Amazon Route 53

API Reference

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Welcome

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 helps lets you register domain names such as example.com.
- **Domain Name System (DNS) service** – Route 53 translates friendly domains names like www.example.com into IP addresses like 192.0.2.1. Route 53 responds to DNS queries using a global network of authoritative DNS servers, which reduces latency.
- **Health checking** – Route 53 sends automated requests over the internet to your application to verify that it's reachable, available, and functional.
- **Auto naming for service discovery** – You define the configuration for DNS records and an optional health check that you want Route 53 to create whenever you register a service instance.

This *Amazon Route 53 API Reference* explains how to use API actions to create the following resources:

Public 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. See Public Hosted Zones.

Private Hosted Zones

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. See Private Hosted Zones.

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. See Reusable Delegation Sets.

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. See Resource Record Sets.

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. See Traffic Policies and Traffic Policy Instances.

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. See Health Checks.

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. See Domain Registrations.

Namespaces, Services, and Service Instances

A namespace specifies the domain name that you want to route traffic to.

You create a service in a namespace and specify the configuration for DNS records and an optional health check that you want Route 53 to create when you register a service instance. A service represents an application component, such as a web server, that can run on one or multiple service instances that you want Route 53 to route traffic to.

A service instance contains information about how Route 53 responds to DNS queries for a resource, such as an EC2 instance.

See Service Discovery.

Query Logs

You can configure Route 53 to log information about the 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). See DNS Query Logs.

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. See Tags for Hosted Zones and Health Checks and Tags for 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. See Limits for Accounts, Hosted Zones, and Reusable Delegation Sets.

In addition, the *Amazon Route 53 API Reference* includes the following information:

- **Making API Requests** – How to submit HTTP requests to Route 53
- **Traffic Policy Document Format** – Syntax and examples for the document that you include when you create a traffic policy programmatically

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 API Actions by Function

Types of Function

- Domain Registrations
- Public Hosted Zones
- Private Hosted Zones
- Resource Record Sets
- Health Checks
- DNS Query Logs
- Reusable Delegation Sets
- Traffic Policies
- Traffic Policy Instances
- Service Discovery
- Limits for Accounts, Hosted Zones, and Reusable Delegation Sets
- Tags for Hosted Zones and Health Checks
- Tags for Domains

The following actions are supported by Route 53:

Domain Registrations

Reusable Delegation Sets

Traffic Policies

Traffic Policy Instances

Service Discovery

Limits for Accounts, Hosted Zones, and Reusable Delegation Sets

Tags for Hosted Zones and Health Checks

Tags for Domains

Actions

The following actions are supported by Amazon Route 53:

The following actions are supported by Amazon Route 53 Domains:

The following actions are supported by Amazon Route 53 Auto Naming:

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Amazon Route 53

The following actions are supported by Amazon Route 53:

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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.

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 requires the following URI parameters.

Id (p. 11)

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.

Request Body

The request accepts the following data in XML format.

AssociateVPCWithHostedZoneRequest (p. 11)

Root level tag for the AssociateVPCWithHostedZoneRequest parameters.

Required: Yes

Comment (p. 11)

Optional: A comment about the association request.

Type: String

Required: No

VPC (p. 11)

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

Type: VPC (p. 432) 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 (p. 12)

Root level tag for the AssociateVPCWithHostedZoneResponse parameters.

Required: Yes

ChangeInfo (p. 12)

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

Type: ChangeInfo (p. 386) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

ConflictingDomainExists

The cause of this error depends on whether you're trying to create a public or a private hosted zone:

- **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 (p. 47).

- **Private hosted zone:** You specified an Amazon VPC that you're already using for another hosted zone, and the domain that you specified for one of the hosted zones is a subdomain of the domain that you specified for the other hosted zone. For example, you can't use the same Amazon VPC for the hosted zones for example.com and test.example.com.

HTTP Status Code: 400

InvalidInput

The input is not valid.

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.

HTTP Status Code: 400

LimitsExceeded

This operation can't be completed either because the current account has reached the limit on reusable delegation sets that it can create or because you've reached the limit on the number of Amazon VPCs that you can associate with a private hosted zone. To get the current limit on the number of reusable delegation sets, see GetAccountLimit (p. 85). To get the current limit on the number of Amazon VPCs that you can associate with a private hosted zone, see GetHostedZoneLimit (p. 111). To request a higher limit, create a case with the AWS Support Center.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

NotAuthorizedException

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

HTTP Status Code: 401

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.

HTTP Status Code: 400

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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.

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. When using the Amazon Route 53 API to change resource record sets, Route 53 either makes all or none of the changes in a change batch request. This ensures that Route 53 never partially implements the intended changes to the resource record sets in a hosted zone.

For example, a change batch request that deletes the `CNAME` record for www.example.com and creates an alias resource record set for www.example.com. Route 53 deletes the first resource record set and creates the second resource record set in a single operation. If either the `DELETE` or the `CREATE` action fails, then both changes (plus any other changes in the batch) fail, and the original `CNAME` record continues to exist.

> **Important**
> Due to the nature of transactional changes, you can't delete the same resource record set more than once in a single change batch. If you attempt to delete the same change batch more than once, Route 53 returns an `InvalidChangeBatch` error.

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 record set does not already exist, AWS creates it. If a resource set does exist, 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 Examples (p. 18).

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. 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 within 60 seconds. For more information, see GetChange (p. 87).

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>
               <Failover>string</Failover>
               <GeoLocation>
                  <ContinentCode>string</ContinentCode>
                  <CountryCode>string</CountryCode>
                  <SubdivisionCode>string</SubdivisionCode>
               </GeoLocation>
               <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 requires the following URI parameters.

Id (p. 16)

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

Length Constraints: Maximum length of 32.

Request Body

The request accepts the following data in XML format.

ChangeResourceRecordSetsRequest (p. 16)

>   Root level tag for the ChangeResourceRecordSetsRequest parameters.

>   Required: Yes

ChangeBatch (p. 16)

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

>   Type: ChangeBatch (p. 385) 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 (p. 17)

>   Root level tag for the ChangeResourceRecordSetsResponse parameters.

>   Required: Yes

ChangeInfo (p. 17)

>   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 (p. 87) action to get detailed information about the change.

>   Type: ChangeInfo (p. 386) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

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.

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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

```
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>
```

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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

ResourceId (p. 25)

> The ID of the resource for which you want to add, change, or delete tags.
>
> Length Constraints: Maximum length of 64.

ResourceType (p. 25)

> 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`

Request Body

The request accepts the following data in XML format.

ChangeTagsForResourceRequest (p. 25)

> Root level tag for the ChangeTagsForResourceRequest parameters.
>
> Required: Yes

AddTags (p. 25)

> 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 (p. 424) objects

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

Required: No

RemoveTagKeys (p. 25)

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 Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

CreateHealthCheck

Service: Amazon Route 53

Creates a new health check.

For information about adding health checks to resource record sets, see
ResourceRecordSet:HealthCheckId (p. 414) in ChangeResourceRecordSets (p. 15).

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>
        <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 (p. 28)

Root level tag for the CreateHealthCheckRequest parameters.

Required: Yes

CallerReference (p. 28)

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 settings for the existing health check.
- 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.

Type: String

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

Required: Yes

HealthCheckConfig (p. 28)

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

Type: HealthCheckConfig (p. 397) object

Required: Yes

Response Syntax

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

```xml
        <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>
            <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 (p. 29)

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 (p. 29)

Root level tag for the CreateHealthCheckResponse parameters.

Required: Yes

HealthCheck (p. 29)

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

Type: HealthCheck (p. 395) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

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.

HTTP Status Code: 409

InvalidInput

The input is not valid.

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 (p. 85). 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

```
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

```
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

```
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

```
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

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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, Amazon 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`.

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 (p. 35)

Root level tag for the CreateHostedZoneRequest parameters.

Required: Yes

CallerReference (p. 35)

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 (p. 35)

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 (p. 47).

Type: String

Length Constraints: Maximum length of 32.

Required: No

HostedZoneConfig (p. 35)

(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 (p. 408) object

Required: No

Name (p. 35)

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 (p. 35)

(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. To associate additional Amazon VPCs with the hosted zone, use AssociateVPCWithHostedZone (p. 11) after you create a hosted zone.

Type: VPC (p. 432) 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>
        <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 (p. 37)

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 (p. 37)

Root level tag for the CreateHostedZoneResponse parameters.

Required: Yes

ChangeInfo (p. 37)

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

Type: ChangeInfo (p. 386) object

DelegationSet (p. 37)

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

Type: DelegationSet (p. 390) object

HostedZone (p. 37)

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

Type: HostedZone (p. 406) object

VPC (p. 37)

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

Type: VPC (p. 432) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

ConflictingDomainExists

The cause of this error depends on whether you're trying to create a public or a private hosted zone:

- **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 (p. 47).
- **Private hosted zone:** You specified an Amazon VPC that you're already using for another hosted zone, and the domain that you specified for one of the hosted zones is a subdomain of the domain that you specified for the other hosted zone. For example, you can't use the same Amazon VPC for the hosted zones for example.com and test.example.com.

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.

HTTP Status Code: 400

DelegationSetNotReusable

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

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`.

HTTP Status Code: 409

InvalidDomainName

The specified domain name is not valid.

HTTP Status Code: 400

InvalidInput

The input is not valid.

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.

HTTP Status Code: 400

NoSuchDelegationSet

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

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 (p. 85).

To get the current limit on hosted zones that can be associated with a reusable delegation set, see GetReusableDelegationSetLimit (p. 120).

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

HTTP Status Code: 400

Examples

Example Request (Public Hosted Zone)

```
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)

```
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)

```
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)

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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. 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/*`
>
>   > **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 (p. 71).

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 (p. 43)

Root level tag for the CreateQueryLoggingConfigRequest parameters.

Required: Yes

CloudWatchLogsLogGroupArn (p. 43)

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 (p. 43)

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 (p. 44)

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 (p. 44)

Root level tag for the CreateQueryLoggingConfigResponse parameters.

Required: Yes

QueryLoggingConfig (p. 44)

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 (p. 411) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

ConcurrentModification

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

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.

HTTP Status Code: 400

InvalidInput

The input is not valid.

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.

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: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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

CreateReusableDelegationSet

Service: Amazon Route 53

Creates a delegation set (a group of four name servers) that can be reused by multiple hosted zones. If a hosted zoned ID is specified, `CreateReusableDelegationSet` marks the delegation set associated with that zone as reusable.

> **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 (p. 47)

Root level tag for the CreateReusableDelegationSetRequest parameters.

Required: Yes

CallerReference (p. 47)

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 (p. 47)

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 (p. 48)

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 (p. 48)

Root level tag for the CreateReusableDelegationSetResponse parameters.

Required: Yes

DelegationSet (p. 48)

A complex type that contains name server information.

Type: DelegationSet (p. 390) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DelegationSetAlreadyCreated

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

HTTP Status Code: 400

DelegationSetAlreadyReusable

The specified delegation set has already been marked as reusable.

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.

HTTP Status Code: 400

HostedZoneNotFound

The specified HostedZone can't be found.

HTTP Status Code: 400

InvalidArgument

Parameter name is invalid.

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

LimitsExceeded

This operation can't be completed either because the current account has reached the limit on reusable delegation sets that it can create or because you've reached the limit on the number of Amazon VPCs that you can associate with a private hosted zone. To get the current limit on the number of reusable delegation sets, see GetAccountLimit (p. 85). To get the current limit on the number of Amazon VPCs that you can associate with a private hosted zone, see GetHostedZoneLimit (p. 111). To request a higher limit, create a case with the AWS Support Center.

HTTP Status Code: 400

Examples

Example Request

```
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>Z1D633PJN98FT9</HostedZoneId>
</CreateReusableDelegationSetRequest>
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 (p. 51)

Root level tag for the CreateTrafficPolicyRequest parameters.

Required: Yes

Comment (p. 51)

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

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Document (p. 51)

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 (p. 51)

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 (p. 52)

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 (p. 52)

Root level tag for the CreateTrafficPolicyResponse parameters.

Required: Yes

TrafficPolicy (p. 52)

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

Type: TrafficPolicy (p. 425) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

InvalidTrafficPolicyDocument

The format of the traffic policy document that you specified in the `Document` element is invalid.

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 (p. 85).

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

HTTP Status Code: 400

TrafficPolicyAlreadyExists

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

HTTP Status Code: 409

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V2

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.

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 (p. 55)

Root level tag for the CreateTrafficPolicyInstanceRequest parameters.

Required: Yes

HostedZoneId (p. 55)

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 (p. 55)

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 (p. 55)

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 (p. 55)

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 (p. 55)

(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 (p. 56)

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 (p. 56)

Root level tag for the CreateTrafficPolicyInstanceResponse parameters.

Required: Yes

TrafficPolicyInstance (p. 56)

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

Type: TrafficPolicyInstance (p. 427) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

NoSuchTrafficPolicy

No traffic policy exists with the specified ID.

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 (p. 85).

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

HTTP Status Code: 400

TrafficPolicyInstanceAlreadyExists

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

HTTP Status Code: 409

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 59)

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.

Request Body

The request accepts the following data in XML format.

CreateTrafficPolicyVersionRequest (p. 59)

Root level tag for the CreateTrafficPolicyVersionRequest parameters.

Required: Yes

Comment (p. 59)

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

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Document (p. 59)

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 (p. 51).

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 (p. 60)

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 (p. 60)

Root level tag for the CreateTrafficPolicyVersionResponse parameters.

Required: Yes

TrafficPolicy (p. 60)

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

Type: TrafficPolicy (p. 425) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

ConcurrentModification

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

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

InvalidTrafficPolicyDocument

The format of the traffic policy document that you specified in the `Document` element is invalid.

HTTP Status Code: 400

NoSuchTrafficPolicy

No traffic policy exists with the specified ID.

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 (p. 122) to get the traffic policy document for a specified traffic policy version, and then use CreateTrafficPolicy (p. 51) to create a new traffic policy using the traffic policy document.

HTTP Status Code: 400

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 63)

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

Length Constraints: Maximum length of 32.

Request Body

The request accepts the following data in XML format.

CreateVPCAssociationAuthorizationRequest (p. 63)

Root level tag for the CreateVPCAssociationAuthorizationRequest parameters.

Required: Yes

VPC (p. 63)

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 (p. 432) 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 (p. 63)

Root level tag for the CreateVPCAssociationAuthorizationResponse parameters.

Required: Yes

HostedZoneId (p. 63)

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

Type: String

Length Constraints: Maximum length of 32.

VPC (p. 63)

The VPC that you authorized associating with a hosted zone.

Type: VPC (p. 432) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

ConcurrentModification

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

HTTP Status Code: 400

InvalidInput

The input is not valid.

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.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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.

HTTP Status Code: 400

Examples

Example request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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*.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

HealthCheckId (p. 66)

> The ID of the health check that you want to delete.
>
> Length Constraints: Maximum length of 64.

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 Errors (p. 486).

HealthCheckInUse

> *This error has been deprecated.*
>
> This error code is not in use.
>
> HTTP Status Code: 400

InvalidInput

> The input is not valid.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

Examples

Example Request

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeleteHostedZone

Service: Amazon Route 53

Deletes a hosted zone.

> **Important**
> If the name servers for the hosted zone are associated with a domain and if you want to make
> the domain unavailable on the Internet, we recommend that you delete the name servers from
> the domain to prevent future DNS queries from possibly being misrouted. If the domain is
> registered with Amazon Route 53, see `UpdateDomainNameservers`. If the domain is registered
> with another registrar, use the method provided by the registrar to delete name servers for the
> domain.
> Some domain registries don't allow you to remove all of the name servers for a domain. If the
> registry for your domain requires one or more name servers, we recommend that you delete the
> hosted zone only if you transfer DNS service to another service provider, and you replace the
> name servers for the domain with name servers from the new provider.

You can delete a hosted zone only if it contains only the default SOA record and NS resource record sets.
If the hosted zone contains other resource record sets, you must delete them before you can delete the
hosted zone. If you try to delete a hosted zone that contains other resource record sets, the request fails,
and Route 53 returns a `HostedZoneNotEmpty` error. For information about deleting records from your
hosted zone, see ChangeResourceRecordSets (p. 15).

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 requires the following URI parameters.

Id (p. 68)

The ID of the hosted zone you want to delete.

Length Constraints: Maximum length of 32.

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 (p. 68)

Root level tag for the DeleteHostedZoneResponse parameters.

Required: Yes

ChangeInfo (p. 68)

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

Type: ChangeInfo (p. 386) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

HostedZoneNotEmpty

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

HTTP Status Code: 400

InvalidDomainName

The specified domain name is not valid.

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 (p. 42).

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Id (p. 71)

> The ID of the configuration that you want to delete.
>
> 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
```

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 Errors (p. 486).

ConcurrentModification

> Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.
>
> HTTP Status Code: 400

InvalidInput

> The input is not valid.
>
> 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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 (p. 117) 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 requires the following URI parameters.

Id (p. 73)

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

Length Constraints: Maximum length of 32.

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 Errors (p. 486).

DelegationSetInUse

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

HTTP Status Code: 400

DelegationSetNotReusable

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

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchDelegationSet

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

HTTP Status Code: 400

Examples

Example Request

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeleteTrafficPolicy

Service: Amazon Route 53

Deletes a traffic policy.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Id (p. 75)

> The ID of the traffic policy that you want to delete.
>
> Length Constraints: Minimum length of 1. Maximum length of 36.

Version (p. 75)

> The version number of the traffic policy that you want to delete.
>
> Valid Range: Minimum value of 1. Maximum value of 1000.

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 Errors (p. 486).

ConcurrentModification

> Another user submitted a request to create, update, or delete the object at the same time that you did. Retry the request.
>
> HTTP Status Code: 400

InvalidInput

> The input is not valid.
>
> HTTP Status Code: 400

NoSuchTrafficPolicy

> No traffic policy exists with the specified ID.

HTTP Status Code: 404

TrafficPolicyInUse

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

HTTP Status Code: 400

Examples

Example Request

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 77)

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.

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 Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchTrafficPolicyInstance

No traffic policy instance exists with the specified ID.

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

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 79)

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.

Request Body

The request accepts the following data in XML format.

DeleteVPCAssociationAuthorizationRequest (p. 79)

Root level tag for the DeleteVPCAssociationAuthorizationRequest parameters.

Required: Yes

VPC (p. 79)

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 (p. 432) 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 Errors (p. 486).

ConcurrentModification

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

HTTP Status Code: 400

InvalidInput

The input is not valid.

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.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

VPCAssociationAuthorizationNotFound

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

HTTP Status Code: 404

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DisassociateVPCFromHostedZone

Service: Amazon Route 53

Disassociates a VPC from a Amazon Route 53 private hosted zone. Note the following:

- You can't disassociate the last 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 VPC.

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 requires the following URI parameters.

Id (p. 82)

> The ID of the private hosted zone that you want to disassociate a VPC from.
>
> Length Constraints: Maximum length of 32.

Request Body

The request accepts the following data in XML format.

DisassociateVPCFromHostedZoneRequest (p. 82)

> Root level tag for the DisassociateVPCFromHostedZoneRequest parameters.
>
> Required: Yes

Comment (p. 82)

> *Optional:* A comment about the disassociation request.
>
> Type: String
>
> Required: No

VPC (p. 82)

> A complex type that contains information about the VPC that you're disassociating from the specified hosted zone.
>
> Type: VPC (p. 432) 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 (p. 83)

Root level tag for the DisassociateVPCFromHostedZoneResponse parameters.

Required: Yes

ChangeInfo (p. 83)

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

Type: ChangeInfo (p. 386) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

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.

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.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

VPCAssociationNotFound

The specified VPC and hosted zone are not currently associated.

HTTP Status Code: 404

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Type (p. 85)

> 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`

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 (p. 85)

Root level tag for the GetAccountLimitResponse parameters.

Required: Yes

Count (p. 85)

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 (p. 85)

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 (p. 377) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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. This is the initial status of all change batch requests.
- `INSYNC` indicates that the changes have propagated to all Route 53 DNS servers.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Id (p. 87)

> 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: Maximum length of 32.

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 (p. 87)

> Root level tag for the GetChangeResponse parameters.
>
> Required: Yes

ChangeInfo (p. 87)

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

Type: ChangeInfo (p. 386) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchChange

A change with the specified change ID does not exist.

HTTP Status Code: 404

Examples

Example Request

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetCheckerIpRanges

Service: Amazon Route 53

> **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>
      <INVALID-TYPE-NAME>string</INVALID-TYPE-NAME>
   </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 (p. 89)

Root level tag for the GetCheckerIpRangesResponse parameters.

Required: Yes

CheckerIpRanges (p. 89)

Type: Array of strings

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetGeoLocation

Service: Amazon Route 53

Gets information about whether a specified geographic location is supported for Amazon Route 53 geolocation resource record sets.

