `Error` is null, the value of `ErrorMessage` also is null.

Type: String

Required: No

**Id**

The ID of the query logging association.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ResolverQueryLogConfigId**

The ID of the query logging configuration that a VPC is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ResourceId**

The ID of the Amazon VPC that is associated with the query logging configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Status**

The status of the specified query logging association. Valid values include the following:

- `CREATING`: Resolver is creating an association between an Amazon VPC and a query logging configuration.
- `ACTIVE`: The association between an Amazon VPC and a query logging configuration was successfully created. Resolver is logging queries that originate in the specified VPC.
- `DELETING`: Resolver is deleting this query logging association.
- `FAILED`: Resolver either couldn't create or couldn't delete the query logging association.

Type: String

Valid Values: `CREATING | ACTIVE | ACTION_NEEDED | DELETING | FAILED`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverRule

Service: Amazon Route 53 Resolver

For queries that originate in your VPC, detailed information about a Resolver rule, which specifies how to route DNS queries out of the VPC. The `ResolverRule` parameter appears in the response to a CreateResolverRule, DeleteResolverRule, GetResolverRule, ListResolverRules, or UpdateResolverRule request.

## Contents

**Arn**

The ARN (Amazon Resource Name) for the Resolver rule specified by `Id`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**CreationTime**

The date and time that the Resolver rule was created, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**CreatorRequestId**

A unique string that you specified when you created the Resolver rule. `CreatorRequestId` identifies the request and allows failed requests to be retried without the risk of running the operation twice.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**DelegationRecord**

DNS queries with delegation records that point to this domain name are forwarded to resolvers on your network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**DomainName**

DNS queries for this domain name are forwarded to the IP addresses that are specified in `TargetIps`. If a query matches multiple Resolver rules (example.com and www.example.com), the query is routed using the Resolver rule that contains the most specific domain name (www.example.com).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**Id**

The ID that Resolver assigned to the Resolver rule when you created it.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**ModificationTime**

The date and time that the Resolver rule was last updated, in Unix time format and Coordinated Universal Time (UTC).

Type: String

Length Constraints: Minimum length of 20. Maximum length of 40.

Required: No

**Name**

The name for the Resolver rule, which you specified when you created the Resolver rule.

The name can be up to 64 characters long and can contain letters (a-z, A-Z), numbers (0-9), hyphens (-), underscores (_), and spaces. The name cannot consist of only numbers.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**OwnerId**

When a rule is shared with another AWS account, the account ID of the account that the rule is shared with.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 32.

Required: No

**ResolverEndpointId**

The ID of the endpoint that the rule is associated with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**RuleType**

When you want to forward DNS queries for specified domain name to resolvers on your network, specify `FORWARD` or `DELEGATE`. If a query matches multiple Resolver rules (example.com and www.example.com), outbound DNS queries are routed using the Resolver rule that contains the most specific domain name (www.example.com).

When you have a forwarding rule to forward DNS queries for a domain to your network and you want Resolver to process queries for a subdomain of that domain, specify `SYSTEM`.

For example, to forward DNS queries for example.com to resolvers on your network, you create a rule and specify `FORWARD` for `RuleType`. To then have Resolver process queries for apex.example.com, you create a rule and specify `SYSTEM` for `RuleType`.

Currently, only Resolver can create rules that have a value of `RECURSIVE` for `RuleType`.

Type: String

Valid Values: `FORWARD | SYSTEM | RECURSIVE | DELEGATE`

Required: No

**ShareStatus**

Whether the rule is shared and, if so, whether the current account is sharing the rule with another account, or another account is sharing the rule with the current account.

Type: String

Valid Values: `NOT_SHARED | SHARED_WITH_ME | SHARED_BY_ME`

Required: No

**Status**

A code that specifies the current status of the Resolver rule.

Type: String

Valid Values: `COMPLETE | DELETING | UPDATING | FAILED`

Required: No

**StatusMessage**

A detailed description of the status of a Resolver rule.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**TargetIps**

An array that contains the IP addresses and ports that an outbound endpoint forwards DNS queries to. Typically, these are the IP addresses of DNS resolvers on your network.

Type: Array of TargetAddress objects

Array Members: Minimum number of 1 item.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverRuleAssociation

Service: Amazon Route 53 Resolver

In the response to an AssociateResolverRule, DisassociateResolverRule, or ListResolverRuleAssociations request, provides information about an association between a Resolver rule and a VPC. The association determines which DNS queries that originate in the VPC are forwarded to your network.

## Contents

**Id**

The ID of the association between a Resolver rule and a VPC. Resolver assigns this value when you submit an AssociateResolverRule request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Name**

The name of an association between a Resolver rule and a VPC.

The name can be up to 64 characters long and can contain letters (a-z, A-Z), numbers (0-9), hyphens (-), underscores (_), and spaces. The name cannot consist of only numbers.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**ResolverRuleId**

The ID of the Resolver rule that you associated with the VPC that is specified by `VPCId`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Status**

A code that specifies the current status of the association between a Resolver rule and a VPC.