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 requires the following URI parameters.

continentcode (p. 91)

>   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 (p. 91)

>   Amazon Route 53 uses the two-letter country codes that are specified in ISO standard 3166-1 alpha-2.
>
>   Length Constraints: Minimum length of 1. Maximum length of 2.

subdivisioncode (p. 91)

>   Amazon Route 53 uses the one- to three-letter subdivision codes that are specified in ISO standard 3166-1 alpha-2. Route 53 doesn't support subdivision codes for all countries. If you specify subdivisioncode, you must also specify countrycode.
>
>   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 (p. 92)

Root level tag for the GetGeoLocationResponse parameters.

Required: Yes

GeoLocationDetails (p. 92)

A complex type that contains the codes and full continent, country, and subdivision names for the specified geolocation code.

Type: GeoLocationDetails (p. 393) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchGeoLocation

Amazon Route 53 doesn't support the specified geographic location.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

HealthCheckId (p. 94)

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.

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>
            <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 (p. 94)

Root level tag for the GetHealthCheckResponse parameters.

Required: Yes

HealthCheck (p. 94)

A complex type that contains information about one health check that is associated with the current AWS account.

Type: HealthCheck (p. 395) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

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.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/healthcheck/018927304987
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 (p. 97)

Root level tag for the GetHealthCheckCountResponse parameters.

Required: Yes

HealthCheckCount (p. 97)

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 Errors (p. 486).

Examples

Example Request

```
GET /2013-04-01/healthcheckcount
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

HealthCheckId (p. 99)

> 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.

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 (p. 99)

> Root level tag for the GetHealthCheckLastFailureReasonResponse parameters.
>
> Required: Yes

HealthCheckObservations (p. 99)

> 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 (p. 404) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

> The input is not valid.
>
> HTTP Status Code: 400

NoSuchHealthCheck

> No health check exists with the specified ID.
>
> HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/healthcheck/018927304987/lastfailurereason
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetHealthCheckStatus

Service: Amazon Route 53

Gets status of a specified health check.

Request Syntax

```
GET /2013-04-01/healthcheck/HealthCheckId/status HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

HealthCheckId (p. 102)

> 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.

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 (p. 102)

> Root level tag for the GetHealthCheckStatusResponse parameters.
>
> Required: Yes

HealthCheckObservations (p. 102)

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 (p. 404) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/healthcheck/018927304987/status
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetHostedZone

Service: Amazon Route 53

Gets information about a specified hosted zone including the four name servers assigned to the hosted zone.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Id (p. 105)

The ID of the hosted zone that you want to get information about.

Length Constraints: Maximum length of 32.

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>
      <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 (p. 105)

>Root level tag for the GetHostedZoneResponse parameters.

>Required: Yes

DelegationSet (p. 105)

>A complex type that lists the Amazon Route 53 name servers for the specified hosted zone.

>Type: DelegationSet (p. 390) object

HostedZone (p. 105)

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

>Type: HostedZone (p. 406) object

VPCs (p. 105)

>A complex type that contains information about the VPCs that are associated with the specified hosted zone.

>Type: Array of VPC (p. 432) objects

>Array Members: Minimum number of 1 item.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

>The input is not valid.

>HTTP Status Code: 400

NoSuchHostedZone

>No hosted zone exists with the ID that you specified.

>HTTP Status Code: 404

Examples

Example Request

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

Example Response (Public Hosted Zone, Default Delegation Set Assigned by Route 53)

```
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)

```
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)

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 (p. 109)

> Root level tag for the GetHostedZoneCountResponse parameters.
>
> Required: Yes

HostedZoneCount (p. 109)

> 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 Errors (p. 486).

InvalidInput

> The input is not valid.
>
> HTTP Status Code: 400

Examples

Example Request

```
GET /2013-04-01/hostedzonecount
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 111)

> The ID of the hosted zone that you want to get a limit for.
>
> Length Constraints: Maximum length of 32.

Type (p. 111)

> 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`

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 (p. 111)

Root level tag for the GetHostedZoneLimitResponse parameters.

Required: Yes

Count (p. 111)

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 (p. 111)

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 (p. 409) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

HostedZoneNotPrivate

The specified hosted zone is a public hosted zone, not a private hosted zone.

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetQueryLoggingConfig

Service: Amazon Route 53

Gets information about a specified configuration for DNS query logging.

For more information about DNS query logs, see CreateQueryLoggingConfig (p. 42) and Logging DNS Queries.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Id (p. 114)

> 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.

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 (p. 114)

> Root level tag for the GetQueryLoggingConfigResponse parameters.
>
> Required: Yes

QueryLoggingConfig (p. 114)

> A complex type that contains information about the query logging configuration that you specified in a GetQueryLoggingConfig (p. 114) request.
>
> Type: QueryLoggingConfig (p. 411) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 117)

The ID of the reusable delegation set that you want to get a list of name servers for.

Length Constraints: Maximum length of 32.

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 (p. 117)

Root level tag for the GetReusableDelegationSetResponse parameters.

Required: Yes

DelegationSet (p. 117)

A complex type that contains information about the reusable delegation set.

Type: DelegationSet (p. 390) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DelegationSetNotReusable

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

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchDelegationSet

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

HTTP Status Code: 400

Examples

Example Request

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

Example Response

```
<?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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 120)

The ID of the delegation set that you want to get the limit for.

Length Constraints: Maximum length of 32.

Type (p. 120)

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

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 (p. 120)

Root level tag for the GetReusableDelegationSetLimitResponse parameters.

Required: Yes

Count (p. 120)

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 (p. 120)

The current setting for the limit on hosted zones that you can associate with the specified reusable delegation set.

Type: ReusableDelegationSetLimit (p. 422) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchDelegationSet

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

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetTrafficPolicy

Service: Amazon Route 53

Gets information about a specific traffic policy version.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

Id (p. 122)

> The ID of the traffic policy that you want to get information about.
>
> Length Constraints: Minimum length of 1. Maximum length of 36.

Version (p. 122)

> The version number of the traffic policy that you want to get information about.
>
> Valid Range: Minimum value of 1. Maximum value of 1000.

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 (p. 122)

> Root level tag for the GetTrafficPolicyResponse parameters.
>
> Required: Yes

TrafficPolicy (p. 122)

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

Type: TrafficPolicy (p. 425) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchTrafficPolicy

No traffic policy exists with the specified ID.

HTTP Status Code: 404

Examples

Example Request

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V2

GetTrafficPolicyInstance

Service: Amazon Route 53

Gets information about a specified traffic policy instance.

> **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.

> **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 requires the following URI parameters.

Id (p. 125)

The ID of the traffic policy instance that you want to get information about.

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"?>
<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 (p. 125)

> Root level tag for the GetTrafficPolicyInstanceResponse parameters.

> Required: Yes

TrafficPolicyInstance (p. 125)

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

> Type: TrafficPolicyInstance (p. 427) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

> The input is not valid.

> HTTP Status Code: 400

NoSuchTrafficPolicyInstance

> No traffic policy instance exists with the specified ID.

> HTTP Status Code: 404

Examples

Example Request

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

Example Response

```
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
- AWS SDK for .NET

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

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 (p. 128)

Root level tag for the GetTrafficPolicyInstanceCountResponse parameters.

Required: Yes

TrafficPolicyInstanceCount (p. 128)

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 Errors (p. 486).

Examples

Example Request

```
GET /2013-04-01/trafficpolicyinstancecount/
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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.

Request Syntax

```
GET /2013-04-01/geolocations?
maxitems=MaxItems&startcontinentcode=StartContinentCode&startcountrycode=StartCountryCode&startsubdivis
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

maxitems (p. 130)

> (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 (p. 130)

> 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 (p. 130)

> 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.
>
> Route 53 uses the two-letter country codes that are specified in ISO standard 3166-1 alpha-2.
>
> Length Constraints: Minimum length of 1. Maximum length of 2.

startsubdivisioncode (p. 130)

> The code for the subdivision (for example, state or province) 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 of a country, 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 (p. 131)

Root level tag for the ListGeoLocationsResponse parameters.

Required: Yes

GeoLocationDetailsList (p. 131)

A complex type that contains one `GeoLocationDetails` element for each location that Amazon Route 53 supports for geolocation.

Type: Array of GeoLocationDetails (p. 393) objects

IsTruncated (p. 131)

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 (p. 131)

The value that you specified for `MaxItems` in the request.

Type: String

NextContinentCode (p. 131)

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 (p. 131)

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 (p. 131)

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 Errors (p. 486).

InvalidInput

The input is not valid.

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

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

marker (p. 135)

> 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 (p. 135)

> 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 100 items. If you set `MaxItems` to a value greater than 100, Route 53 returns only the first 100 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>
                <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 (p. 135)

Root level tag for the ListHealthChecksResponse parameters.

Required: Yes

HealthChecks (p. 135)

A complex type that contains one `HealthCheck` element for each health check that is associated with the current AWS account.

Type: Array of HealthCheck (p. 395) objects

IsTruncated (p. 135)

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 (p. 135)

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 (p. 135)

The value that you specified for the `maxitems` parameter in the call to `ListHealthChecks` that produced the current response.

Type: String

NextMarker (p. 135)

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 Errors (p. 486).

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.

HTTP Status Code: 400

Examples

Example Request

```
GET /2013-04-01/healthcheck?maxitems=1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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&marker=Marker&maxitems=MaxItems
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

delegationsetid (p. 139)

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.

marker (p. 139)

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 (p. 139)

(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>
         <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 (p. 139)

Root level tag for the ListHostedZonesResponse parameters.

Required: Yes

HostedZones (p. 139)

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

Type: Array of HostedZone (p. 406) objects

IsTruncated (p. 139)

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 (p. 139)

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 (p. 139)

The value that you specified for the `maxitems` parameter in the call to `ListHostedZones` that produced the current response.

Type: String

NextMarker (p. 139)

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 Errors (p. 486).

DelegationSetNotReusable

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

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchDelegationSet

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

HTTP Status Code: 400

Examples

Example Request

```
GET /2013-04-01/hostedzone?maxitems=1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

dnsname (p. 143)

> (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 (p. 143)

(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 (p. 143)

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>
         <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 (p. 144)

>   Root level tag for the ListHostedZonesByNameResponse parameters.

>   Required: Yes

DNSName (p. 144)

>   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 (p. 144)

>   The ID that Amazon Route 53 assigned to the hosted zone when you created it.

>   Type: String

>   Length Constraints: Maximum length of 32.

HostedZones (p. 144)

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

>   Type: Array of HostedZone (p. 406) objects

IsTruncated (p. 144)

>   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 (p. 144)

>   The value that you specified for the `maxitems` parameter in the call to `ListHostedZonesByName` that produced the current response.

>   Type: String

NextDNSName (p. 144)

>   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.

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 Errors (p. 486).

InvalidDomainName

The specified domain name is not valid.

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

Examples

Example Request

```
GET /2013-04-01/hostedzonesbyname?maxitems=1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 (p. 42). 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 requires the following URI parameters.

hostedzoneid (p. 148)

(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 (p. 148)

(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 ListQueryLoggingConfigs:NextToken (p. 149) 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 (p. 148)

(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 256.

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 (p. 148)

Root level tag for the ListQueryLoggingConfigsResponse parameters.

Required: Yes

NextToken (p. 148)

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 (p. 148) 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 256.

QueryLoggingConfigs (p. 148)

An array that contains one QueryLoggingConfig (p. 411) element for each configuration for DNS query logging that is associated with the current AWS account.

Type: Array of QueryLoggingConfig (p. 411) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

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.

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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListResourceRecordSets

Service: Amazon Route 53

Lists the resource record sets in a specified hosted zone.

`ListResourceRecordSets` returns up to 100 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`.

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 requires the following URI parameters.

Id (p. 152)

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

Length Constraints: Maximum length of 32.

identifier (p. 152)

Weighted resource record sets only: 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 (p. 152)

(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 (p. 152)

The first name in the lexicographic ordering of resource record sets that you want to list.

Length Constraints: Maximum length of 1024.

type (p. 152)

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:

- **CloudFront distribution**: A or AAAA
- **Elastic Beanstalk environment that has a regionalized subdomain**: A
- **ELB load balancer**: A | AAAA
- **Amazon S3 bucket**: 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

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>
            <Failover>string</Failover>
            <GeoLocation>
                <ContinentCode>string</ContinentCode>
                <CountryCode>string</CountryCode>
                <SubdivisionCode>string</SubdivisionCode>
            </GeoLocation>
            <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 (p. 153)

Root level tag for the ListResourceRecordSetsResponse parameters.

Required: Yes

IsTruncated (p. 153)

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 (p. 153)

The maximum number of records you requested.

Type: String

NextRecordIdentifier (p. 153)

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 (p. 153)

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 (p. 153)

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`

ResourceRecordSets (p. 153)

Information about multiple resource record sets.

Type: Array of ResourceRecordSet (p. 413) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/hostedzone/Z1PA6795UKMFR9/rrset?maxitems=1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

marker (p. 156)

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 (p. 156)

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 (p. 156)

> Root level tag for the ListReusableDelegationSetsResponse parameters.
>
> Required: Yes

DelegationSets (p. 156)

> 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 (p. 390) objects

IsTruncated (p. 156)

> A flag that indicates whether there are more reusable delegation sets to be listed.
>
> Type: Boolean

Marker (p. 156)

> 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 (p. 156)

> The value that you specified for the `maxitems` parameter in the call to `ListReusableDelegationSets` that produced the current response.
>
> Type: String

NextMarker (p. 156)

> 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 Errors (p. 486).

InvalidInput

> The input is not valid.
>
> HTTP Status Code: 400

Examples

Example Request

```
GET /2013-04-01/delegationset?maxitems=2
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

ResourceId (p. 159)

>   The ID of the resource for which you want to retrieve tags.

>   Length Constraints: Maximum length of 64.

ResourceType (p. 159)

>   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`

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 (p. 159)

Root level tag for the ListTagsForResourceResponse parameters.

Required: Yes

ResourceTagSet (p. 159)

A `ResourceTagSet` containing tags associated with the specified resource.

Type: ResourceTagSet (p. 421) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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

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

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

ResourceType (p. 162)

> 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`

Request Body

The request accepts the following data in XML format.

ListTagsForResourcesRequest (p. 162)

> Root level tag for the ListTagsForResourcesRequest parameters.
>
> Required: Yes

ResourceIds (p. 162)

> 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 (p. 162)

Root level tag for the ListTagsForResourcesResponse parameters.

Required: Yes

ResourceTagSets (p. 162)

A list of `ResourceTagSets` containing tags associated with the specified resources.

Type: Array of ResourceTagSet (p. 421) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

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

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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.

Request Syntax

```
GET /2013-04-01/trafficpolicies?maxitems=MaxItems&trafficpolicyid=TrafficPolicyIdMarker
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

maxitems (p. 166)

(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 (p. 166)

(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 (p. 166)

Root level tag for the ListTrafficPoliciesResponse parameters.

Required: Yes

IsTruncated (p. 166)

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 (p. 166)

The value that you specified for the `MaxItems` parameter in the `ListTrafficPolicies` request that produced the current response.

Type: String

TrafficPolicyIdMarker (p. 166)

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 (p. 166)

A list that contains one `TrafficPolicySummary` element for each traffic policy that was created by the current AWS account.

Type: Array of TrafficPolicySummary (p. 430) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

Examples

Example Request

```
GET /2013-04-01/trafficpolicies?maxitems=1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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=TrafficPolicyInstanceNameMa
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

hostedzoneid (p. 169)

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 (p. 169)

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 (p. 169)

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 (p. 169)

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`

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 (p. 170)

Root level tag for the ListTrafficPolicyInstancesResponse parameters.

Required: Yes

HostedZoneIdMarker (p. 170)

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 (p. 170)

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 (p. 170)

The value that you specified for the `MaxItems` parameter in the call to
`ListTrafficPolicyInstances` that produced the current response.

Type: String

TrafficPolicyInstanceNameMarker (p. 170)

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 (p. 170)

A list that contains one `TrafficPolicyInstance` element for each traffic policy instance that
matches the elements in the request.

Type: Array of TrafficPolicyInstance (p. 427) objects

TrafficPolicyInstanceTypeMarker (p. 170)

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`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchTrafficPolicyInstance

No traffic policy instance exists with the specified ID.

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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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&trafficpoli
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

id (p. 173)

The ID of the hosted zone that you want to list traffic policy instances for.

Length Constraints: Maximum length of 32.

maxitems (p. 173)

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 (p. 173)

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 (p. 173)

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`

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 (p. 174)

Root level tag for the ListTrafficPolicyInstancesByHostedZoneResponse parameters.

Required: Yes

IsTruncated (p. 174)

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 (p. 174)

The value that you specified for the `MaxItems` parameter in the `ListTrafficPolicyInstancesByHostedZone` request that produced the current response.

Type: String

TrafficPolicyInstanceNameMarker (p. 174)

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 (p. 174)

A list that contains one `TrafficPolicyInstance` element for each traffic policy instance that matches the elements in the request.

Type: Array of TrafficPolicyInstance (p. 427) objects

TrafficPolicyInstanceTypeMarker (p. 174)

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`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

NoSuchTrafficPolicyInstance

No traffic policy instance exists with the specified ID.

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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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=TrafficP
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

hostedzoneid (p. 177)

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 (p. 177)

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.

maxitems (p. 177)

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 (p. 177)

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 (p. 177)

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`

version (p. 177)

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.

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 (p. 178)

>   Root level tag for the ListTrafficPolicyInstancesByPolicyResponse parameters.

>   Required: Yes

HostedZoneIdMarker (p. 178)

>   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 (p. 178)

>   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 (p. 178)

>   The value that you specified for the `MaxItems` parameter in the call to `ListTrafficPolicyInstancesByPolicy` that produced the current response.

>   Type: String

TrafficPolicyInstanceNameMarker (p. 178)

>   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 (p. 178)

>   A list that contains one `TrafficPolicyInstance` element for each traffic policy instance that matches the elements in the request.

>   Type: Array of TrafficPolicyInstance (p. 427) objects

TrafficPolicyInstanceTypeMarker (p. 178)

>   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`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchTrafficPolicy

No traffic policy exists with the specified ID.

HTTP Status Code: 404

NoSuchTrafficPolicyInstance

No traffic policy instance exists with the specified ID.

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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 182)

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.

maxitems (p. 182)

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 (p. 182)

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 (p. 182)

>   Root level tag for the ListTrafficPolicyVersionsResponse parameters.

>   Required: Yes

IsTruncated (p. 182)

>   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 (p. 182)

>   The value that you specified for the `maxitems` parameter in the `ListTrafficPolicyVersions`
>   request that produced the current response.

>   Type: String

TrafficPolicies (p. 182)

>   A list that contains one `TrafficPolicy` element for each traffic policy version that is associated
>   with the specified traffic policy.

>   Type: Array of TrafficPolicy (p. 425) objects

TrafficPolicyVersionMarker (p. 182)

>   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 Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchTrafficPolicy

No traffic policy exists with the specified ID.

HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/trafficpolicy/12345678-abcd-9876-fedc-1a2b3c4de5f6/versions?maxitems=1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 185)

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.

maxresults (p. 185)

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 (p. 185)

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 256.

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 (p. 185)

> Root level tag for the ListVPCAssociationAuthorizationsResponse parameters.

> Required: Yes

HostedZoneId (p. 185)

> The ID of the hosted zone that you can associate the listed VPCs with.

> Type: String

> Length Constraints: Maximum length of 32.

NextToken (p. 185)

> 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 256.

VPCs (p. 185)

> The list of VPCs that are authorized to be associated with the specified hosted zone.

> Type: Array of VPC (p. 432) objects

> Array Members: Minimum number of 1 item.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

> The input is not valid.

> 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.

> HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/hostedzone/Z1PA6795UKMFR9/authorizevpcassociation&maxresults=1 HTTP/1.1
```

Example Response

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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.

Request Syntax

```
GET /2013-04-01/testdnsanswer?
edns0clientsubnetip=EDNS0ClientSubnetIP&edns0clientsubnetmask=EDNS0ClientSubnetMask&hostedzoneid=Hosted
 HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

edns0clientsubnetip (p. 188)

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 (p. 188)

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 (p. 188)

The ID of the hosted zone that you want Amazon Route 53 to simulate a query for.

Length Constraints: Maximum length of 32.

recordname (p. 188)

The name of the resource record set that you want Amazon Route 53 to simulate a query for.

Length Constraints: Maximum length of 1024.

recordtype (p. 188)

The type of the resource record set.

Valid Values: `SOA | A | TXT | NS | CNAME | MX | NAPTR | PTR | SRV | SPF | AAAA | CAA`

resolverip (p. 188)

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 (p. 189)

Root level tag for the TestDNSAnswerResponse parameters.

Required: Yes

Nameserver (p. 189)

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 (p. 189)

The protocol that Amazon Route 53 used to respond to the request, either `UDP` or `TCP`.

Type: String

RecordData (p. 189)

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 (p. 189)

The name of the resource record set that you submitted a request for.

Type: String

Length Constraints: Maximum length of 1024.

RecordType (p. 189)

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`

ResponseCode (p. 189)

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 Errors (p. 486).

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchHostedZone

No hosted zone exists with the ID that you specified.

HTTP Status Code: 404

Examples

Example Request

```
GET /2013-04-01/testdnsanswer?
hostedzoneid=Z111111QQQQQQQ&recordname=www.example.com&recordtype=A&resolverip=192.0.2.44
```

Example Response

```
<?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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

HealthCheckId (p. 192)

> 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.

Request Body

The request accepts the following data in XML format.

UpdateHealthCheckRequest (p. 192)

> Root level tag for the UpdateHealthCheckRequest parameters.

Required: Yes

AlarmIdentifier (p. 192)

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 (p. 378) object

Required: No

ChildHealthChecks (p. 192)

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 (p. 192)

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 UpdateHealthCheck:Inverted (p. 196).

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 (p. 192)

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 (p. 192)

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*.

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 (p. 192)

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.

> **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 (p. 192)

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 (p. 192)

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 (p. 192)

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 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 (p. 192)

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 (p. 192)

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 UpdateHealthCheck:FullyQualifiedDomainName (p. 194).

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 (p. 192)

The port on the endpoint on which you want Amazon Route 53 to perform health checks.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65535.

Required: No

Regions (p. 192)

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 (p. 192)

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 HealthCheckConfig:ChildHealthChecks (p. 397) to null.
- `FullyQualifiedDomainName`: Route 53 resets HealthCheckConfig:FullyQualifiedDomainName (p. 398) to null.
- `Regions`: Route 53 resets the HealthCheckConfig:Regions (p. 401) list to the default set of regions.
- `ResourcePath`: Route 53 resets HealthCheckConfig:ResourcePath (p. 401) 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 (p. 192)

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 (p. 192)

If the value of `Type` is `HTTP_STR_MATCH` or `HTTP_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>
        <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 (p. 198)

Root level tag for the UpdateHealthCheckResponse parameters.

Required: Yes

HealthCheck (p. 198)

A complex type that contains the response to an `UpdateHealthCheck` request.

Type: HealthCheck (p. 395) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

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.

HTTP Status Code: 400

NoSuchHealthCheck

No health check exists with the specified ID.

HTTP Status Code: 404

Examples

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

```
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

```
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

```
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

```
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

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 203)

The ID for the hosted zone that you want to update the comment for.

Length Constraints: Maximum length of 32.

Request Body

The request accepts the following data in XML format.

UpdateHostedZoneCommentRequest (p. 203)

Root level tag for the UpdateHostedZoneCommentRequest parameters.

Required: Yes

Comment (p. 203)

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>
      <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 (p. 203)

> Root level tag for the UpdateHostedZoneCommentResponse parameters.

> Required: Yes

HostedZone (p. 203)

> A complex type that contains the response to the `UpdateHostedZoneComment` request.

> Type: HostedZone (p. 406) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

> The input is not valid.

> HTTP Status Code: 400

NoSuchHostedZone

> No hosted zone exists with the ID that you specified.

> HTTP Status Code: 404

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

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 requires the following URI parameters.

Id (p. 206)

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.

Version (p. 206)

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.

Request Body

The request accepts the following data in XML format.

UpdateTrafficPolicyCommentRequest (p. 206)

Root level tag for the UpdateTrafficPolicyCommentRequest parameters.

Required: Yes

Comment (p. 206)

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 (p. 206)

> Root level tag for the UpdateTrafficPolicyCommentResponse parameters.

> Required: Yes

TrafficPolicy (p. 206)

> A complex type that contains settings for the specified traffic policy.

> Type: TrafficPolicy (p. 425) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

ConcurrentModification

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

> HTTP Status Code: 400

InvalidInput

> The input is not valid.

> HTTP Status Code: 400

NoSuchTrafficPolicy

> No traffic policy exists with the specified ID.

> HTTP Status Code: 404

Examples

Example Request

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateTrafficPolicyInstance

Service: Amazon Route 53

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 requires the following URI parameters.

Id (p. 209)

> The ID of the traffic policy instance that you want to update.
>
> Length Constraints: Minimum length of 1. Maximum length of 36.

Request Body

The request accepts the following data in XML format.

UpdateTrafficPolicyInstanceRequest (p. 209)

> Root level tag for the UpdateTrafficPolicyInstanceRequest parameters.
>
> Required: Yes

TrafficPolicyId (p. 209)

> 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 (p. 209)

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 (p. 209)

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 (p. 210)

Root level tag for the UpdateTrafficPolicyInstanceResponse parameters.

Required: Yes

TrafficPolicyInstance (p. 210)

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

Type: TrafficPolicyInstance (p. 427) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

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.

HTTP Status Code: 400

InvalidInput

The input is not valid.

HTTP Status Code: 400

NoSuchTrafficPolicy

No traffic policy exists with the specified ID.

HTTP Status Code: 404

NoSuchTrafficPolicyInstance

No traffic policy instance exists with the specified ID.

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

```
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

```
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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

Amazon Route 53 Domains

The following actions are supported by Amazon Route 53 Domains:

- UpdateTagsForDomain (p. 293)
- ViewBilling (p. 296)

CheckDomainAvailability

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 214)

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 Amazon 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 (p. 214)

Reserved for future use.

Type: String

Length Constraints: Maximum length of 3.

Required: No

Response Syntax

```
{
```

```
    "Availability": "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 (p. 214)

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. Amazon 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

Valid Values: AVAILABLE | AVAILABLE_RESERVED | AVAILABLE_PREORDER | UNAVAILABLE | UNAVAILABLE_PREMIUM | UNAVAILABLE_RESTRICTED | RESERVED | DONT_KNOW

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

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).

HTTP Status Code: 400

Example

CheckDomainAvailability Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

CheckDomainTransferability

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

AuthCode (p. 218)

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 (p. 218)

The name of the domain that you want to transfer to Amazon Route 53. The top-level domain
(TLD), such as .com, must be a TLD that Amazon 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

```
{
    "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.

Transferability (p. 218)

> A complex type that contains information about whether the specified domain can be transferred to Amazon Route 53.
>
> Type: DomainTransferability (p. 442) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

> 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).
>
> HTTP Status Code: 400

Example

CheckDomainTransferability Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeleteTagsForDomain

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 221)

The domain for which you want to delete one or more tags.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

TagsToDelete (p. 221)

A list of tag keys to delete.

Type: Array of strings

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 Errors (p. 486).

InvalidInput

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.

HTTP Status Code: 400

UnsupportedTLD

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

Example

DeleteTagsForDomain Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DisableDomainAutoRenew

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 223)

> 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 Errors (p. 486).

InvalidInput

> 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).
>
> HTTP Status Code: 400

Example

DisableDomainAutoRenew Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DisableDomainTransferLock

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 225)

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 (p. 225)

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail (p. 246).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The request is already in progress for the domain.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

DisableDomainTransferLock Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

EnableDomainAutoRenew

Service: Amazon Route 53 Domains

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 "Renewal, restoration, and deletion times" on the website for our registrar associate, Gandi. Amazon Route 53 requires that you renew before the end of the renewal period that is listed on the Gandi website 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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 228)

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 Errors (p. 486).

InvalidInput

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.

HTTP Status Code: 400

UnsupportedTLD

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

Example

EnableDomainAutoRenew Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

EnableDomainTransferLock

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 230)

> 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 (p. 230)

> 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 Errors (p. 486).

DuplicateRequest

The request is already in progress for the domain.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

EnableDomainTransferLock Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetContactReachabilityStatus

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

domainName (p. 233)

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 (p. 233)

The domain name for which you requested the reachability status.

Type: String

Length Constraints: Maximum length of 255.

status (p. 233)

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 Errors (p. 486).

InvalidInput

>   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.

>   HTTP Status Code: 400

UnsupportedTLD

>   Amazon Route 53 does not support this top-level domain (TLD).

>   HTTP Status Code: 400

Example

GetContactReachabilityStatus Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetDomainDetail

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 236)

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,
    "CreationDate": number,
    "DnsSec": "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 (p. 236)

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 (p. 236)

Phone number for reporting abuse.

Type: String

Length Constraints: Maximum length of 30.

AdminContact (p. 236)

Provides details about the domain administrative contact.

Type: ContactDetail (p. 436) object

AdminPrivacy (p. 236)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If the value is `false`, WHOIS queries return the information that you entered for the admin contact.

Type: Boolean

AutoRenew (p. 236)

Specifies whether the domain registration is set to renew automatically.

Type: Boolean

CreationDate (p. 236)

The date when the domain was created as found in the response to a WHOIS query. The date and time is in Coordinated Universal time (UTC).

Type: Timestamp

DnsSec (p. 236)

Reserved for future use.

Type: String

DomainName (p. 236)

The name of a domain.

Type: String

Length Constraints: Maximum length of 255.

ExpirationDate (p. 236)

The date when the registration for the domain is set to expire. The date and time is in Coordinated Universal time (UTC).

Type: Timestamp

Nameservers (p. 236)

The name of the domain.

Type: Array of Nameserver (p. 448) objects

RegistrantContact (p. 236)

Provides details about the domain registrant.

Type: ContactDetail (p. 436) object

RegistrantPrivacy (p. 236)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If the value is `false`, WHOIS queries return the information that you entered for the registrant contact (domain owner).

Type: Boolean

RegistrarName (p. 236)

Name of the registrar of the domain as identified in the registry. Domains with a .com, .net, or .org TLD are registered by Amazon Registrar. All other domains are registered by our registrar associate, Gandi. The value for domains that are registered by Gandi is `"GANDI SAS"`.

Type: String

RegistrarUrl (p. 236)

Web address of the registrar.

Type: String

RegistryDomainId (p. 236)

Reserved for future use.

Type: String

Reseller (p. 236)

Reseller of the domain. Domains registered or transferred using Amazon Route 53 domains will have `"Amazon"` as the reseller.

Type: String

StatusList (p. 236)

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 (p. 236)

Provides details about the domain technical contact.

Type: ContactDetail (p. 436) object

TechPrivacy (p. 236)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If the value is `false`, WHOIS queries return the information that you entered for the technical contact.

Type: Boolean

UpdatedDate (p. 236)

The last updated date of the domain as found in the response to a WHOIS query. The date and time is in Coordinated Universal time (UTC).

Type: Timestamp

WhoIsServer (p. 236)

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 Errors (p. 486).

InvalidInput

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).

HTTP Status Code: 400

Example

GetDomainDetail Example

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":"+2065550100",
        "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":"+2065550100",
```

```
        "State":"WA",
        "ZipCode":"98101"
     },
     "RegistrantPrivacy":true,
     "RegistrarName":"GANDI SAS",
     "RegistrarUrl":"http://www.gandi.net",
     "Reseller":"Amazon",
     "StatusList":[
     "clientTransferProhibited"
     ],
     "TechContact":{
        "AddressLine1":"1 Any Street",
        "AddressLine2":"",
        "City":"Anytown",
        "CountryCode":"US",
        "Email":"john@example.com",
        "ExtraParams":[
        ],
        "FirstName":"John",
        "LastName":"Doe",
        "PhoneNumber":"+2065550100",
        "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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetDomainSuggestions

Service: Amazon Route 53 Domains

The GetDomainSuggestions operation returns a list of suggested domain names.

Request Syntax

```
{
    "DomainName": "string",
    "OnlyAvailable": boolean,
    "SuggestionCount": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 243)

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 Amazon 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 (p. 243)

If `OnlyAvailable` is `true`, Amazon Route 53 returns only domain names that are available. If `OnlyAvailable` is `false`, Amazon Route 53 returns domain names without checking whether they're available to be registered. To determine whether the domain is available, you can call `checkDomainAvailability` for each suggestion.

Type: Boolean

Required: Yes

SuggestionCount (p. 243)

The number of suggested domain names that you want Amazon Route 53 to return. Specify a value between 1 and 50.

Type: Integer

Required: Yes

Response Syntax

```
{
   "SuggestionsList": [
      {
         "Availability": "string",
         "DomainName": "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 (p. 244)

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 (p. 439) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

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).

HTTP Status Code: 400

Example

GetDomainSuggestions Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetOperationDetail

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

OperationId (p. 246)

The identifier for the operation for which you want to get the status. Amazon 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",
    "Message": "string",
    "OperationId": "string",
    "Status": "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 (p. 246)

The name of a domain.

Type: String

Length Constraints: Maximum length of 255.

Message (p. 246)

Detailed information on the status including possible errors.

Type: String

OperationId (p. 246)

The identifier for the operation.

Type: String

Length Constraints: Maximum length of 255.

Status (p. 246)

The current status of the requested operation in the system.

Type: String

Valid Values: `SUBMITTED` | `IN_PROGRESS` | `ERROR` | `SUCCESSFUL` | `FAILED`

SubmittedDate (p. 246)

The date when the request was submitted.

Type: Timestamp

Type (p. 246)

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`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

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

Example

GetOperationDetail Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListDomains

Service: Amazon Route 53 Domains

This operation returns all the domain names registered with Amazon Route 53 for the current AWS account.

Request Syntax

```
{
    "Marker": "string",
    "MaxItems": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Marker (p. 249)

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 (p. 249)

Number of domains to be returned.

Default: 20

Type: Integer

Valid Range: Maximum value of 100.

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 (p. 249)

A summary of domains.

Type: Array of DomainSummary (p. 441) objects

NextPageMarker (p. 249)

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 Errors (p. 486).

InvalidInput

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

Example

ListDomains Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListOperations

Service: Amazon Route 53 Domains

This operation returns the operation IDs of operations that are not yet complete.

Request Syntax

```
{
   "Marker": "string",
   "MaxItems": number,
   "SubmittedSince": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 484).

The request accepts the following data in JSON format.

Marker (p. 252)

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 (p. 252)

Number of domains to be returned.

Default: 20

Type: Integer

Valid Range: Maximum value of 100.

Required: No

SubmittedSince (p. 252)

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 Coordinated Universal time (UTC).

Type: Timestamp

Required: No

Response Syntax

```
{
   "NextPageMarker": "string",
```

```
    "Operations": [
        {
            "OperationId": "string",
            "Status": "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 (p. 252)

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 (p. 252)

Lists summaries of the operations.

Type: Array of OperationSummary (p. 449) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

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

Example

ListOperations Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListTagsForDomain

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 255)

>   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 (p. 255)

>   A list of the tags that are associated with the specified domain.
>
>   Type: Array of Tag (p. 450) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

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.

HTTP Status Code: 400

UnsupportedTLD

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

Example

ListTagsForDomain Example

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": "foo",
            "Value": "bar"
        }, {
            "Key": "foo2",
            "Value": ""
        }
    ]
}
```

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

RegisterDomain

Service: Amazon Route 53 Domains

This operation registers a domain. Domains are registered either by Amazon Registrar (for .com, .net, and .org domains) or by our registrar associate, Gandi (for all other domains). For some top-level domains (TLDs), this operation requires extra parameters.

When you register a domain, Amazon Route 53 does the following:

- Creates a Amazon Route 53 hosted zone that has the same name as the domain. Amazon Route 53 assigns four name servers to your hosted zone and automatically updates your domain registration with the names of these name servers.
- Enables autorenew, 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 information either for Amazon Registrar (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you don't enable privacy protection, WHOIS queries return the information that you entered for the registrant, admin, and tech 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,
    "DomainName": "string",
    "DurationInYears": number,
    "IdnLangCode": "string",
    "PrivacyProtectAdminContact": 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 (p. 484).

The request accepts the following data in JSON format.

AdminContact (p. 258)

Provides detailed contact information.

Type: ContactDetail (p. 436) object

Required: Yes

AutoRenew (p. 258)

Indicates whether the domain will be automatically renewed (`true`) or not (`false`). Autorenewal
only takes effect after the account is charged.

Default: `true`

Type: Boolean

Required: No

DomainName (p. 258)

The domain name that you want to register. The top-level domain (TLD), such as .com, must be a TLD that Amazon 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 (p. 258)

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 (p. 258)

Reserved for future use.

Type: String

Length Constraints: Maximum length of 3.

Required: No

PrivacyProtectAdminContact (p. 258)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the admin contact.

Default: `true`

Type: Boolean

Required: No

PrivacyProtectRegistrantContact (p. 258)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the registrant contact (the domain owner).

Default: `true`

Type: Boolean

Required: No

PrivacyProtectTechContact (p. 258)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the technical contact.

Default: `true`

Type: Boolean

Required: No

RegistrantContact (p. 258)

Provides detailed contact information.

Type: ContactDetail (p. 436) object

Required: Yes

TechContact (p. 258)

Provides detailed contact information.

Type: ContactDetail (p. 436) 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 (p. 261)

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail (p. 246).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DomainLimitExceeded

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.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

RegisterDomain Example

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":"+2065550100",
      "Email":"john@example.com",
      "Fax":"+2065550101"
   },
   "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":"+2065550100",
      "Email":"john@example.com",
      "Fax":"+2065550101"
   },
   "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":"+2065550100",
      "Email":"john@example.com",
      "Fax":"+2065550101"
},
"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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

RenewDomain

Service: Amazon Route 53 Domains

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

```
{
    "CurrentExpiryYear": number,
    "DomainName": "string",
    "DurationInYears": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

CurrentExpiryYear (p. 265)

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 (p. 265)

The name of the domain that you want to renew.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

DurationInYears (p. 265)

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 (p. 266)

The identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail (p. 246).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The request is already in progress for the domain.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

RenewDomain Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ResendContactReachabilityEmail

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

domainName (p. 268)

The name of the domain for which you want Amazon 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 (p. 268)

The domain name for which you requested a confirmation email.

Type: String

Length Constraints: Maximum length of 255.

emailAddress (p. 268)

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 (p. 268)

`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 Errors (p. 486).

InvalidInput

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.

HTTP Status Code: 400

UnsupportedTLD

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

Example

ResendContactReachabilityEmail Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

RetrieveDomainAuthCode

Service: Amazon Route 53 Domains

This operation returns the AuthCode 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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 271)

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 (p. 271)

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 Errors (p. 486).

InvalidInput

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).

HTTP Status Code: 400

Example

RetrieveDomainAuthCode Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V2

TransferDomain

Service: Amazon Route 53 Domains

Transfers a domain from another registrar to Amazon Route 53. When the transfer is complete, the domain is registered either with Amazon Registrar (for .com, .net, and .org domains) or with our registrar associate, Gandi (for all other TLDs).

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 Amazon 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 Transferring a Domain to a Different AWS Account in the *Amazon Route 53 Developer Guide*.
- 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*.

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 Amazon 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,
   "DomainName": "string",
   "DurationInYears": number,
```

```
      "IdnLangCode": "string",
      "Nameservers": [
         {
            "GlueIps": [ "string" ],
            "Name": "string"
         }
      ],
      "PrivacyProtectAdminContact": 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 (p. 484).

The request accepts the following data in JSON format.

AdminContact (p. 274)

Provides detailed contact information.

Type: ContactDetail (p. 436) object

Required: Yes

AuthCode (p. 274)

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 (p. 274)

Indicates whether the domain will be automatically renewed (true) or not (false). Autorenewal only takes effect after the account is charged.

Default: true

Type: Boolean

Required: No

DomainName (p. 274)

The name of the domain that you want to transfer to Amazon Route 53. The top-level domain (TLD), such as .com, must be a TLD that Amazon 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 (p. 274)

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.

Default: 1

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: Yes

IdnLangCode (p. 274)

Reserved for future use.

Type: String

Length Constraints: Maximum length of 3.

Required: No

Nameservers (p. 274)

Contains details for the host and glue IP addresses.

Type: Array of Nameserver (p. 448) objects

Required: No

PrivacyProtectAdminContact (p. 274)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the admin contact.

Default: `true`

Type: Boolean

Required: No

PrivacyProtectRegistrantContact (p. 274)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the registrant contact (domain owner).

Default: `true`

Type: Boolean

Required: No

PrivacyProtectTechContact (p. 274)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the technical contact.

Default: `true`

Type: Boolean

Required: No

RegistrantContact (p. 274)

Provides detailed contact information.

Type: ContactDetail (p. 436) object

Required: Yes

TechContact (p. 274)

Provides detailed contact information.

Type: ContactDetail (p. 436) 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 (p. 278)

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail (p. 246).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DomainLimitExceeded

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.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

TransferDomain Example

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":"+2065550100",
        "Email":"john@example.com",
        "Fax":"+206555-0101"
    },
    "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":"+2065550100",
        "Email":"john@example.com",
        "Fax":"+206555-0101"
    },
    "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":"+2065550100",
        "Email":"john@example.com",
        "Fax":"+206555-0101"
    },
    "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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateDomainContact

Service: Amazon Route 53 Domains

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 action. 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"
    },
    "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 (p. 484).

The request accepts the following data in JSON format.

AdminContact (p. 281)

> Provides detailed contact information.
>
> Type: ContactDetail (p. 436) object
>
> Required: No

DomainName (p. 281)

> The name of the domain that you want to update contact information for.
>
> Type: String
>
> Length Constraints: Maximum length of 255.
>
> Required: Yes

RegistrantContact (p. 281)

> Provides detailed contact information.
>
> Type: ContactDetail (p. 436) object
>
> Required: No

TechContact (p. 281)

> Provides detailed contact information.
>
> Type: ContactDetail (p. 436) 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 (p. 282)

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail (p. 246).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The request is already in progress for the domain.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

UpdateDomainContact Example

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":"+2065550100",
        "Email":"john@example.com",
        "Fax":"+2065550101"
        },
    "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":"+2065550100",
        "Email":"john@example.com",
        "Fax":"+2065550101"
    },
    "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":"+2065550100",
        "Email":"john@example.com",
        "Fax":"+2065550101"
    },
}
```

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateDomainContactPrivacy

Service: Amazon Route 53 Domains

This operation updates the specified domain contact's privacy setting. When privacy protection is enabled, contact information such as email address is replaced either with contact information for Amazon Registrar (for .com, .net, and .org domains) or with contact information for our registrar associate, Gandi.