Type: String

Valid Values: `CREATING | COMPLETE | DELETING | FAILED | OVERRIDDEN`

Required: No

**StatusMessage**

A detailed description of the status of the association between a Resolver rule and a VPC.

Type: String

Length Constraints: Maximum length of 255.

Required: No

**VPCId**

The ID of the VPC that you associated the Resolver rule with.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# ResolverRuleConfig

Service: Amazon Route 53 Resolver

In an UpdateResolverRule request, information about the changes that you want to make.

## Contents

**Name**

The new name for the Resolver rule. The name that you specify appears in the Resolver dashboard in the Route 53 console.

The name can be up to 64 characters long and can contain letters (a-z, A-Z), numbers (0-9), hyphens (-), underscores (_), and spaces. The name cannot consist of only numbers.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**ResolverEndpointId**

The ID of the new outbound Resolver endpoint that you want to use to route DNS queries to the IP addresses that you specify in `TargetIps`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**TargetIps**

For DNS queries that originate in your VPC, the new IP addresses that you want to route outbound DNS queries to.

Type: Array of TargetAddress objects

Array Members: Minimum number of 1 item.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# SubscriptionInfo

Service: Amazon Route 53 Resolver

Identifies the AWS Marketplace product that backs a partner-managed rule type. Returned as part of FirewallRuleTypeDefinition when the rule type variant requires an active customer subscription to the named product.

## Contents

**ProductId**

The AWS Marketplace product identifier of the partner threat-protection product. Use this value to verify or manage the calling account's subscription in AWS Marketplace.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**VendorName**

The name of the AWS Marketplace seller (vendor) that publishes the partner threat-protection product (for example, `Palo Alto Networks`).

Type: String

Length Constraints: Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Tag

Service: Amazon Route 53 Resolver

One tag that you want to add to the specified resource. A tag consists of a `Key` (a name for the tag) and a `Value`.

## Contents

**Key**

The name for the tag. For example, if you want to associate Resolver resources with the account IDs of your customers for billing purposes, the value of `Key` might be `account-id`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

**Value**

The value for the tag. For example, if `Key` is `account-id`, then `Value` might be the ID of the customer account that you're creating the resource for.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# TargetAddress

Service: Amazon Route 53 Resolver

In a CreateResolverRule request, an array of the IPs that you want to forward DNS queries to.

## Contents

**Ip**

One IPv4 address that you want to forward DNS queries to.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 36.

Required: No

**Ipv6**

One IPv6 address that you want to forward DNS queries to.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 39.

Required: No

**Port**

The port at `Ip` that you want to forward DNS queries to.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

**Protocol**

The protocols for the target address. The protocol you choose needs to be supported by the outbound endpoint of the Resolver rule.

Type: String

Valid Values: `DoH | Do53 | DoH-FIPS`

Required: No

**ServerNameIndication**

The Server Name Indication of the DoH server that you want to forward queries to. This is only used if the Protocol of the `TargetAddress` is `DoH`.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateFirewallRuleEntry

Service: Amazon Route 53 Resolver

The details for updating a single firewall rule in a batch operation.

## Contents

### FirewallRuleGroupId

The unique identifier of the firewall rule group for the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### Action

The action that DNS Firewall should take on a DNS query when it matches one of the domains in the rule's domain list, or a threat in a DNS Firewall Advanced rule:

- `ALLOW` - Permit the request to go through. Not available for DNS Firewall Advanced rules.
- `ALERT` - Permit the request and send metrics and logs to CloudWatch.
- `BLOCK` - Disallow the request. This option requires additional details in the rule's `BlockResponse`.

Type: String

Valid Values: `ALLOW | BLOCK | ALERT`

Required: No

### BlockOverrideDnsType

The DNS record's type. This determines the format of the record value that you provided in `BlockOverrideDomain`. Used for the rule action `BLOCK` with a `BlockResponse` setting of `OVERRIDE`.

Type: String

Valid Values: `CNAME`

Required: No

**BlockOverrideDomain**

The custom DNS record to send back in response to the query. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**BlockOverrideTtl**

The recommended amount of time, in seconds, for the DNS resolver or web browser to cache the provided override record. Used for the rule action BLOCK with a BlockResponse setting of OVERRIDE.

This setting is required if the BlockResponse setting is OVERRIDE.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 604800.

Required: No

**BlockResponse**

The way that you want DNS Firewall to block the request, used with the rule action setting BLOCK.

- NODATA - Respond indicating that the query was successful, but no response is available for it.
- NXDOMAIN - Respond indicating that the domain name that's in the query doesn't exist.
- OVERRIDE - Provide a custom override in the response. This option requires custom handling details in the rule's BlockOverride* settings.

Type: String

Valid Values: NODATA | NXDOMAIN | OVERRIDE

Required: No

**ConfidenceThreshold**

The confidence threshold for DNS Firewall Advanced. You must provide this value when you create or update a DNS Firewall Advanced rule. The confidence level values mean:

- `LOW`: Provides the highest detection rate for threats, but also increases false positives.
- `MEDIUM`: Provides a balance between detecting threats and false positives.
- `HIGH`: Detects only the most well corroborated threats with a low rate of false positives.