This operation affects only the contact information for the specified contact type (registrant, administrator, or tech). If the request succeeds, Amazon Route 53 returns an operation ID that you can use with GetOperationDetail (p. 246) 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 Amazon 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,
    "DomainName": "string",
    "RegistrantPrivacy": boolean,
    "TechPrivacy": boolean
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

AdminPrivacy (p. 286)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the admin contact.

Type: Boolean

Required: No

DomainName (p. 286)

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 (p. 286)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the registrant contact (domain owner).

Type: Boolean

Required: No

TechPrivacy (p. 286)

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 (for .com, .net, and .org domains) or for our registrar associate, Gandi (for all other TLDs). If you specify `false`, WHOIS queries return the information that you entered for the technical contact.

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 (p. 287)

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 Errors (p. 486).

DuplicateRequest

The request is already in progress for the domain.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

UpdateDomainContactPrivacy Example

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
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateDomainNameservers

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 290)

The name of the domain that you want to change name servers for.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

FIAuthKey (p. 290)

This parameter has been deprecated.

The authorization key for .fi domains

Type: String

Required: No

Nameservers (p. 290)

A list of new name servers for the domain.

Type: Array of Nameserver (p. 448) 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 (p. 291)

Identifier for tracking the progress of the request. To use this ID to query the operation status, use GetOperationDetail (p. 246).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The request is already in progress for the domain.

HTTP Status Code: 400

InvalidInput

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.

HTTP Status Code: 400

TLDRulesViolation

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).

HTTP Status Code: 400

Example

UpdateDomainNameservers Example

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateTagsForDomain

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

DomainName (p. 293)

> The domain for which you want to add or update tags.
>
> Type: String
>
> Length Constraints: Maximum length of 255.
>
> Required: Yes

TagsToUpdate (p. 293)

> 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 (p. 450) 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 Errors (p. 486).

InvalidInput

> 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.

HTTP Status Code: 400

UnsupportedTLD

Amazon Route 53 does not support this top-level domain (TLD).

HTTP Status Code: 400

Example

UpdateTagsForDomain Example

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
- AWS SDK for .NET
- AWS SDK for C++

- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ViewBilling

Service: Amazon Route 53 Domains

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 (p. 484).

The request accepts the following data in JSON format.

End (p. 296)

The end date and time for the time period for which you want a list of billing records. Specify the date and time in Coordinated Universal time (UTC).

Type: Timestamp

Required: No

Marker (p. 296)

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 (p. 296)

The number of billing records to be returned.

Default: 20

Type: Integer

Valid Range: Maximum value of 100.

Required: No

The beginning date and time for the time period for which you want a list of billing records. Specify the date and time in 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 (p. 297)

A summary of billing records.

Type: Array of BillingRecord (p. 434) objects

NextPageMarker (p. 297)

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 Errors (p. 486).

InvalidInput

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

Example

ViewBilling Example

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
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

Amazon Route 53 Auto Naming

The following actions are supported by Amazon Route 53 Auto Naming:

CreatePrivateDnsNamespace

Service: Amazon Route 53 Auto Naming

Creates a private namespace based on DNS, which will be visible only inside a specified Amazon VPC. The namespace defines your service naming scheme. For example, if you name your namespace `example.com` and name your service `backend`, the resulting DNS name for the service will be `backend.example.com`. For the current limit on the number of namespaces that you can create using the same AWS account, see Limits on Auto Naming in the *Route 53 Developer Guide*.

Request Syntax

```
{
   "CreatorRequestId": "string",
   "Description": "string",
   "Name": "string",
   "Vpc": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

CreatorRequestId (p. 300)

A unique string that identifies the request and that allows failed `CreatePrivateDnsNamespace` requests to be retried without the risk of executing the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Description (p. 300)

A description for the namespace.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Name (p. 300)

The name that you want to assign to this namespace. When you create a namespace, Amazon Route 53 automatically creates a hosted zone that has the same name as the namespace.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

Vpc (p. 300)

The ID of the Amazon VPC that you want to associate the namespace with.

Type: String

Length Constraints: Maximum length of 64.

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 (p. 301)

A value that you can use to determine whether the request completed successfully. To get the status of the operation, see GetOperation (p. 323).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The operation is already in progress.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

NamespaceAlreadyExists

The namespace that you're trying to create already exists.

HTTP Status Code: 400

ResourceLimitExceeded

The resource can't be created because you've reached the limit on the number of resources.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

CreatePublicDnsNamespace

Service: Amazon Route 53 Auto Naming

Creates a public namespace based on DNS, which will be visible on the internet. The namespace defines your service naming scheme. For example, if you name your namespace `example.com` and name your service `backend`, the resulting DNS name for the service will be `backend.example.com`. For the current limit on the number of namespaces that you can create using the same AWS account, see Limits on Auto Naming in the *Route 53 Developer Guide*.

Request Syntax

```
{
    "CreatorRequestId": "string",
    "Description": "string",
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

CreatorRequestId (p. 303)

A unique string that identifies the request and that allows failed `CreatePublicDnsNamespace` requests to be retried without the risk of executing the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Description (p. 303)

A description for the namespace.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Name (p. 303)

The name that you want to assign to this namespace.

Type: String

Length Constraints: Maximum length of 1024.

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 (p. 303)

A value that you can use to determine whether the request completed successfully. To get the status of the operation, see GetOperation (p. 323).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The operation is already in progress.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

NamespaceAlreadyExists

The namespace that you're trying to create already exists.

HTTP Status Code: 400

ResourceLimitExceeded

The resource can't be created because you've reached the limit on the number of resources.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V2

CreateService

Service: Amazon Route 53 Auto Naming

Creates a service, which defines the configuration for the following entities:

- Up to three records (A, AAAA, and SRV) or one CNAME record
- Optionally, a health check

After you create the service, you can submit a RegisterInstance (p. 339) request, and Amazon Route 53 uses the values in the configuration to create the specified entities.

For the current limit on the number of instances that you can register using the same namespace and using the same service, see Limits on Auto Naming in the *Route 53 Developer Guide*.

Request Syntax

```
{
    "CreatorRequestId": "string",
    "Description": "string",
    "DnsConfig": {
        "DnsRecords": [
            {
                "TTL": number,
                "Type": "string"
            }
        ],
        "NamespaceId": "string",
        "RoutingPolicy": "string"
    },
    "HealthCheckConfig": {
        "FailureThreshold": number,
        "ResourcePath": "string",
        "Type": "string"
    },
    "HealthCheckCustomConfig": {
        "FailureThreshold": number
    },
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

CreatorRequestId (p. 306)

A unique string that identifies the request and that allows failed `CreateService` requests to be retried without the risk of executing the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Description (p. 306)

A description for the service.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

DnsConfig (p. 306)

A complex type that contains information about the records that you want Route 53 to create when you register an instance.

Type: DnsConfig (p. 452) object

Required: Yes

HealthCheckConfig (p. 306)

Public DNS namespaces only. A complex type that contains settings for an optional Route 53 health check. If you specify settings for a health check, Route 53 associates the health check with all the records that you specify in `DnsConfig`.

> **Important**
> If you specify a health check configuration, you can specify either `HealthCheckCustomConfig` or `HealthCheckConfig` but not both.

For information about the charges for health checks, see Amazon Route 53 Pricing.

Type: HealthCheckConfig (p. 458) object

Required: No

HealthCheckCustomConfig (p. 306)

A complex type that contains information about an optional custom health check.

> **Important**
> If you specify a health check configuration, you can specify either `HealthCheckCustomConfig` or `HealthCheckConfig` but not both.

Type: HealthCheckCustomConfig (p. 461) object

Required: No

Name (p. 306)

The name that you want to assign to the service.

Type: String

Pattern: ((?=^.{1,127}$)^([a-zA-Z0-9_][a-zA-Z0-9-_]{0,61}[a-zA-Z0-9_]|[a-zA-Z0-9])(\.([a-zA-Z0-9_][a-zA-Z0-9-_]{0,61}[a-zA-Z0-9_]|[a-zA-Z0-9]))*$)|(^\.$)

Required: Yes

Response Syntax

```
{
    "Service": {
```

```
        "Arn": "string",
        "CreateDate": number,
        "CreatorRequestId": "string",
        "Description": "string",
        "DnsConfig": {
            "DnsRecords": [
                {
                    "TTL": number,
                    "Type": "string"
                }
            ],
            "NamespaceId": "string",
            "RoutingPolicy": "string"
        },
        "HealthCheckConfig": {
            "FailureThreshold": number,
            "ResourcePath": "string",
            "Type": "string"
        },
        "HealthCheckCustomConfig": {
            "FailureThreshold": number
        },
        "Id": "string",
        "InstanceCount": number,
        "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.

Service (p. 307)

A complex type that contains information about the new service.

Type: Service (p. 477) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

NamespaceNotFound

No namespace exists with the specified ID.

HTTP Status Code: 400

ResourceLimitExceeded

The resource can't be created because you've reached the limit on the number of resources.

HTTP Status Code: 400

ServiceAlreadyExists

The service can't be created because a service with the same name already exists.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeleteNamespace

Service: Amazon Route 53 Auto Naming

Deletes a namespace from the current account. If the namespace still contains one or more services, the request fails.

Request Syntax

```
{
    "Id": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Id (p. 310)

> The ID of the namespace that you want to delete.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> 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 (p. 310)

> A value that you can use to determine whether the request completed successfully. To get the status of the operation, see GetOperation (p. 323).
>
> Type: String
>
> Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The operation is already in progress.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

NamespaceNotFound

No namespace exists with the specified ID.

HTTP Status Code: 400

ResourceInUse

The specified resource can't be deleted because it contains other resources. For example, you can't delete a service that contains any instances.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeleteService

Service: Amazon Route 53 Auto Naming

Deletes a specified service. If the service still contains one or more registered instances, the request fails.

Request Syntax

```
{
    "Id": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Id (p. 312)

The ID of the service that you want to delete.

Type: String

Length Constraints: Maximum length of 64.

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 Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ResourceInUse

The specified resource can't be deleted because it contains other resources. For example, you can't delete a service that contains any instances.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

DeregisterInstance

Service: Amazon Route 53 Auto Naming

Deletes the records and the health check, if any, that Amazon Route 53 created for the specified instance.

Request Syntax

```
{
    "InstanceId": "string",
    "ServiceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

InstanceId (p. 314)

The value that you specified for Id in the RegisterInstance (p. 339) request.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

ServiceId (p. 314)

The ID of the service that the instance is associated with.

Type: String

Length Constraints: Maximum length of 64.

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 (p. 314)

A value that you can use to determine whether the request completed successfully. For more information, see GetOperation (p. 323).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The operation is already in progress.

HTTP Status Code: 400

InstanceNotFound

No instance exists with the specified ID, or the instance was recently registered, and information about the instance hasn't propagated yet.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ResourceInUse

The specified resource can't be deleted because it contains other resources. For example, you can't delete a service that contains any instances.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetInstance

Service: Amazon Route 53 Auto Naming

Gets information about a specified instance.

Request Syntax

```
{
    "InstanceId": "string",
    "ServiceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

InstanceId (p. 316)

The ID of the instance that you want to get information about.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

ServiceId (p. 316)

The ID of the service that the instance is associated with.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

Response Syntax

```
{
    "Instance": {
        "Attributes": {
            "string" : "string"
        },
        "CreatorRequestId": "string",
        "Id": "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.

Instance (p. 316)

A complex type that contains information about a specified instance.

Type: Instance (p. 463) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InstanceNotFound

No instance exists with the specified ID, or the instance was recently registered, and information about the instance hasn't propagated yet.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetInstancesHealthStatus

Service: Amazon Route 53 Auto Naming

Gets the current health status (`Healthy`, `Unhealthy`, or `Unknown`) of one or more instances that are associated with a specified service.

> **Note**
> There is a brief delay between when you register an instance and when the health status for the instance is available.

Request Syntax

```
{
   "Instances": [ "string" ],
   "MaxResults": number,
   "NextToken": "string",
   "ServiceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Instances (p. 318)

An array that contains the IDs of all the instances that you want to get the health status for.

If you omit `Instances`, Amazon Route 53 returns the health status for all the instances that are associated with the specified service.

> **Note**
> To get the IDs for the instances that you've registered by using a specified service, submit a ListInstances (p. 327) request.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Maximum length of 64.

Required: No

MaxResults (p. 318)

The maximum number of instances that you want Route 53 to return in the response to a `GetInstancesHealthStatus` request. If you don't specify a value for `MaxResults`, Route 53 returns up to 100 instances.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 318)

For the first `GetInstancesHealthStatus` request, omit this value.

If more than `MaxResults` instances match the specified criteria, you can submit another `GetInstancesHealthStatus` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

ServiceId (p. 318)

The ID of the service that the instance is associated with.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

Response Syntax

```
{
   "NextToken": "string",
   "Status": {
      "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.

NextToken (p. 319)

If more than `MaxResults` instances match the specified criteria, you can submit another `GetInstancesHealthStatus` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

Type: String

Length Constraints: Maximum length of 4096.

Status (p. 319)

A complex type that contains the IDs and the health status of the instances that you specified in the `GetInstancesHealthStatus` request.

Type: String to string map

Key Length Constraints: Maximum length of 64.

Valid Values: `HEALTHY | UNHEALTHY | UNKNOWN`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InstanceNotFound

No instance exists with the specified ID, or the instance was recently registered, and information about the instance hasn't propagated yet.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetNamespace

Service: Amazon Route 53 Auto Naming

Gets information about a namespace.

Request Syntax

```
{
    "Id": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 484).

The request accepts the following data in JSON format.

Id (p. 321)

> The ID of the namespace that you want to get information about.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Required: Yes

Response Syntax

```
{
    "Namespace": {
        "Arn": "string",
        "CreateDate": number,
        "CreatorRequestId": "string",
        "Description": "string",
        "Id": "string",
        "Name": "string",
        "Properties": {
            "DnsProperties": {
                "HostedZoneId": "string"
            }
        },
        "ServiceCount": 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.

Namespace (p. 321)

> A complex type that contains information about the specified namespace.

Type: Namespace (p. 467) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

NamespaceNotFound

No namespace exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetOperation

Service: Amazon Route 53 Auto Naming

Gets information about any operation that returns an operation ID in the response, such as a
`CreateService` request.

> **Note**
> To get a list of operations that match specified criteria, see ListOperations (p. 333).

Request Syntax

```
{
    "OperationId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 484).

The request accepts the following data in JSON format.

OperationId (p. 323)

The ID of the operation that you want to get more information about.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

Response Syntax

```
{
    "Operation": {
        "CreateDate": number,
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "Id": "string",
        "Status": "string",
        "Targets": {
            "string" : "string"
        },
        "Type": "string",
        "UpdateDate": 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.

Operation (p. 323)

A complex type that contains information about the operation.

Type: Operation (p. 472) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

OperationNotFound

No operation exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

GetService

Service: Amazon Route 53 Auto Naming

Gets the settings for a specified service.

Request Syntax

```
{
    "Id": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Id (p. 325)

> The ID of the service that you want to get settings for.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Required: Yes

Response Syntax

```
{
    "Service": {
        "Arn": "string",
        "CreateDate": number,
        "CreatorRequestId": "string",
        "Description": "string",
        "DnsConfig": {
            "DnsRecords": [
                {
                    "TTL": number,
                    "Type": "string"
                }
            ],
            "NamespaceId": "string",
            "RoutingPolicy": "string"
        },
        "HealthCheckConfig": {
            "FailureThreshold": number,
            "ResourcePath": "string",
            "Type": "string"
        },
        "HealthCheckCustomConfig": {
            "FailureThreshold": number
        },
        "Id": "string",
        "InstanceCount": number,
        "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.

Service (p. 325)

A complex type that contains information about the service.

Type: Service (p. 477) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListInstances

Service: Amazon Route 53 Auto Naming

Lists summary information about the instances that you registered by using a specified service.

Request Syntax

```
{
    "MaxResults": number,
    "NextToken": "string",
    "ServiceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

MaxResults (p. 327)

The maximum number of instances that you want Amazon Route 53 to return in the response to a `ListInstances` request. If you don't specify a value for `MaxResults`, Route 53 returns up to 100 instances.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 327)

For the first `ListInstances` request, omit this value.

If more than `MaxResults` instances match the specified criteria, you can submit another `ListInstances` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

ServiceId (p. 327)

The ID of the service that you want to list instances for.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

Response Syntax

```
{
```

```
    "Instances": [
        {
            "Attributes": {
                "string" : "string"
            },
            "Id": "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.

Instances (p. 327)

Summary information about the instances that are associated with the specified service.

Type: Array of InstanceSummary (p. 466) objects

NextToken (p. 327)

If more than `MaxResults` instances match the specified criteria, you can submit another `ListInstances` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

Type: String

Length Constraints: Maximum length of 4096.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListNamespaces

Service: Amazon Route 53 Auto Naming

Lists summary information about the namespaces that were created by the current AWS account.

Request Syntax

```
{
    "Filters": [
        {
            "Condition": "string",
            "Name": "string",
            "Values": [ "string" ]
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Filters (p. 330)

A complex type that contains specifications for the namespaces that you want to list.

If you specify more than one filter, a namespace must match all filters to be returned by `ListNamespaces`.

Type: Array of NamespaceFilter (p. 469) objects

Required: No

MaxResults (p. 330)

The maximum number of namespaces that you want Amazon Route 53 to return in the response to a `ListNamespaces` request. If you don't specify a value for `MaxResults`, Route 53 returns up to 100 namespaces.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 330)

For the first `ListNamespaces` request, omit this value.

If the response contains `NextToken`, submit another `ListNamespaces` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

> **Note**
> Route 53 gets `MaxResults` namespaces and then filters them based on the specified criteria. It's possible that no namespaces in the first `MaxResults` namespaces matched the specified criteria but that subsequent groups of `MaxResults` namespaces do contain namespaces that match the criteria.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

Response Syntax

```
{
    "Namespaces": [
        {
            "Arn": "string",
            "Id": "string",
            "Name": "string",
            "Type": "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.

Namespaces (p. 331)

An array that contains one `NamespaceSummary` object for each namespace that matches the specified filter criteria.

Type: Array of NamespaceSummary (p. 471) objects

NextToken (p. 331)

If the response contains `NextToken`, submit another `ListNamespaces` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

> **Note**
> Route 53 gets `MaxResults` namespaces and then filters them based on the specified criteria. It's possible that no namespaces in the first `MaxResults` namespaces matched the specified criteria but that subsequent groups of `MaxResults` namespaces do contain namespaces that match the criteria.

Type: String

Length Constraints: Maximum length of 4096.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListOperations

Service: Amazon Route 53 Auto Naming

Lists operations that match the criteria that you specify.

Request Syntax

```
{
   "Filters": [
      {
         "Condition": "string",
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 484).

The request accepts the following data in JSON format.

Filters (p. 333)

A complex type that contains specifications for the operations that you want to list, for example, operations that you started between a specified start date and end date.

If you specify more than one filter, an operation must match all filters to be returned by `ListOperations`.

Type: Array of OperationFilter (p. 474) objects

Required: No

MaxResults (p. 333)

The maximum number of items that you want Amazon Route 53 to return in the response to a `ListOperations` request. If you don't specify a value for `MaxResults`, Route 53 returns up to 100 operations.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 333)

For the first `ListOperations` request, omit this value.

If the response contains `NextToken`, submit another `ListOperations` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

> **Note**
> Route 53 gets `MaxResults` operations and then filters them based on the specified criteria. It's possible that no operations in the first `MaxResults` operations matched the specified

criteria but that subsequent groups of `MaxResults` operations do contain operations that match the criteria.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

Response Syntax

```
{
    "NextToken": "string",
    "Operations": [
        {
            "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.

NextToken (p. 334)

If the response contains `NextToken`, submit another `ListOperations` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

> **Note**
> Route 53 gets `MaxResults` operations and then filters them based on the specified criteria. It's possible that no operations in the first `MaxResults` operations matched the specified criteria but that subsequent groups of `MaxResults` operations do contain operations that match the criteria.

Type: String

Length Constraints: Maximum length of 4096.

Operations (p. 334)

Summary information about the operations that match the specified criteria.

Type: Array of OperationSummary (p. 476) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

ListServices

Service: Amazon Route 53 Auto Naming

Lists summary information for all the services that are associated with one or more specified namespaces.

Request Syntax

```
{
    "Filters": [
        {
            "Condition": "string",
            "Name": "string",
            "Values": [ "string" ]
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Filters (p. 336)

A complex type that contains specifications for the namespaces that you want to list services for.