Type: String

Valid Values: `LOW | MEDIUM | HIGH`

Required: No

**DnsThreatProtection**

The type of the DNS Firewall Advanced rule. This setting is mutually exclusive with `FirewallDomainListId` and `FirewallRuleType`. Valid values are:

- `DGA`: Domain generation algorithms detection. DGAs are used by attackers to generate a large number of domains to launch malware attacks.
- `DNS_TUNNELING`: DNS tunneling detection. DNS tunneling is used by attackers to exfiltrate data from the client by using the DNS tunnel without making a network connection to the client.
- `DICTIONARY_DGA`: Dictionary-based domain generation algorithms detection. Dictionary DGAs use wordlists to generate domains that appear more legitimate, making them harder to detect than traditional DGAs.

Type: String

Valid Values: `DGA | DNS_TUNNELING | DICTIONARY_DGA`

Required: No

**FirewallDomainListId**

The ID of the domain list to use in the rule. This setting is mutually exclusive with `DnsThreatProtection` and `FirewallRuleType`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**FirewallDomainRedirectionAction**

How you want the rule to evaluate DNS redirection in the DNS redirection chain, such as CNAME or DNAME.

`INSPECT_REDIRECTION_DOMAIN`: (Default) inspects all domains in the redirection chain. The individual domains in the redirection chain must be added to the domain list.

`TRUST_REDIRECTION_DOMAIN`: Inspects only the first domain in the redirection chain. You don't need to add the subsequent domains in the redirection list to the domain list.

Type: String

Valid Values: `INSPECT_REDIRECTION_DOMAIN | TRUST_REDIRECTION_DOMAIN`

Required: No

**FirewallRuleType**

The rule type configuration for the firewall rule. This is a tagged union — set exactly one of its members. This setting is mutually exclusive with the top-level `FirewallDomainListId` and `DnsThreatProtection` fields. Use one of:

- `FirewallAdvancedContentCategory` — match an AWS-managed content category (for example, `VIOLENCE_AND_HATE_SPEECH`).
- `FirewallAdvancedThreatCategory` — match an AWS-managed advanced threat category (for example, `PHISHING`).
- `DnsThreatProtection` — match a built-in DNS Firewall Advanced threat detector (`DGA`, `DNS_TUNNELING`, or `DICTIONARY_DGA`).
- `PartnerThreatProtection` — match a third-party threat feed delivered through AWS Marketplace. The selected partner must be an active subscription on the calling account.

To enumerate the values supported in your account, call ListFirewallRuleTypes.

Type: FirewallRuleType object

Required: No

**FirewallThreatProtectionId**

The ID of the DNS Firewall Advanced rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Name**

The name of the rule.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `(?!^[0-9]+$)([a-zA-Z0-9\-_' ']+)`

Required: No

**Priority**

The setting that determines the processing order of the rule in the rule group. DNS Firewall processes the rules in a rule group by order of priority, starting from the lowest setting.

Type: Integer

Required: No

**Qtype**

The DNS query type you want the rule to evaluate. Allowed values are:

- A: Returns an IPv4 address.
- AAAA: Returns an IPv6 address.
- CAA: Restricts CAs that can create SSL/TLS certifications for the domain.
- CNAME: Returns another domain name.
- DS: Record that identifies the DNSSEC signing key of a delegated zone.
- MX: Specifies mail servers.
- NAPTR: Regular-expression-based rewriting of domain names.
- NS: Authoritative name servers.
- PTR: Maps an IP address to a domain name.
- SOA: Start of authority record for the zone.
- SPF: Lists the servers authorized to send emails from a domain.

- SRV: Application specific values that identify servers.
- TXT: Verifies email senders and application-specific values.
- A query type you define by using the DNS type ID, for example 28 for AAAA. The values must be defined as TYPENUMBER, where the NUMBER can be 1-65534, for example, TYPE28. For more information, see List of DNS record types.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# UpdateIpAddress

Service: Amazon Route 53 Resolver

Provides information about the IP address type in response to UpdateResolverEndpoint.

## Contents

### IpId

The ID of the IP address, specified by the `ResolverEndpointId`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### Ipv6

The IPv6 address that you want to use for DNS queries.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 39.

Required: Yes

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the *IAM User Guide*.

**X-Amz-Algorithm**

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

**X-Amz-Credential**

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the *IAM User Guide*.

Type: string

Required: Conditional

**X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

**X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

# Common Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

**AccessDeniedException**

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

**ExpiredTokenException**

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

**IncompleteSignature**

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

**InternalFailure**

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

**MalformedHttpRequestException**

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

**NotAuthorized**

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

**OptInRequired**

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

**RequestAbortedException**

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

**RequestEntityTooLargeException**

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

**RequestTimeoutException**

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

**ServiceUnavailable**

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

**ThrottlingException**

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

**UnknownOperationException**

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

**UnrecognizedClientException**

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

**ValidationError**

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400