If you specify more than one filter, an operation must match all filters to be returned by `ListServices`.

Type: Array of ServiceFilter (p. 481) objects

Required: No

MaxResults (p. 336)

The maximum number of services that you want Amazon Route 53 to return in the response to a `ListServices` request. If you don't specify a value for `MaxResults`, Route 53 returns up to 100 services.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 336)

For the first `ListServices` request, omit this value.

If the response contains `NextToken`, submit another `ListServices` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.

> **Note**
> Route 53 gets `MaxResults` services and then filters them based on the specified criteria. It's possible that no services in the first `MaxResults` services matched the specified criteria

> but that subsequent groups of `MaxResults` services do contain services that match the criteria.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Services": [
      {
         "Arn": "string",
         "Description": "string",
         "Id": "string",
         "InstanceCount": number,
         "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.

NextToken (p. 337)

> If the response contains `NextToken`, submit another `ListServices` request to get the next group of results. Specify the value of `NextToken` from the previous response in the next request.
>
> > **Note**
> > Route 53 gets `MaxResults` services and then filters them based on the specified criteria. It's possible that no services in the first `MaxResults` services matched the specified criteria but that subsequent groups of `MaxResults` services do contain services that match the criteria.
>
> Type: String
>
> Length Constraints: Maximum length of 4096.

Services (p. 337)

> An array that contains one `ServiceSummary` object for each service that matches the specified filter criteria.
>
> Type: Array of ServiceSummary (p. 482) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

InvalidInput

> One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

RegisterInstance

Service: Amazon Route 53 Auto Naming

Creates or updates one or more records and, optionally, creates a health check based on the settings in a specified service. When you submit a `RegisterInstance` request, the following occurs:

- For each DNS record that you define in the service that is specified by `ServiceId`, a record is created or updated in the hosted zone that is associated with the corresponding namespace.
- If the service includes `HealthCheckConfig`, a health check is created based on the settings in the health check configuration.
- The health check, if any, is associated with each of the new or updated records.

> **Important**
> One `RegisterInstance` request must complete before you can submit another request and specify the same service ID and instance ID.

For more information, see CreateService (p. 306).

When Route 53 receives a DNS query for the specified DNS name, it returns the applicable value:

- **If the health check is healthy**: returns all the records
- **If the health check is unhealthy**: returns the applicable value for the last healthy instance
- **If you didn't specify a health check configuration**: returns all the records

For the current limit on the number of instances that you can register using the same namespace and using the same service, see Limits on Auto Naming in the *Route 53 Developer Guide*.

Request Syntax

```
{
    "Attributes": {
        "string" : "string"
    },
    "CreatorRequestId": "string",
    "InstanceId": "string",
    "ServiceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Attributes (p. 339)

A string map that contains the following information for the service that you specify in `ServiceId`:

- The attributes that apply to the records that are defined in the service.
- For each attribute, the applicable value.

Supported attribute keys include the following:

AWS_ALIAS_DNS_NAME

If you want Route 53 to create an alias record that routes traffic to an Elastic Load Balancing load balancer, specify the DNS name that is associated with the load balancer. For information about how to get the DNS name, see "DNSName" in the topic AliasTarget.

Note the following:

- The configuration for the service that is specified by `ServiceId` must include settings for an A record, an AAAA record, or both.
- In the service that is specified by `ServiceId`, the value of `RoutingPolicy` must be `WEIGHTED`.
- If the service that is specified by `ServiceId` includes `HealthCheckConfig` settings, Route 53 will create the health check, but it won't associate the health check with the alias record.
- Auto naming currently doesn't support creating alias records that route traffic to AWS resources other than ELB load balancers.
- If you specify a value for `AWS_ALIAS_DNS_NAME`, don't specify values for any of the `AWS_INSTANCE` attributes.

AWS_INSTANCE_CNAME

If the service configuration includes a CNAME record, the domain name that you want Route 53 to return in response to DNS queries, for example, `example.com`.

This value is required if the service specified by `ServiceId` includes settings for an CNAME record.

AWS_INSTANCE_IPV4

If the service configuration includes an A record, the IPv4 address that you want Route 53 to return in response to DNS queries, for example, `192.0.2.44`.

This value is required if the service specified by `ServiceId` includes settings for an A record. If the service includes settings for an SRV record, you must specify a value for `AWS_INSTANCE_IPV4`, `AWS_INSTANCE_IPV6`, or both.

AWS_INSTANCE_IPV6

If the service configuration includes an AAAA record, the IPv6 address that you want Route 53 to return in response to DNS queries, for example, `2001:0db8:85a3:0000:0000:abcd:0001:2345`.

This value is required if the service specified by `ServiceId` includes settings for an AAAA record. If the service includes settings for an SRV record, you must specify a value for `AWS_INSTANCE_IPV4`, `AWS_INSTANCE_IPV6`, or both.

AWS_INSTANCE_PORT

If the service includes an SRV record, the value that you want Route 53 to return for the port.

If the service includes `HealthCheckConfig`, the port on the endpoint that you want Route 53 to send requests to.

This value is required if you specified settings for an SRV record when you created the service.

Type: String to string map

Key Length Constraints: Maximum length of 255.

Value Length Constraints: Maximum length of 255.

Required: Yes

CreatorRequestId (p. 339)

A unique string that identifies the request and that allows failed `RegisterInstance` requests to be retried without the risk of executing the operation twice. You must use a unique

CreatorRequestId string every time you submit a RegisterInstance request if you're registering additional instances for the same namespace and service. CreatorRequestId can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Maximum length of 64.

Required: No

InstanceId (p. 339)

An identifier that you want to associate with the instance. Note the following:

- If the service that is specified by ServiceId includes settings for an SRV record, the value of InstanceId is automatically included as part of the value for the SRV record. For more information, see DnsRecord:Type (p. 456).
- You can use this value to update an existing instance.
- To register a new instance, you must specify a value that is unique among instances that you register by using the same service.
- If you specify an existing InstanceId and ServiceId, Route 53 updates the existing records. If there's also an existing health check, Route 53 deletes the old health check and creates a new one.

    Note
    The health check isn't deleted immediately, so it will still appear for a while if you submit a ListHealthChecks request, for example.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

ServiceId (p. 339)

The ID of the service that you want to use for settings for the records and health check that Route 53 will create.

Type: String

Length Constraints: Maximum length of 64.

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 (p. 341)

A value that you can use to determine whether the request completed successfully. To get the status of the operation, see GetOperation (p. 323).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The operation is already in progress.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ResourceInUse

The specified resource can't be deleted because it contains other resources. For example, you can't delete a service that contains any instances.

HTTP Status Code: 400

ResourceLimitExceeded

The resource can't be created because you've reached the limit on the number of resources.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateInstanceCustomHealthStatus

Service: Amazon Route 53 Auto Naming

Submits a request to change the health status of a custom health check to healthy or unhealthy.

You can use `UpdateInstanceCustomHealthStatus` to change the status only for custom health checks, which you define using `HealthCheckCustomConfig` when you create a service. You can't use it to change the status for Route 53 health checks, which you define using `HealthCheckConfig`.

For more information, see HealthCheckCustomConfig (p. 461).

Request Syntax

```
{
   "InstanceId": "string",
   "ServiceId": "string",
   "Status": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

InstanceId (p. 343)

> The ID of the instance that you want to change the health status for.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Required: Yes

ServiceId (p. 343)

> The ID of the service that includes the configuration for the custom health check that you want to change the status for.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Required: Yes

Status (p. 343)

> The new status of the instance, `HEALTHY` or `UNHEALTHY`.
>
> Type: String
>
> Valid Values: `HEALTHY` | `UNHEALTHY`
>
> 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 Errors (p. 486).

CustomHealthNotFound

The health check for the instance that is specified by `ServiceId` and `InstanceId` is not a custom health check.

HTTP Status Code: 400

InstanceNotFound

No instance exists with the specified ID, or the instance was recently registered, and information about the instance hasn't propagated yet.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

UpdateService

Service: Amazon Route 53 Auto Naming

Submits a request to perform the following operations:

- Add or delete `DnsRecords` configurations
- Update the TTL setting for existing `DnsRecords` configurations
- Add, update, or delete `HealthCheckConfig` for a specified service

You must specify all `DnsRecords` configurations (and, optionally, `HealthCheckConfig`) that you want to appear in the updated service. Any current configurations that don't appear in an `UpdateService` request are deleted.

When you update the TTL setting for a service, Amazon Route 53 also updates the corresponding settings in all the records and health checks that were created by using the specified service.

Request Syntax

```
{
   "Id": "string",
   "Service": {
      "Description": "string",
      "DnsConfig": {
         "DnsRecords": [
            {
               "TTL": number,
               "Type": "string"
            }
         ]
      },
      "HealthCheckConfig": {
         "FailureThreshold": number,
         "ResourcePath": "string",
         "Type": "string"
      }
   }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 484).

The request accepts the following data in JSON format.

Id (p. 345)

> The ID of the service that you want to update.
>
> Type: String
>
> Length Constraints: Maximum length of 64.
>
> Required: Yes

Service (p. 345)

> A complex type that contains the new settings for the service.

Type: ServiceChange (p. 479) 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 (p. 346)

A value that you can use to determine whether the request completed successfully. To get the status of the operation, see GetOperation (p. 323).

Type: String

Length Constraints: Maximum length of 255.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 486).

DuplicateRequest

The operation is already in progress.

HTTP Status Code: 400

InvalidInput

One or more specified values aren't valid. For example, a required value might be missing, a numeric value might be outside the allowed range, or a string value might exceed length constraints.

HTTP Status Code: 400

ServiceNotFound

No service exists with the specified ID.

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

Using Auto Naming for Service Discovery

Amazon Route 53 auto naming makes it easier to provision instances for microservices by automating DNS configuration. Auto naming lets you automatically create DNS records based on a configuration that you define. You can also optionally create a health check based on the same configuration and associate the health check with all of the new records.

Topics
- Overview (p. 348)
- Using Service Discovery with an Existing Hosted Zone (p. 350)

Overview

Here's an overview of how you use Route 53 auto naming:

1. Create either a public namespace (accessible on the internet) or a private namespace (accessible only in an Amazon VPC). Note the following:

   - A namespace is a logical group of services that share the same domain name, such as example.com.
   - When you create a namespace, you specify a name that matches the name of a domain that you've registered.
   - When you create a namespace, Route 53 automatically creates a public or private hosted zone that has the same name as the namespace.
   - For private namespaces, you can query within your VPC immediately.

   Commands:

   - CreatePublicDnsNamespace (p. 303)
   - CreatePrivateDnsNamespace (p. 300)

   For a list of the endpoints that you can submit HTTPS requests to, see Amazon Route 53 in the "AWS Regions and Endpoints" chapter in the *Amazon Web Services General Reference*.

2. If you created a public DNS namespace, perform the following steps:

   a. If you already registered a domain that has the same name as the public DNS namespace, skip to step 2b.

   If you haven't registered a domain that has the same name as the namespace, register a domain. If you want to use Route 53 for domain registration, see Registering a New Domain in the *Amazon Route 53 Developer Guide*.

   b. Get the names of the name servers that Route 53 assigned to your hosted zone. For more information, see Getting the Name Servers for a Public Hosted Zone.

   c. Change the name servers that are assigned to the domain. If the domain is registered with Route 53, see Adding or Changing Name Servers and Glue Records for a Domain for more information.

3. Using the `OperationId` that was returned when you created the namespace, get the namespace ID.

Command:

- GetOperation (p. 323)

4.   Create a service for the namespace, and specify the following values:

- A name for the service, such as `backend` or `worker`. When you register an instance in the next step, Route 53 creates records in the hosted zone that it created automatically in step 1. The record names are a combination of the name of the service and the name of the namespace, for example, `backend.example.com` or `worker.example.com`.

- DNS settings for the applicable records.

- Optionally, a health check. If you specify settings for a health check, Route 53 assigns the health check to all the records that it creates when you register an instance.

- The `NamespaceId` that you got in step 3.

Command:

- CreateService (p. 306)

5.   Register one or more instances. Specify the `ServiceId` that Route 53 returned in the response to the `CreateService` request, an `InstanceId` to associate your instance with the record, and IP address for the instance.

Route 53 creates multivalue answer or weighted records based on the settings that you specified in the service. You can see the records that Route 53 creates in the hosted zone, but you can't change or delete them. For more information, see Multivalue Answer Routing and Weighted Routing in the *Amazon Route 53 Developer Guide*

Command:

- RegisterInstance (p. 339)

When Route 53 receives a DNS query for the name of an instance, such as `backend.example.com`, it responds with the applicable values based on the settings that you specified when you created the service and when you registered instances. If you specified settings for a health check when you created the service, Route 53 returns values only for healthy instances.

6.   When you're ready to remove the DNS records and healthchecks for an instance, you can deregister your instance. Route 53 automatically deletes the corresponding resources. Specify the `ServiceId` that Route 53 returned in the response to the `CreateService` request, and specify the `InstanceId` for the instance that you want to deregister.

Command:

- DeregisterInstance (p. 314)

7.   If you don't need a service and namespace any longer, you can delete them. Note the following:

- Before you can delete a service, you must deregister all instances that were registered using the service.

- Before you can delete a namespace, you must delete all services that were created using the namespace.

Commands:

- DeleteService (p. 312)
- DeleteNamespace (p. 310)

Using Service Discovery with an Existing Hosted Zone

If you already have a hosted zone for a domain such as example.com, you can continue to use the records in that hosted zone and configure service discovery using the same domain name.

To use service discovery with an existing hosted zone

1. Create a public namespace (accessible on the internet) or a private namespace (accessible only in an Amazon VPC).

    If you create a public namespace, give it the same name as the existing hosted zone. Route 53 creates another hosted zone that has the same name.

    If you create a private namespace, you must give it a different name than the existing hosted zone.

    Command:

    -   CreatePublicDnsNamespace (p. 303)
    -   CreatePrivateDnsNamespace (p. 300)

2. Use the `OperationId` that was returned when you created the namespace to get the namespace ID.

    Command:

    -   GetOperation (p. 323)

3. Create one or more services.

    Command:

    -   CreateService (p. 306)

4. In the existing hosted zone, create one alias record for each service discovery service that you want to route DNS queries to.

    Note the following:

    -   Don't update the configuration for the domain to use different name servers. Continue to use the name servers for the existing hosted zone.
    -   Whenever you add another service to the hosted zone that service discovery created, you must add another alias record to the original hosted zone.

    You can't use the Route 53 console to create an alias record in one hosted zone that refers to a record in another hosted zone, so you must create the alias record programmatically. Here's how you do it using the AWS Command Line Interface (AWS CLI) change-resource-record-sets command. For information about installing and configuring the AWS CLI, see the AWS Command Line Interface User Guide.

    a. Create a text file that contains the definition of the new alias record:

    ```
    {
      "Changes": [
        {
          "Action": "UPSERT",
          "ResourceRecordSet": {
            "Type":"A",
            "Name":"record-name-in-existing-hosted-zone",
            "AliasTarget": {
    ```

```
            "DNSName":"record-name-in-new-hosted-zone",
            "HostedZoneId":"service-discovery-hosted-zone-id",
            "EvaluateTargetHealth":true
         }
      }
    }
  ]
}
```

Specify the following values:

record-name-in-existing-hosted-zone

The name of the record that you want to create in the existing hosted zone

record-name-in-new-hosted-zone

The name of the record that service discovery created in the hosted zone for your namespace, for example, `backend.example.com`

> **Note**
> If you created a public DNS namespace in step 1, the record names will be the same. If you created a private namespace, the record names will be different because the hosted zone names are different.

service-discovery-hosted-zone-id

The ID of the hosted zone that service discovery created when you created a namespace

b. Run the following AWS CLI `change-resource-record-sets` command:

```
aws route53 change-resource-record-sets --hosted-zone-id existing-hosted-zone-id --
change-batch file://path-to-text-file
```

Specify the following values:

existing-hosted-zone-id

The ID of the hosted zone that existed before you created a namespace

path-to-text-file

The path to the text file that you created in step 4a

Making API Requests

Topics

This section describes how to make requests to the two Route 53 APIs:

- A REST API for hosted zones, resource record sets, health checks, and cost allocation tags
- An RPC API for domain registration

For each API, we describe the components of requests and the content of responses. We also describe how to authenticate requests.

Making API Requests for Hosted Zones, Resource Record Sets, Health Checks, and Cost Allocation Tags

Topics

This section describes how to make REST requests to the Amazon Route 53 API for creating and managing your hosted zones, resource record sets, health checks, and cost allocation tags. We'll acquaint you with the components of requests, the content of responses, and how to authenticate requests.

> **Note**
> To register and manage domains, use the Route 53 API for domain registration. For more information, see Making API Requests for Domain Registration (p. 356).

REST Requests

Amazon Route 53 REST requests are HTTPS requests, as defined by RFC 2616 (for more information, go to http://www.ietf.org/rfc/rfc2616.txt). This section describes the structure of an Route 53 REST request.

A typical REST action consists of sending a single HTTPS request to Route 53, and waiting for the response. Like any HTTP request, a REST request to Route 53 contains a request method, a URI, request headers, and sometimes a query string or request body. The response contains an HTTP status code, response headers, and sometimes a response body.

Request URI

The request URI always starts with a forward slash and then the version of the Route 53 API you use (for example, 2013-04-01). The remainder of the URI indicates the particular resource you want to act on. For example, following is the URI you use when creating a new hosted zone. (For more information, see CreateHostedZone (p. 35).)

```
/2013-04-01/hostedzone
```

About the Request Time Stamp

You must provide the time stamp in either the HTTP `Date` header or the AWS `x-amz-date` header (some HTTP client libraries don't let you set the `Date` header). When an `x-amz-date` header is present, the system ignores any `Date` header when authenticating the request.

The time stamp must be within 5 minutes of the AWS system time when the request is received. If it isn't, the request fails with the `RequestExpired` error code. This is to prevent replays of your requests by an adversary.

The date must be specified in ISO 8601 format, for example, `2016-03-03T19:20:25.177Z`. For more information about ISO 8601 format, see the Wikipedia article ISO 8601.

Request Body

Many of the Route 53 API actions require you to include XML in the body of the request. The XML conforms to the Route 53 schema.

Example Example Request

The following example request uses a simple XML statement to create a hosted zone named example.com with the reference identifier, *myUniqueIdentifier*.

The XML elements in your request must appear in the order listed.

```
POST /2013-04-01/hostedzone HTTP/1.1
host:route53.amazonaws.com
x-amz-date:date and time of the request
authorization:AWS4-HMAC-SHA256
           Credential=AKIAIOSFODNN7EXAMPLE/date of the request in yyyymmdd format/us-
east-1/route53domains/aws4_request,
           SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-amz-
target,
           Signature=computed signature
[Other required headers]

<?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 hosted zone.</Comment>
   </HostedZoneConfig>
</CreateHostedZoneRequest>
```

REST Responses

Amazon Route 53 responses are just standard HTTP responses. Some of the Route 53 actions return special information specific to Route 53 in the form of an HTTP header or XML in the body of the response. The specific details are covered in the API reference topic for the particular action.

Each response contains a request ID that you can use if you need to troubleshoot a request with Route 53. The ID is contained in an HTTP header called `x-amz-request-id`. An example of a request ID is `647cd254-e0d1-44a9-af61-1d6d86ea6b77`.

The following example shows a response to a request to create a hosted zone. The `CreatedHostedZoneResponse` element contains information about the hosted zone including an Route 53 identifier, the domain that the hosted zone is associated with, and a reference description and comment. The change request itself is associated with a submittal time, an identifier and a status, shown as `PENDING`. Most importantly, the `CreatedHostedZoneResponse` includes the Route 53 name servers assigned to the hosted zone; this information is contained in the `DelegationSet` element.

Example Example Response

```
HTTP/1.1 201 Created
x-amz-request-id: request_id

<?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>
        </Config>
    </HostedZone>
    <ChangeInfo>
        <Id>/change/C1PA6795UKMFR9</Id>
        <Status>PENDING</Status>
        <SubmittedAt>2010-09-10T01:36:41.958Z</SubmittedAt>
    </ChangeInfo>
    <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>
</CreateHostedZoneResponse>
```

Error Responses

If a REST request results in an error, the HTTP response has:

- An XML error document as the response body
- Content-Type header: text/xml
- An appropriate 3xx, 4xx, or 5xx HTTP status code

Following is an example of the XML error document in a REST error response.

```
<ErrorResponse xmlns="https://route53.amazonaws.com/doc/2013-04-01/">
    <Error>
        <Type>Sender</Type>
        <Code>InvalidInput</Code>
        <Message>The input is not valid.</Message>
    </Error>
    <RequestId>410c2a4b-e435-49c9-8382-3770d80d7d4c</RequestId>
</ErrorResponse>
```

Making API Requests for Domain Registration

Topics

- RPC Requests (p. 357)
- RPC Responses (p. 358)

This section describes how to make RPC requests to the Amazon Route 53 API that you use to register and manage domains. We'll acquaint you with the components of requests, the content of responses, and how to authenticate requests.

> **Note**
> To create and manage hosted zones, resource record sets, health checks, and cost allocation tags, use the applicable Route 53 API. For more information, see Making API Requests for Hosted Zones, Resource Record Sets, Health Checks, and Cost Allocation Tags (p. 352).

RPC Requests

Amazon Route 53 RPC requests are HTTPS requests, as defined by RFC 2616 (for more information, go to http://www.ietf.org/rfc/rfc2616.txt). This section describes the structure of an Route 53 RPC request.

For an RPC action, you send an HTTPS request to Route 53 and wait for the response. An RPC request to Route 53 contains request headers and sometimes a query string or request body. The response contains an HTTP status code, response headers, and sometimes a response body.

About the Request Time Stamp

You must provide the time stamp in either the HTTP `Date` header or the AWS `x-amz-date` header (some HTTP client libraries don't let you set the `Date` header). When an `x-amz-date` header is present, the system ignores any `Date` header when authenticating the request.

The time stamp must be within 5 minutes of the AWS system time when the request is received. If it isn't, the request fails with the `RequestExpired` error code. This is to prevent replays of your requests by an adversary.

The date must be specified in ISO 8601 format, for example, `2016-03-03T19:20:25.177Z`. For more information about ISO 8601 format, see the Wikipedia article ISO 8601.

Request Body

Many of the Route 53 API actions require you to include JSON in the body of the request. The JSON conforms to the Route 53 schema for domain registration.

Example Example Request

The following example request uses a simple JSON statement to determine whether the domain name `example.com` is available.

The JSON elements in your request must appear in the order listed.

```
POST / HTTP/1.1
host:route53domains.us-east-1.amazonaws.com
x-amz-date:date and time of the request
authorization:AWS4-HMAC-SHA256
            Credential=AKIAIOSFODNN7EXAMPLE/date of the request in yyyymmdd format/us-
east-1/route53domains/aws4_request,
            SignedHeaders=content-length;content-type;host;user-agent;x-amz-date;x-amz-
target,
            Signature=computed signature
x-amz-target:Route53Domains_v20140515.CheckDomainAvailability
user-agent:information about the source of the request
content-type:application/x-amz-json- 1.1
content-length:length
connections:Keep-Alive
{
    "DomainName":"example.com"
}
```

RPC Responses

Amazon Route 53 responses are just standard HTTP responses. Some of the Route 53 actions return special information specific to Route 53 in the form of an HTTP header or JSON in the body of the response. The specific details are covered in the API reference topic for the particular action.

Each response contains a request ID that you can use if you need to troubleshoot a request with Route 53. The ID is contained in an HTTP header called `x-amz-request-id`. An example of a request ID is `647cd254-e0d1-44a9-af61-1d6d86ea6b77`.

The following example shows a response to a request to create a hosted zone. The `CreatedHostedZoneResponse` element contains information about the hosted zone including an Route 53 identifier, the domain that the hosted zone is associated with, and a reference description and comment. The change request itself is associated with a submittal time, an identifier and a status, shown as `PENDING`. Most importantly, the `CreatedHostedZoneResponse` includes the Route 53 name servers assigned to the hosted zone; this information is contained in the `DelegationSet` element.

Example Example Response

```
HTTP/1.1 200
Content-Length:number of characters in the JSON string
{
    "OperationId":"308c56712-faa4-40fe-94c8-b423069de3f6"
}
```

Error Responses

If an RPC request results in an error, the HTTP response has:

- An error document in JSON format as the response body
- Content-Type header: text/xml
- An appropriate 3xx, 4xx, or 5xx HTTP status code

Following is an example of the JSON error document in an RPC error response.

```
{
 "__type": "com.amazon.coral.service#UnrecognizedClientException",
 "message": "The security token included in the request is invalid."
}
```

Signing Amazon Route 53 API Requests

Requests must be signed using an access key ID and a secret access key. We strongly recommend that you do not use your AWS account credentials for everyday work with Route 53. You can use the credentials for an IAM user or you can use AWS STS to generate temporary security credentials.

To sign your API requests, we recommend that you use AWS Signature Version 4. For more information, see Signature Version 4 Signing Process in the *Amazon Web Services General Reference*.

In addition, you might also be interested in the following topics:

- AWS Security Credentials – Provides general information about the types of credentials used for accessing AWS.

- IAM Best Practices – Presents a list of suggestions for using IAM service to help secure your AWS resources.
- Temporary Security Credentials – Describes how to create and use temporary security credentials.

Traffic Policy Document Format

When you create a traffic policy programmatically by using the Amazon Route 53 API, one of the AWS SDKs, the AWS CLI, or AWS Tools for Windows PowerShell, you specify the definition of the traffic policy in a `Document` element in JSON format.

For more information about traffic policies, see Using Traffic Flow to Route DNS Traffic in the *Amazon Route 53 Developer Guide*.

Topics

Basic Syntax

Here is the basic syntax for a traffic policy document:

```
{
    "AWSPolicyFormatVersion": "2015-10-01",
    "RecordType": "DNS type for all resource record sets created by this traffic policy",
    "StartEndpoint | StartRule": "ID that you assign to an endpoint or rule",
    "Endpoints": {
        "Endpoint ID that you assign": {
            Endpoint definition
        },
        ...
    },
    "Rules": {
        "Rule ID that you assign": {
            Rule definition
        },
        ...
    }
}
```

The basic syntax for a traffic policy document contains the following objects:

AWSPolicyFormatVersion

The version of the traffic policy format, currently `2015-10-01`.

RecordType

The DNS type of all of the resource record sets that Amazon Route 53 will create based on this traffic policy. If you want to route traffic to the following AWS resources, choose the applicable value:

- **CloudFront distribution** – Choose **A: IP address in IPv4 format**.
- **ELB load balancer** – Choose either **A: IP address in IPv4 format** or **AAAA: IP address in IPv6 format**.
- **Amazon S3 bucket configured as a website endpoint**: Choose **A: IP address in IPv4 format**.

If you want to route traffic to other resources, choose the applicable type for the resource. For example, if you want to route traffic to mail servers, specify `MX`. For the list of DNS types that Route 53 supports, see Supported DNS Resource Record Types in the *Amazon Route 53 Developer Guide*.

StartEndpoint | StartRule

Whether you want the starting point for the traffic policy to be an endpoint or a rule, and the ID that you assigned to the endpoint or rule elsewhere in the traffic policy document.

Endpoints

The definitions of the endpoints that you want to use in this traffic policy. For more information, see Syntax for Endpoint Definitions (p. 361).

Rules

The definitions of the rules that you want to use in this traffic policy. For more information, see Syntax for Rule Definitions (p. 362).

Syntax for Endpoint Definitions

Here is the syntax for the endpoint definitions that you specify in a traffic policy document:

```
{
   "Type": value | cloudfront | elastic-load-balancer | s3-website,
   "Region": "AWS region that you created your Amazon S3 bucket in"
   "Value": "value applicable to the type of endpoint"
}
```

The syntax for an endpoint definition contains the following objects:

Type

Specify the applicable value:

value

To route traffic to a resource other than a CloudFront distribution, an ELB load balancer, or an Amazon S3 bucket that is configured as a website endpoint, specify `value` for `Type`.

cloudfront

To route traffic to a CloudFront distribution, specify `cloudfront` for `Type`.

elastic-load-balancer

To route traffic to an ELB load balancer, specify `elastic-load-balancer` for `Type`.

s3-website

To route traffic to an Amazon S3 bucket that is configured as a website endpoint, specify `s3-website` for `Type`.

Region

To route traffic to an Amazon S3 bucket that is configured as a website endpoint, specify the region in which you created the bucket for `Region`. For any other resource, omit `Region`.

Value

Specify the applicable value:

value

> To route traffic to a resource other than a CloudFront distribution, an ELB load balancer,
> or an Amazon S3 bucket that is configured as a website endpoint, specify the value that
> corresponds with the value that you specified for `RecordType`. For example, if you specified `A`
> for `RecordType`, specify an IP address in IPv4 format for `Value`.

cloudfront

> If you specified `cloudfront` for `Type`, specify the domain name that CloudFront
> assigned to your CloudFront distribution when you created it, for example,
> `d111111abcdef8.cloudfront.net`.

elastic-load-balancer

> If you specified `elastic-load-balancer` for `Type`, specify the DNS name for your load
> balancer. Use the value that begins with `dualstack`, for example, `dualstack.my-load-`
> `balancer-1234567890.us-west-2.elb.amazonaws.com`.

s3-website

> If you specified `s3-website` for `Type`, specify the name of your Amazon S3 bucket, for
> example, `example.com.s3-website-us-east-1.amazonaws.com`.
>
> > **Important**
> > When you create a traffic policy instance based on this traffic policy, the bucket that
> > you specify here must match the domain name (such as www.example.com) that you
> > specify for `Name` in the CreateTrafficPolicyInstance (p. 55) request. If `Value` and `Name`
> > don't match, Amazon S3 won't respond to DNS queries for the domain name.

Syntax for Rule Definitions

There are different syntaxes for the rule definitions that you specify in a traffic policy document,
depending on the type of routing policy that you want to use: failover, geolocation, geoproximity,
latency, multivalue answer, or weighted.

Topics

Failover Rules

For more information, see Configuring DNS Failover in the *Amazon Route 53 Developer Guide*.

```
{
    "RuleType": "failover",
    "Primary": {
        "EndpointReference | RuleReference": "ID that you assigned to the rule or endpoint
 that this rule routes traffic to",
        "EvaluateTargetHealth": "true" | "false",
        "HealthCheck": "optional health check ID"
    },
```

```
    "Secondary": {
        "EndpointReference | RuleReference": "ID that you assigned to the rule or endpoint
 that this rule routes traffic to",
        "EvaluateTargetHealth": "true" | "false",
        "HealthCheck": "optional health check ID"
    }
}
```

When you define a failover rule, you specify the following objects:

RuleType

> Specify `failover`.

Primary | Secondary

> For the `Primary` object, specify settings for the rule or endpoint that you want to route traffic to whenever the corresponding resources are available.
>
> For the `Secondary` object, specify settings for the rule or endpoint that you want to route traffic to whenever the primary resources are not available.

EndpointReference | RuleReference

> Whether you want to route traffic to an endpoint or to another rule, and the ID that you assigned to the endpoint or rule elsewhere in the traffic policy document.

EvaluateTargetHealth

> A Boolean that indicates whether you want Amazon Route 53 to evaluate the health of the endpoint and route traffic only to healthy endpoints. For more information, see EvaluateTargetHealth in the documentation about ChangeResourceRecordSets (p. 15).

HealthCheck

> If you want to associate a health check with the endpoint or rule, specify the ID of the health check. For more information, see HealthCheckId in the documentation about ChangeResourceRecordSets (p. 15).

Geolocation Rules

When you add a geolocation rule, you configure your traffic policy to route your traffic based on the geographic location of your users. For more information, see Geolocation Routing in the *Amazon Route 53 Developer Guide*.

```
{
    "RuleType": "geo",
    "Locations": [
        {
            "EndpointReference | RuleReference": "ID that you assigned to the rule or endpoint
 that this rule routes traffic to",
            "IsDefault": "true" | "false",
            "Continent": "continent name,
            "Country": "country name,
            "Subdivision": "subdivision name,
            "EvaluateTargetHealth": "true" | "false",
            "HealthCheck": "optional health check ID"
        },
        ...
    ]
}
```

When you define a geolocation rule, you specify the following objects:

RuleType

Specify `geo`.

Locations

Specify one set of values (`EndpointReference | RuleReference`, `IsDefault`, `Continent`, `Country`, `Subdivision`, `EvaluateTargetHealth`, and `HealthCheck`) for each of the geographic locations that you want to route traffic to.

EndpointReference | RuleReference

Whether you want to route traffic to an endpoint or to another rule, and the ID that you assigned to the endpoint or rule elsewhere in the traffic policy document.

IsDefault

A Boolean that indicates whether this set of values represents the default location. For more information about `IsDefault`, see the explanation about specifying `*` as the value for the `CountryCode` element when you create or update a resource record set in the description for `GeoLocation`.

Continent, Country, Subdivision

Values that indicate the geographic location of users whose traffic you want to route to a rule or endpoint. For more information, see the following element descriptions in the documentation about ChangeResourceRecordSets (p. 15):

- `GeoLocation`
- `ContinentCode`
- `CountryCode`
- `SubdivisionCode`

EvaluateTargetHealth

A Boolean that indicates whether you want Amazon Route 53 to evaluate the health of the endpoint and route traffic only to healthy endpoints. For more information, see EvaluateTargetHealth in the documentation about ChangeResourceRecordSets (p. 15).

HealthCheck

If you want to associate a health check with the endpoint or rule, specify the ID of the health check. For more information, see HealthCheckId in the documentation about ChangeResourceRecordSets (p. 15).

Geoproximity Rules

When you add a geoproximity rule, you configure Amazon Route 53 to route traffic to your resources based on the geographic location of your resources. You can also optionally choose to route more traffic or less to a given endpoint or rule by specifying a bias. You use a bias to expand or shrink the size of the geographic region from which traffic is routed to an endpoint or rule. For more information, see Geoproximity Routing in the *Amazon Route 53 Developer Guide*.

```
{
    "RuleType": "geoproximity",
    "GeoproximityLocations": [
        {
            "EndpointReference | RuleReference": "ID that you assigned to the endpoint or rule
 that this rule routes traffic to",
```

```
        "Region": "AWS Region",
        "Bias": "optional value to expand or shrink the geographic region for this rule,
 -99 to 99",
        "EvaluateTargetHealth": "true | false",
        "HealthCheck": "optional health check ID"
    },
    {
        "EndpointReference | RuleReference": "ID that you assigned to the endpoint or rule
 that this rule routes traffic to",
        "Latitude": "location south (negative) or north (positive) of the equator, -90 to
 90 degrees",
        "Longitude": "location west (negative) or east (positive) of the prime meridian,
 -180 to 180 degrees",
        "Bias": "optional value to expand or shrink the geographic region for this rule,
 -99 to 99",
        "EvaluateTargetHealth": "true | false",
        "HealthCheck": "optional health check ID"
    }
  ]
}
```

When you define a geoproximity rule, you specify the following objects:

RuleType

Specify `geoproximity`.

GeoproximityLocations

Specify one set of values for each resource that you want to route traffic to. You can specify either an AWS Region or the latitude and longitude of a geographic location.

EndpointReference | RuleReference

Whether you want to route traffic to an endpoint or to another rule, and the ID that you assigned to the endpoint or rule elsewhere in the traffic policy document.

Region

If your endpoint is an AWS resource, specify the AWS Region that you created the resource in. Use the following format:

`aws:route53:`*`region-code`*

For a list of valid region codes, see Region in the documentation about ChangeResourceRecordSets (p. 15).

Latitude and Longitude

If your endpoint is not an AWS resource, enter the latitude and longitude of the location of the resource. Note the following:

- Latitude represents the location south (negative) or north (positive) of the equator. Valid values are -90 degrees to 90 degrees.

- Longitude represents the location west (negative) or east (positive) of the prime meridian. Valid values are -180 degrees to 180 degrees.

- You can get latitude and longitude from some online mapping applications. For example, in Google Maps, the URL for a location specifies the latitude and longitude:

  https://www.google.com/maps/@**47.6086111**,-**122.3409953**,20z

- You can enter up to two decimals of precision, for example, `47.61`. If you specify a value with greater precision, Route 53 returns an error. For latitude and for longitude at the equator, 0.01 degree is approximately 0.69 miles.

Bias

Specify a value for `Bias` if you want to route more traffic to an endpoint from nearby endpoints (positive values) or route less traffic to an endpoint (negative values). The range of valid values is -99 to 99; the default value is 0.

> **Important**
> The value of `Bias` is relative, based on the location of other resources, rather than absolute, based on distance. As a result, the effect of a change is difficult to predict. For example, depending on where your resources are, changing the bias from `10` to `15` can mean the difference between adding or subtracting a significant amount of traffic from the New York City metropolitan area. We recommend that you change the bias in small increments and evaluate the results, and then make additional changes if appropriate.

EvaluateTargetHealth

A Boolean that indicates whether you want Route 53 to evaluate the health of the endpoint and route traffic only to healthy endpoints. For more information, see EvaluateTargetHealth in the documentation about ChangeResourceRecordSets (p. 15).

HealthCheck

If you want to associate a health check with the endpoint or rule, specify the ID of the health check. For more information, see HealthCheckId in the documentation about ChangeResourceRecordSets (p. 15).

Latency Rules

When you add a latency rule, you configure your traffic policy to route your traffic based on the latency (the time delay) between your users and the AWS regions where you've created AWS resources such as ELB load balancers and Amazon S3 buckets. For more information, see Latency Routing in the *Amazon Route 53 Developer Guide*.

```
{
    "RuleType": "latency",
    "Regions": [
        {
            "EndpointReference | RuleReference": "ID that you assigned to the rule or endpoint
 that this rule routes traffic to",
            "Region": "AWS region that you want to route traffic to",
            "EvaluateTargetHealth": "true" | "false",
            "HealthCheck": "optional health check ID"
        },
        ...
    ]
}
```

When you define a latency rule, you specify the following objects:

RuleType

Specify `latency`.

Regions

Specify one set of values (`EndpointReference|RuleReference`, `Region`, `EvaluateTargetHealth`, and `HealthCheck`) for each of the regions that you want to route traffic to.

EndpointReference | RuleReference

Whether you want to route traffic to an endpoint or to another rule, and the ID that you assigned to the endpoint or rule elsewhere in the traffic policy document.

Region

The region code for the AWS Region that you created the resource in. For a list of valid region codes, see Region in the documentation about ChangeResourceRecordSets (p. 15).

EvaluateTargetHealth

A Boolean that indicates whether you want Amazon Route 53 to evaluate the health of the endpoint and route traffic only to healthy endpoints. For more information, see EvaluateTargetHealth in the documentation about ChangeResourceRecordSets (p. 15).

HealthCheck

If you want to associate a health check with the endpoint or rule, specify the ID of the health check. For more information, see HealthCheckId in the documentation about ChangeResourceRecordSets (p. 15).

Multivalue Answer Rules

When you add a multivalue answer rule, you configure your traffic policy to route traffic approximately randomly to your healthy resources. Amazon 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. For more information, see MultiValueAnswer.

```
{
    "RuleType": "multivalue",
    "Items": [
        {
            "EndpointReference": "ID that you assigned to the endpoint that this rule routes
 traffic to",
            "HealthCheck": "optional health check ID"
        },
        ...
    ]
}
```

When you define a multivalue answer rule, you specify the following objects:

RuleType

Specify `multivalue`.

Items

Specify one set of values (`EndpointReference` and `HealthCheck`) for each of the multivalue answer rules or endpoints that you want to route traffic to.

EndpointReference

The ID that you assigned to the endpoint elsewhere in the traffic policy document.

HealthCheck

If you want to associate a health check with the endpoint, specify the ID of the health check. For more information, see HealthCheckId.

Weighted Rules

When you add a weighted rule, you configure your traffic policy to route traffic based on proportions that you specify. For example, you might specify weights of 4, 5, 5, and 6 (sum=20). The result is that

4/20ths of your traffic, on average, is routed to the first endpoint or rule, 5/20ths is routed both to the second and third endpoints or rules, and 6/20ths is routed to the last endpoint or rule. For more information, see Weighted Routing in the *Amazon Route 53 Developer Guide*.

```
{
    "RuleType": "weighted",
    "Items": [
        {
            "EndpointReference | RuleReference": "ID that you assigned to the rule or endpoint
 that this rule routes traffic to",
            "Weight": "value between 0 and 255",
            "EvaluateTargetHealth": "true" | "false",
            "HealthCheck": "optional health check ID"
        },
        ...
    ]
}
```

When you define a weighted rule, you specify the following objects:

RuleType

> Specify `weighted`.

Items

> Specify one set of values (`EndpointReference` | `RuleReference`, `Weight`, `EvaluateTargetHealth`, and `HealthCheck`) for each of the weighted rules or endpoints that you want to route traffic to.

EndpointReference | RuleReference

> Whether you want to route traffic to an endpoint or to another rule, and the ID that you assigned to the endpoint or rule elsewhere in the traffic policy document.

Weight

> A value between 0 and 255 that determines the proportion of traffic that is routed to the corresponding endpoint or rule. For more information, see Weight in the documentation about ChangeResourceRecordSets (p. 15).

EvaluateTargetHealth

> A Boolean that indicates whether you want Amazon Route 53 to evaluate the health of the endpoint and route traffic only to healthy endpoints. For more information, see EvaluateTargetHealth in the documentation about ChangeResourceRecordSets (p. 15).

HealthCheck

> If you want to associate a health check with the endpoint or rule, specify the ID of the health check. For more information, see HealthCheckId in the documentation about ChangeResourceRecordSets (p. 15).

Examples

The following examples show how to use failover, geolocation, geoproximity, latency, and weighted rules, and how to use multiple types of rules in the same traffic policy.

Topics

- Failover Example (p. 369)

Failover Example

```
{
    "AWSPolicyFormatVersion":"2015-10-01",
    "RecordType":"A",
    "StartRule":"site_switch",
    "Endpoints":{
        "my_elb":{
            "Type":"elastic-load-balancer",
            "Value":"elb-111111.us-east-1.elb.amazonaws.com"
        },
        "site_down_banner":{
            "Type":"s3-website",
            "Region":"us-east-1",
            "Value":"www.example.com"
        }
    },
    "Rules":{
        "site_switch":{
            "RuleType":"failover",
            "Primary":{
                "EndpointReference":"my_elb"
            },
            "Secondary":{
                "EndpointReference":"site_down_banner"
            }
        }
    }
}
```

Geolocation Example

```
{
    "AWSPolicyFormatVersion":"2015-10-01",
    "RecordType":"A",
    "StartRule":"geo_dest",
    "Endpoints":{
        "english":{
            "Type":"value",
            "Value":"192.0.2.1"
        },
        "french":{
            "Type":"value",
            "Value":"192.0.2.2"
        },
        "german":{
            "Type":"value",
            "Value":"192.0.2.3"
        }
    },
    "Rules":{
        "geo_dest":{
            "RuleType":"geo",
```

```
      "Locations":[
        {
          "EndpointReference":"english",
          "IsDefault":true,
          "HealthCheck":"11111111-1111-1111-1111-111111111111"
        },
        {
          "EndpointReference":"french",
          "Country":"FR",
          "HealthCheck":"22222222-2222-2222-2222-222222222222"
        },
        {
          "EndpointReference":"french",
          "Country":"BE",
          "HealthCheck":"22222222-2222-2222-2222-222222222222"
        },
        {
          "EndpointReference":"german",
          "Country":"DE",
          "HealthCheck":"33333333-3333-3333-3333-333333333333"
        }
      ]
    }
  }
}
```

Geoproximity Example

```
{
  "AWSPolicyFormatVersion":"2015-10-01",
  "RecordType":"A",
  "StartRule":"geoprox-rule",
  "Endpoints":{
    "aws-us-west-1-region":{
      "Type":"elastic-load-balancer",
      "Value":"elb-123456.us-east-1.elb.amazonaws.com"
    },
    "london-data-center":{
      "Type":"value",
      "Value":"192.0.2.1"
    }
  },
  "Rules":{
    "geoprox-rule":{
      "RuleType": "geoproximity",
      "GeoproximityLocations": [
        {
          "EndpointReference": "aws-us-west-1-region",
          "Region": "us-west-1",
          "Bias": "10",
          "HealthCheck": "11111111-1111-1111-1111-111111111111"
        },
        {
          "EndpointReference": "london-data-center",
          "Latitude": "51.50",
          "Longitude": "-0.16",
          "Bias": "0",
          "HealthCheck": "22222222-2222-2222-2222-222222222222"
        }
      ]
    }
  }
}
```

Latency Example

```
{
  "AWSPolicyFormatVersion":"2015-10-01",
  "RecordType":"A",
  "StartRule":"region_selector",
  "Endpoints":{
    "us_lb":{
      "Type":"elastic-load-balancer",
      "Value":"elb-123456.us-east-1.elb.amazonaws.com"
    },
    "europe_lb":{
      "Type":"elastic-load-balancer",
      "Value":"elb-654321.eu-west-1.elb.amazonaws.com"
    }
  },
  "Rules":{
    "region_selector":{
      "RuleType":"latency",
      "Regions":[
        {
          "Region":"us-east-1",
          "EndpointReference":"us_lb"
        },
        {
          "Region":"eu-west-1",
          "EndpointReference":"europe_lb"
        }
      ]
    }
  }
}
```

Weighted Example

```
{
  "AWSPolicyFormatVersion":"2015-10-01",
  "RecordType":"A",
  "StartRule":"round_robin",
  "Endpoints":{
    "srv1":{
      "Type":"value",
      "Value":"192.0.2.1"
    },
    "srv2":{
      "Type":"value",
      "Value":"192.0.2.2"
    },
    "srv3":{
      "Type":"value",
      "Value":"192.0.2.3"
    }
  },
  "Rules":{
    "round_robin":{
      "RuleType":"weighted",
      "Items":[
        {
          "EndpointReference":"srv1",
          "Weight":"3",
          "HealthCheck":"11111111-1111-1111-1111-111111111111"
        },
```

```
      {
        "EndpointReference":"srv2",
        "Weight":"1",
        "HealthCheck":"22222222-2222-2222-2222-222222222222"
      },
      {
        "EndpointReference":"srv3",
        "Weight":"1",
        "HealthCheck":"33333333-3333-3333-3333-333333333333"
      }
    ]
  }
 }
}
```

Example with Failover, Latency, and Geolocation Rules

```
{
  "AWSPolicyFormatVersion":"2015-10-01",
  "RecordType":"A",
  "StartRule":"geo_restriction",
  "Endpoints":{
    "east_coast_lb1":{
      "Type":"elastic-load-balancer",
      "Value":"elb-111111.us-east-1.elb.amazonaws.com"
    },
    "east_coast_lb2":{
      "Type":"elastic-load-balancer",
      "Value":"elb-222222.us-east-1.elb.amazonaws.com"
    },
    "west_coast_lb1":{
      "Type":"elastic-load-balancer",
      "Value":"elb-111111.us-west-1.elb.amazonaws.com"
    },
    "west_coast_lb2":{
      "Type":"elastic-load-balancer",
      "Value":"elb-222222.us-west-1.elb.amazonaws.com"
    },
    "denied_message":{
      "Type":"s3-website",
      "Region":"us-east-1",
      "Value":"video.example.com"
    }
  },
  "Rules":{
    "geo_restriction":{
      "RuleType":"geo",
      "Locations":[
        {
          "EndpointReference":"denied_message",
          "IsDefault":true
        },
        {
          "RuleReference":"region_selector",
          "Country":"US"
        }
      ]
    },
    "region_selector":{
      "RuleType":"latency",
      "Regions":[
```

```
          {
            "Region":"us-east-1",
            "RuleReference":"east_coast_region"
          },
          {
            "Region":"us-west-1",
            "RuleReference":"west_coast_region"
          }
        ]
      },
      "east_coast_region":{
        "RuleType":"failover",
        "Primary":{
          "EndpointReference":"east_coast_lb1"
        },
        "Secondary":{
          "EndpointReference":"east_coast_lb2"
        }
      },
      "west_coast_region":{
        "RuleType":"failover",
        "Primary":{
          "EndpointReference":"west_coast_lb1"
        },
        "Secondary":{
          "EndpointReference":"west_coast_lb2"
        }
      }
    }
}
```

Data Types

The following data types are supported by Amazon Route 53:

The following data types are supported by Amazon Route 53 Domains:

- Tag (p. 450)

The following data types are supported by Amazon Route 53 Auto Naming:

- DnsConfig (p. 452)
- DnsConfigChange (p. 454)
- DnsProperties (p. 455)
- DnsRecord (p. 456)
- HealthCheckConfig (p. 458)
- HealthCheckCustomConfig (p. 461)
- Instance (p. 463)
- InstanceSummary (p. 466)
- Namespace (p. 467)
- NamespaceFilter (p. 469)
- NamespaceProperties (p. 470)
- NamespaceSummary (p. 471)
- Operation (p. 472)
- OperationFilter (p. 474)
- OperationSummary (p. 476)
- Service (p. 477)
- ServiceChange (p. 479)
- ServiceFilter (p. 481)
- ServiceSummary (p. 482)

Amazon Route 53

The following data types are supported by Amazon Route 53:

- AccountLimit (p. 377)
- AlarmIdentifier (p. 378)
- AliasTarget (p. 379)
- Change (p. 384)
- ChangeBatch (p. 385)
- ChangeInfo (p. 386)
- CloudWatchAlarmConfiguration (p. 388)
- DelegationSet (p. 390)
- Dimension (p. 391)
- GeoLocation (p. 392)
- GeoLocationDetails (p. 393)
- HealthCheck (p. 395)
- HealthCheckConfig (p. 397)
- HealthCheckObservation (p. 404)
- HostedZone (p. 406)
- HostedZoneConfig (p. 408)
- HostedZoneLimit (p. 409)
- LinkedService (p. 410)

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 AccountLimit:Type (p. 377).

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 in the *AWS Regions and Endpoints* chapter of 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-west-1 | eu-west-2 | eu-west-3 | ap-south-1 | ap-southeast-1 | ap-southeast-2 | ap-northeast-1 | ap-northeast-2 | ap-northeast-3 | sa-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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

AliasTarget

Service: Amazon Route 53

Alias resource record sets only: Information about the CloudFront distribution, Elastic Beanstalk environment, ELB load balancer, Amazon S3 bucket, or Amazon Route 53 resource record set that you're redirecting queries to. An Elastic Beanstalk environment must have a regionalized subdomain.

When creating resource record sets for a private hosted zone, note the following:

- Resource record sets can't be created for CloudFront distributions in a private hosted zone.
- Creating geolocation alias resource record sets or latency alias resource record sets in a private hosted zone is unsupported.
- 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:

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*.

> **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 Command Line Interface 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

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 Simple Storage Service (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 healthy.

    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.

S3 buckets

There are no special requirements for setting `EvaluateTargetHealth` to `true` when the alias target is an S3 bucket.

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*.

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:

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 in the "AWS Regions and Endpoints" chapter of 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 table in the "AWS Regions and Endpoints" chapter of 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`.

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 Amazon Simple Storage Service Website Endpoints table in the "AWS Regions and Endpoints" chapter of 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 (p. 77)` . 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 (p. 413) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 (p. 384) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ChangeInfo

Service: Amazon Route 53

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

Contents

Comment

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

This element contains an ID that you use when performing a GetChange (p. 87) action to get detailed information about the change.

Type: String

Length Constraints: Maximum length of 256.

Required: No

Id

The ID of the request.

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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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

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 (p. 391) objects

Array Members: Maximum number of 10 items.

Required: No

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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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

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

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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

GeoLocation

Service: Amazon Route 53

A complex type that contains information about a geographic location.

Contents

ContinentCode

The two-letter code for the continent.

Valid values: `AF` | `AN` | `AS` | `EU` | `OC` | `NA` | `SA`

Constraint: Specifying `ContinentCode` with either `CountryCode` or `SubdivisionCode` returns an `InvalidInput` error.

Type: String

Length Constraints: Fixed length of 2.

Required: No

CountryCode

The two-letter code for the country.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2.

Required: No

SubdivisionCode

The code for the subdivision. Route 53 currently supports only states in the United States.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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. Route 53 currently supports only states in the United States.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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

CloudWatchAlarmConfiguration

A complex type that contains information about the CloudWatch alarm that Amazon Route 53 is monitoring for this health check.

Type: CloudWatchAlarmConfiguration (p. 388) object

Required: No

HealthCheckConfig

A complex type that contains detailed information about one health check.

Type: HealthCheckConfig (p. 397) 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 53assigned 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

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 (p. 410) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

HealthCheckConfig

Service: Amazon Route 53

A complex type that contains information about the health check.

Contents

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 (p. 378) 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 UpdateHealthCheck:Inverted (p. 196).

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*.

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 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 HealthCheckConfig:ChildHealthChecks (p. 397) and HealthCheckConfig:ChildHealthChecks (p. 397) 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`: 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 HealthCheckConfig:FullyQualifiedDomainName (p. 398).

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.

> **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 on which you want Amazon Route 53 to perform health checks. Specify a value for `Port` only when you specify a value for `IPAddress`.

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.

> **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

SearchString

If the value of Type is `HTTP_STR_MATCH` or `HTTP_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

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 or later.

- **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`.

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`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 (p. 423) 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 Go
- AWS SDK for Java

- AWS SDK for Ruby V2

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

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 (p. 408) object

Required: No

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

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 (p. 410) object

Required: No

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 (p. 35).

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ResourceRecordSet

Service: Amazon Route 53

Information about the resource record set to create or delete.

Contents

AliasTarget

Alias resource record sets only: Information about the CloudFront distribution, AWS Elastic Beanstalk environment, ELB load balancer, Amazon S3 bucket, or Amazon Route 53 resource record set to which you're redirecting queries. The AWS Elastic Beanstalk environment must have a regionalized subdomain.

If you're creating resource records sets for a private hosted zone, note the following:

- You can't create alias resource record sets for CloudFront distributions in a private hosted zone.
- Creating geolocation alias resource record sets or latency alias resource record sets in a private hosted zone is unsupported.
- 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 (p. 379) 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`.

> **Note**
> Creating geolocation and geolocation alias resource record sets in private hosted zones is not supported.

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 `*`, which handles both 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 (p. 392)](#) 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

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.

You can use the * wildcard as the leftmost label in a domain name, for example, `*.example.com`. You can't use an * for one of the middle labels, for example, `marketing.*.example.com`. In addition, the * must replace the entire label; for example, you can't specify `prod*.example.com`.

Type: String

Length Constraints: Maximum length of 1024.

Required: Yes

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.

    Note
    Creating latency and latency alias resource record sets in private hosted zones is not supported.

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` | `ap-southeast-1` | `ap-southeast-2` | `ap-northeast-1` | `ap-northeast-2` | `ap-northeast-3` | `sa-east-1` | `cn-north-1` | `cn-northwest-1` | `ap-south-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 (p. 412) 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

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` | `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`. 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`

> **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:

- **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`.
- **AWS Elastic Beanstalk environment that has a regionalized subdomain**: `A`
- **ELB load balancers:** `A` | `AAAA`
- **Amazon S3 buckets:** `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`

Required: Yes

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 (p. 424) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

TrafficPolicy

Service: Amazon Route 53

A complex type that contains settings for a traffic policy.

Contents

Comment

The comment that you specify in the `CreateTrafficPolicy` request, if any.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

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`

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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

VPC

Service: Amazon Route 53

(Private hosted zones only) A complex type that contains information about an Amazon VPC.

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` | `ap-southeast-1` | `ap-southeast-2` | `ap-south-1` | `ap-northeast-1` | `ap-northeast-2` | `ap-northeast-3` | `sa-east-1` | `ca-central-1` | `cn-north-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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Amazon Route 53 Domains

The following data types are supported by Amazon Route 53 Domains:

- Tag (p. 450)

BillingRecord

Service: Amazon Route 53 Domains

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

The ID of the invoice that is associated with the billing record.

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`

Required: No

Price

The price that you were charged for the operation, in US dollars.

Example value: 12.0

Type: Double

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ContactDetail

Service: Amazon Route 53 Domains

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. If you choose an option other than `PERSON`, you must enter an organization name, and you can't enable privacy protection for the contact.

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: `AD | AE | AF | AG | AI | AL | AM | AN | AO | AQ | AR | AS | AT |`
`AU | AW | AZ | BA | BB | BD | BE | BF | BG | BH | BI | BJ | BL | BM | BN |`
`BO | BR | BS | BT | BW | BY | BZ | CA | CC | CD | CF | CG | CH | CI | CK |`
`CL | CM | CN | CO | CR | CU | CV | CX | CY | CZ | DE | DJ | DK | DM | DO |`
`DZ | EC | EE | EG | ER | ES | ET | FI | FJ | FK | FM | FO | FR | GA | GB |`
`GD | GE | GH | GI | GL | GM | GN | GQ | GR | GT | GU | GW | GY | HK | HN |`
`HR | HT | HU | ID | IE | IL | IM | IN | IQ | IR | IS | IT | 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 | MR | MS | MT | MU | MV | MW | MX | MY | MZ | NA |
NC | NE | NG | NI | NL | NO | NP | NR | NU | NZ | OM | PA | PE | PF | PG |
PH | PK | PL | PM | PN | PR | PT | PW | PY | QA | RO | RS | RU | RW | SA |
SB | SC | SD | SE | SG | SH | SI | SK | SL | SM | SN | SO | SR | ST | SV |
SY | SZ | TC | TD | TG | TH | TJ | TK | TL | TM | TN | TO | 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 (p. 443) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

DomainSuggestion

Service: Amazon Route 53 Domains

Information about one suggested domain name.

Contents

Availability

Whether the domain name is available for registering.

> **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. Amazon 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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

DomainSummary

Service: Amazon Route 53 Domains

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: Yes

Expiry

Expiration date of the domain in 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

DomainTransferability

Service: Amazon Route 53 Domains

A complex type that contains information about whether the specified domain can be transferred to Amazon Route 53.

Contents

Transferable

Whether the domain name can be transferred to Amazon Route 53.

> **Note**
> You can transfer only domains that have a value of `TRANSFERABLE` for `Transferable`.

Valid values:

TRANSFERABLE

The domain name can be transferred to Amazon Route 53.

UNTRANSFERRABLE

The domain name can't be transferred to Amazon Route 53.

DONT_KNOW

Reserved for future use.

Type: String

Valid Values: `TRANSFERABLE | UNTRANSFERABLE | DONT_KNOW`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ExtraParam

Service: Amazon Route 53 Domains

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:

.com.au and .net.au

- `AU_ID_NUMBER`
- `AU_ID_TYPE`

  Valid values include the following:
  - `ABN` (Australian business number)
  - `ACN` (Australian company number)
  - `TM` (Trademark number)

.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
- 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

.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

.fr

- BIRTH_CITY

- BIRTH_COUNTRY

- `BIRTH_DATE_IN_YYYY_MM_DD`

- `BIRTH_DEPARTMENT`: Specify the INSEE code that corresponds with the department where the contact was born. If the contact was born somewhere other than France or its overseas departments, specify `99`. For more information, including a list of departments and the corresponding INSEE numbers, see the Wikipedia entry Departments of France.

- `BRAND_NUMBER`

.it

- `BIRTH_COUNTRY`

- `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`

.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` | `ES_IDENTIFICATION` | `ES_IDENTIFICATION_TYPE` | `ES_LEGAL_FORM` | `FI_BUSINESS_NUMBER` | `FI_ID_NUMBER` | `FI_NATIONALITY` | `FI_ORGANIZATION_TYPE` | `IT_PIN` | `IT_REGISTRANT_ENTITY_TYPE` | `RU_PASSPORT_DATA` | `SE_ID_NUMBER` | `SG_ID_NUMBER` | `VAT_NUMBER` | `UK_CONTACT_TYPE` | `UK_COMPANY_NUMBER`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Nameserver

Service: Amazon Route 53 Domains

Nameserver includes the following elements.

Contents

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

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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

OperationSummary

Service: Amazon Route 53 Domains

OperationSummary includes the following elements.

Contents

OperationId

Identifier returned to track the requested action.

Type: String

Length Constraints: Maximum length of 255.

Required: Yes

Status

The current status of the requested operation in the system.

Type: String

Valid Values: `SUBMITTED | IN_PROGRESS | ERROR | SUCCESSFUL | FAILED`

Required: Yes

SubmittedDate

The date when the request was submitted.

Type: Timestamp

Required: Yes

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`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Tag

Service: Amazon Route 53 Domains

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

   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

   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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Amazon Route 53 Auto Naming

The following data types are supported by Amazon Route 53 Auto Naming:

DnsConfig

Service: Amazon Route 53 Auto Naming

A complex type that contains information about the records that you want Amazon Route 53 to create when you register an instance.

Contents

DnsRecords

An array that contains one `DnsRecord` object for each record that you want Route 53 to create when you register an instance.

Type: Array of DnsRecord (p. 456) objects

Required: Yes

NamespaceId

The ID of the namespace to use for DNS configuration.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

RoutingPolicy

The routing policy that you want to apply to all records that Route 53 creates when you register an instance and specify this service.

> **Note**
> If you want to use this service to register instances that create alias records, specify `WEIGHTED` for the routing policy.

You can specify the following values:

MULTIVALUE

If you define a health check for the service and the health check is healthy, Route 53 returns the applicable value for up to eight instances.

For example, suppose the service includes configurations for one A record and a health check, and you use the service to register 10 instances. Route 53 responds to DNS queries with IP addresses for up to eight healthy instances. If fewer than eight instances are healthy, Route 53 responds to every DNS query with the IP addresses for all of the healthy instances.

If you don't define a health check for the service, Route 53 assumes that all instances are healthy and returns the values for up to eight instances.

For more information about the multivalue routing policy, see Multivalue Answer Routing in the *Route 53 Developer Guide*.

WEIGHTED

Route 53 returns the applicable value from one randomly selected instance from among the instances that you registered using the same service. Currently, all records have the same weight, so you can't route more or less traffic to any instances.

For example, suppose the service includes configurations for one A record and a health check, and you use the service to register 10 instances. Route 53 responds to DNS queries with the IP address

for one randomly selected instance from among the healthy instances. If no instances are healthy, Route 53 responds to DNS queries as if all of the instances were healthy.

If you don't define a health check for the service, Route 53 assumes that all instances are healthy and returns the applicable value for one randomly selected instance.

For more information about the weighted routing policy, see Weighted Routing in the *Route 53 Developer Guide*.

Type: String

Valid Values: `MULTIVALUE | WEIGHTED`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

DnsConfigChange

Service: Amazon Route 53 Auto Naming

A complex type that contains information about changes to the records that Route 53 creates when you register an instance.

Contents

DnsRecords

An array that contains one `DnsRecord` object for each record that you want Route 53 to create when you register an instance.

Type: Array of DnsRecord (p. 456) objects

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

DnsProperties

Service: Amazon Route 53 Auto Naming

A complex type that contains the ID for the hosted zone that Route 53 creates when you create a namespace.

Contents

HostedZoneId

The ID for the hosted zone that Route 53 creates when you create a namespace.

Type: String

Length Constraints: 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

DnsRecord

Service: Amazon Route 53 Auto Naming

A complex type that contains information about the records that you want Route 53 to create when you register an instance.

Contents

TTL

The amount of time, in seconds, that you want DNS resolvers to cache the settings for this record.

> **Note**
> Alias records don't include a TTL because Route 53 uses the TTL for the AWS resource that an alias record routes traffic to. If you include the `AWS_ALIAS_DNS_NAME` attribute when you submit a RegisterInstance (p. 339) request, the `TTL` value is ignored. Always specify a TTL for the service; you can use a service to register instances that create either alias or non-alias records.

Type: Long

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

Required: Yes

Type

The type of the resource, which indicates the type of value that Route 53 returns in response to DNS queries.

Note the following:

- **A, AAAA, and SRV records:** You can specify settings for a maximum of one A, one AAAA, and one SRV record. You can specify them in any combination.
- **CNAME records:** If you specify `CNAME` for `Type`, you can't define any other records. This is a limitation of DNS—you can't create a CNAME record and any other type of record that has the same name as a CNAME record.
- **Alias records:** If you want Route 53 to create an alias record when you register an instance, specify `A` or `AAAA` for `Type`.
- **All records:** You specify settings other than `TTL` and `Type` when you register an instance.

The following values are supported:

A

Route 53 returns the IP address of the resource in IPv4 format, such as 192.0.2.44.

AAAA

Route 53 returns the IP address of the resource in IPv6 format, such as 2001:0db8:85a3:0000:0000:abcd:0001:2345.

CNAME

Route 53 returns the domain name of the resource, such as www.example.com. Note the following:

- You specify the domain name that you want to route traffic to when you register an instance. For more information, see RegisterInstance:Attributes (p. 339).
- You must specify `WEIGHTED` for the value of `RoutingPolicy`.

- You can't specify both `CNAME` for `Type` and settings for `HealthCheckConfig`. If you do, the request will fail with an `InvalidInput` error.

SRV

Route 53 returns the value for an SRV record. The value for an SRV record uses the following values:

```
priority weight port service-hostname
```

Note the following about the values:

- The values of `priority` and `weight` are both set to `1` and can't be changed.
- The value of `port` comes from the value that you specify for the `AWS_INSTANCE_PORT` attribute when you submit a RegisterInstance (p. 339) request.
- The value of `service-hostname` is a concatenation of the following values:
  - The value that you specify for `InstanceId` when you register an instance.
  - The name of the service.
  - The name of the namespace.

  For example, if the value of `InstanceId` is `test`, the name of the service is `backend`, and the name of the namespace is `example.com`, the value of `service-hostname` is:

  ```
  test.backend.example.com
  ```

If you specify settings for an SRV record and if you specify values for `AWS_INSTANCE_IPV4`, `AWS_INSTANCE_IPV6`, or both in the `RegisterInstance` request, Route 53 automatically creates `A` and/or `AAAA` records that have the same name as the value of `service-hostname` in the SRV record. You can ignore these records.

Type: String

Valid Values: `SRV | A | AAAA | CNAME`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

HealthCheckConfig

Service: Amazon Route 53 Auto Naming

Public DNS namespaces only. A complex type that contains settings for an optional health check. If you specify settings for a health check, Amazon Route 53 associates the health check with all the records that you specify in `DnsConfig`.

> **Important**
> If you specify a health check configuration, you can specify either `HealthCheckCustomConfig` or `HealthCheckConfig` but not both.

Custom health checks are basic Route 53 health checks that monitor an AWS endpoint. For information about pricing for health checks, see Amazon Route 53 Pricing.

Note the following about configuring health checks.

A and AAAA records

If `DnsConfig` includes configurations for both A and AAAA records, Route 53 creates a health check that uses the IPv4 address to check the health of the resource. If the endpoint that is specified by the IPv4 address is unhealthy, Route 53 considers both the A and AAAA records to be unhealthy.

CNAME records

You can't specify settings for `HealthCheckConfig` when the `DNSConfig` includes `CNAME` for the value of `Type`. If you do, the `CreateService` request will fail with an `InvalidInput` error.

Request interval

A Route 53 health checker in each health-checking region sends a health check request to an endpoint every 30 seconds. On average, your endpoint receives a health check request about every two seconds. However, health checkers don't coordinate with one another, so you'll sometimes see several requests per second followed by a few seconds with no health checks at all.

Health checking regions

Health checkers perform checks from all Route 53 health-checking regions. For a list of the current regions, see Regions.

Alias records

When you register an instance, if you include the `AWS_ALIAS_DNS_NAME` attribute, Route 53 creates an alias record. Note the following:

- Route 53 automatically sets `EvaluateTargetHealth` to true for alias records. When `EvaluateTargetHealth` is true, the alias record inherits the health of the referenced AWS resource. such as an ELB load balancer. For more information, see EvaluateTargetHealth.

- If you include `HealthCheckConfig` and then use the service to register an instance that creates an alias record, Route 53 doesn't create the health check.

Charges for health checks

Health checks are basic Route 53 health checks that monitor an AWS endpoint. For information about pricing for health checks, see Amazon Route 53 Pricing.

Contents

FailureThreshold

The number of consecutive health checks that an endpoint must pass or fail for Route 53 to change the current status of the endpoint from unhealthy to healthy or vice versa. For more information, see How Route 53 Determines Whether an Endpoint Is Healthy in the *Route 53 Developer Guide*.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

ResourcePath

The path that you want 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, such as the file `/docs/route53-health-check.html`. Route 53 automatically adds the DNS name for the service. If you don't specify a value for `ResourcePath`, the default value is `/`.

If you specify `TCP` for `Type`, you must *not* specify a value for `ResourcePath`.

Type: String

Length Constraints: Maximum length of 255.

Required: No

Type

The type of health check that you want to create, which indicates how 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 or later.

- **TCP**: Route 53 tries to establish a TCP connection.

  If you specify `TCP` for `Type`, don't specify a value for `ResourcePath`.

For more information, see How Route 53 Determines Whether an Endpoint Is Healthy in the *Route 53 Developer Guide*.

Type: String

Valid Values: `HTTP | HTTPS | TCP`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

HealthCheckCustomConfig

Service: Amazon Route 53 Auto Naming

A complex type that contains information about an optional custom health check. A custom health check, which requires that you use a third-party health checker to evaluate the health of your resources, is useful in the following circumstances:

- You can't use a health check that is defined by `HealthCheckConfig` because the resource isn't available over the internet. For example, you can use a custom health check when the instance is in an Amazon VPC. (To check the health of resources in a VPC, the health checker must also be in the VPC.)
- You want to use a third-party health checker regardless of where your resources are.

> **Important**
> If you specify a health check configuration, you can specify either `HealthCheckCustomConfig` or `HealthCheckConfig` but not both.

To change the status of a custom health check, submit an `UpdateInstanceCustomHealthStatus` request. Service discovery doesn't monitor the status of the resource, it just keeps a record of the status specified in the most recent `UpdateInstanceCustomHealthStatus` request.

Here's how custom health checks work:

1. You create a service and specify a value for `FailureThreshold`.

   The failure threshold indicates the number of 30-second intervals you want Route 53 to wait between the time that your application sends an UpdateInstanceCustomHealthStatus (p. 343) request and the time that Route 53 stops routing internet traffic to the corresponding resource.
2. You register an instance.
3. You configure a third-party health checker to monitor the resource that is associated with the new instance.

   > **Note**
   > Route 53 doesn't check the health of the resource directly.
4. The third-party health-checker determines that the resource is unhealthy and notifies your application.
5. Your application submits an `UpdateInstanceCustomHealthStatus` request.
6. Route 53 waits for (`FailureThreshold` x 30) seconds.
7. If another `UpdateInstanceCustomHealthStatus` request doesn't arrive during that time to change the status back to healthy, Route 53 stops routing traffic to the resource.

Note the following about configuring custom health checks.

Request interval

A Route 53 health checker in each health-checking region sends a request every 30 seconds to see whether the custom health check has exceeded the failure threshold. Route 53 aggregates the results to determine whether the health check is healthy.

Health-checking regions

Health checkers perform checks from all Route 53 health-checking regions. For a list of the current regions, see Regions.

Alias records

When you register an instance, if you include the `AWS_ALIAS_DNS_NAME` attribute, Route 53 creates an alias record. Note the following:

- Route 53 automatically sets `EvaluateTargetHealth` to true for alias records. When `EvaluateTargetHealth` is true, the alias record inherits the health of the referenced AWS resource. such as an ELB load balancer. For more information, see EvaluateTargetHealth.
- If you include `HealthCheckCustomConfig` and then use the service to register an instance that creates an alias record, Route 53 doesn't create the health check.

Charges for custom health checks

Custom health checks are basic Route 53 health checks that monitor an AWS endpoint. For information about pricing for health checks, see Amazon Route 53 Pricing.

Contents

FailureThreshold

The number of 30-second intervals that you want service discovery to wait after receiving an `UpdateInstanceCustomHealthStatus` request before it changes the health status of a service instance. For example, suppose you specify a value of `2` for `FailureTheshold`, and then your application sends an `UpdateInstanceCustomHealthStatus` request. Service discovery waits for approximately 60 seconds (2 x 30) before changing the status of the service instance based on that request.

Sending a second or subsequent `UpdateInstanceCustomHealthStatus` request with the same value before `FailureThreshold x 30` seconds has passed doesn't accelerate the change. Service discovery still waits `FailureThreshold x 30` seconds after the first request to make the change.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Instance

Service: Amazon Route 53 Auto Naming

A complex type that contains information about an instance that Amazon Route 53 creates when you submit a `RegisterInstance` request.

Contents

Attributes

> A string map that contains the following information for the service that you specify in `ServiceId`:
> - The attributes that apply to the records that are defined in the service.
> - For each attribute, the applicable value.
>
> Supported attribute keys include the following:
>
> **AWS_ALIAS_DNS_NAME**
>
> If you want Route 53 to create an alias record that routes traffic to an Elastic Load Balancing load balancer, specify the DNS name that is associated with the load balancer. For information about how to get the DNS name, see "DNSName" in the topic AliasTarget.
>
> Note the following:
> - The configuration for the service that is specified by `ServiceId` must include settings for an A record, an AAAA record, or both.
> - In the service that is specified by `ServiceId`, the value of `RoutingPolicy` must be `WEIGHTED`.
> - If the service that is specified by `ServiceId` includes `HealthCheckConfig` settings, Route 53 will create the health check, but it won't associate the health check with the alias record.
> - Auto naming currently doesn't support creating alias records that route traffic to AWS resources other than ELB load balancers.
> - If you specify a value for `AWS_ALIAS_DNS_NAME`, don't specify values for any of the `AWS_INSTANCE` attributes.
>
> **AWS_INSTANCE_CNAME**
>
> If the service configuration includes a CNAME record, the domain name that you want Route 53 to return in response to DNS queries, for example, `example.com`.
>
> This value is required if the service specified by `ServiceId` includes settings for an CNAME record.
>
> **AWS_INSTANCE_IPV4**
>
> If the service configuration includes an A record, the IPv4 address that you want Route 53 to return in response to DNS queries, for example, `192.0.2.44`.
>
> This value is required if the service specified by `ServiceId` includes settings for an A record. If the service includes settings for an SRV record, you must specify a value for `AWS_INSTANCE_IPV4`, `AWS_INSTANCE_IPV6`, or both.
>
> **AWS_INSTANCE_IPV6**
>
> If the service configuration includes an AAAA record, the IPv6 address that you want Route 53 to return in response to DNS queries, for example, `2001:0db8:85a3:0000:0000:abcd:0001:2345`.
>
> This value is required if the service specified by `ServiceId` includes settings for an AAAA record. If the service includes settings for an SRV record, you must specify a value for `AWS_INSTANCE_IPV4`, `AWS_INSTANCE_IPV6`, or both.

AWS_INSTANCE_PORT

If the service includes an SRV record, the value that you want Route 53 to return for the port.

If the service includes `HealthCheckConfig`, the port on the endpoint that you want Route 53 to send requests to.

This value is required if you specified settings for an SRV record when you created the service.

Type: String to string map

Key Length Constraints: Maximum length of 255.

Value Length Constraints: Maximum length of 255.

Required: No

CreatorRequestId

A unique string that identifies the request and that allows failed `RegisterInstance` requests to be retried without the risk of executing the operation twice. You must use a unique `CreatorRequestId` string every time you submit a `RegisterInstance` request if you're registering additional instances for the same namespace and service. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Id

An identifier that you want to associate with the instance. Note the following:

- If the service that is specified by `ServiceId` includes settings for an SRV record, the value of `InstanceId` is automatically included as part of the value for the SRV record. For more information, see DnsRecord:Type (p. 456).
- You can use this value to update an existing instance.
- To register a new instance, you must specify a value that is unique among instances that you register by using the same service.
- If you specify an existing `InstanceId` and `ServiceId`, Route 53 updates the existing records. If there's also an existing health check, Route 53 deletes the old health check and creates a new one.

  Note
  The health check isn't deleted immediately, so it will still appear for a while if you submit a `ListHealthChecks` request, for example.

Type: String

Length Constraints: Maximum length of 64.

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 Go

- AWS SDK for Java
- AWS SDK for Ruby V2

InstanceSummary

Service: Amazon Route 53 Auto Naming

A complex type that contains information about the instances that you registered by using a specified service.

Contents

Attributes

A string map that contains the following information:

- The attributes that are associate with the instance.
- For each attribute, the applicable value.

Supported attribute keys include the following:

- `AWS_ALIAS_DNS_NAME`: For an alias record that routes traffic to an Elastic Load Balancing load balancer, the DNS name that is associated with the load balancer.
- `AWS_INSTANCE_CNAME`: For a CNAME record, the domain name that Route 53 returns in response to DNS queries, for example, `example.com`.
- `AWS_INSTANCE_IPV4`: For an A record, the IPv4 address that Route 53 returns in response to DNS queries, for example, `192.0.2.44`.
- `AWS_INSTANCE_IPV6`: For an AAAA record, the IPv6 address that Route 53 returns in response to DNS queries, for example, `2001:0db8:85a3:0000:0000:abcd:0001:2345`.
- `AWS_INSTANCE_PORT`: For an SRV record, the value that Route 53 returns for the port. In addition, if the service includes `HealthCheckConfig`, the port on the endpoint that Route 53 sends requests to.

Type: String to string map

Key Length Constraints: Maximum length of 255.

Value Length Constraints: Maximum length of 255.

Required: No

Id

The ID for an instance that you created by using a specified service.

Type: String

Length Constraints: 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Namespace

Service: Amazon Route 53 Auto Naming

A complex type that contains information about a specified namespace.

Contents

Arn

The Amazon Resource Name (ARN) that Route 53 assigns to the namespace when you create it.

Type: String

Length Constraints: Maximum length of 255.

Required: No

CreateDate

The date that the namespace was created, in Unix date/time format and Coordinated Universal Time (UTC). The value of `CreateDate` is accurate to milliseconds. For example, the value `1516925490.087` represents Friday, January 26, 2018 12:11:30.087 AM.

Type: Timestamp

Required: No

CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of executing an operation twice.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Description

The description that you specify for the namespace when you create it.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Id

The ID of a namespace.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Name

The name of the namespace, such as `example.com`.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Properties

A complex type that contains information that's specific to the type of the namespace.

Type: NamespaceProperties (p. 470) object

Required: No

ServiceCount

The number of services that are associated with the namespace.

Type: Integer

Required: No

Type

The type of the namespace. Valid values are `DNS_PUBLIC` and `DNS_PRIVATE`.

Type: String

Valid Values: `DNS_PUBLIC | DNS_PRIVATE`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

NamespaceFilter

Service: Amazon Route 53 Auto Naming

A complex type that identifies the namespaces that you want to list. You can choose to list public or private namespaces.

Contents

Condition

The operator that you want to use to determine whether `ListNamespaces` returns a namespace. Valid values for `condition` include:

- `EQ`: When you specify `EQ` for the condition, you can choose to list only public namespaces or private namespaces, but not both. `EQ` is the default condition and can be omitted.
- `IN`: When you specify `IN` for the condition, you can choose to list public namespaces, private namespaces, or both.
- `BETWEEN`: Not applicable

Type: String

Valid Values: `EQ | IN | BETWEEN`

Required: No

Name

Specify `TYPE`.

Type: String

Valid Values: `TYPE`

Required: Yes

Values

If you specify `EQ` for `Condition`, specify either `DNS_PUBLIC` or `DNS_PRIVATE`.

If you specify `IN` for `Condition`, you can specify `DNS_PUBLIC`, `DNS_PRIVATE`, or both.

Type: Array of strings

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

NamespaceProperties

Service: Amazon Route 53 Auto Naming

A complex type that contains information that is specific to the namespace type.

Contents

DnsProperties

A complex type that contains the ID for the hosted zone that Route 53 creates when you create a namespace.

Type: DnsProperties (p. 455) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

NamespaceSummary

Service: Amazon Route 53 Auto Naming

A complex type that contains information about a namespace.

Contents

Arn

The Amazon Resource Name (ARN) that Route 53 assigns to the namespace when you create it.

Type: String

Length Constraints: Maximum length of 255.

Required: No

Id

The ID of the namespace.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Name

The name of the namespace. When you create a namespace, Route 53 automatically creates a hosted zone that has the same name as the namespace.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Type

The type of the namespace, either public or private.

Type: String

Valid Values: `DNS_PUBLIC | DNS_PRIVATE`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Operation

Service: Amazon Route 53 Auto Naming

A complex type that contains information about a specified operation.

Contents

CreateDate

The date and time that the request was submitted, in Unix date/time format and Coordinated Universal Time (UTC). The value of `CreateDate` is accurate to milliseconds. For example, the value `1516925490.087` represents Friday, January 26, 2018 12:11:30.087 AM.

Type: Timestamp

Required: No

ErrorCode

The code associated with `ErrorMessage`. Values for `ErrorCode` include the following:

- `ACCESS_DENIED`
- `CANNOT_CREATE_HOSTED_ZONE`
- `EXPIRED_TOKEN`
- `HOSTED_ZONE_NOT_FOUND`
- `INTERNAL_FAILURE`
- `INVALID_CHANGE_BATCH`
- `THROTTLED_REQUEST`

Type: String

Required: No

ErrorMessage

If the value of `Status` is `FAIL`, the reason that the operation failed.

Type: String

Required: No

Id

The ID of the operation that you want to get information about.

Type: String

Length Constraints: Maximum length of 255.

Required: No

Status

The status of the operation. Values include the following:

- **SUBMITTED**: This is the initial state immediately after you submit a request.
- **PENDING**: Route 53 is performing the operation.
- **SUCCESS**: The operation succeeded.
- **FAIL**: The operation failed. For the failure reason, see `ErrorMessage`.

Type: String

Valid Values: `SUBMITTED | PENDING | SUCCESS | FAIL`

Required: No

Targets

The name of the target entity that is associated with the operation:

- **NAMESPACE**: The namespace ID is returned in the `ResourceId` property.
- **SERVICE**: The service ID is returned in the `ResourceId` property.
- **INSTANCE**: The instance ID is returned in the `ResourceId` property.

Type: String to string map

Valid Keys: `NAMESPACE | SERVICE | INSTANCE`

Value Length Constraints: Maximum length of 64.

Required: No

Type

The name of the operation that is associated with the specified ID.

Type: String

Valid Values: `CREATE_NAMESPACE | DELETE_NAMESPACE | UPDATE_SERVICE | REGISTER_INSTANCE | DEREGISTER_INSTANCE`

Required: No

UpdateDate

The date and time that the value of `Status` changed to the current value, in Unix date/time format and Coordinated Universal Time (UTC). The value of `UpdateDate` is accurate to milliseconds. For example, the value `1516925490.087` represents Friday, January 26, 2018 12:11:30.087 AM.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

OperationFilter

Service: Amazon Route 53 Auto Naming

A complex type that lets you select the operations that you want to list.

Contents

Condition

The operator that you want to use to determine whether an operation matches the specified value. Valid values for condition include:

- `EQ`: When you specify `EQ` for the condition, you can specify only one value. `EQ` is supported for `NAMESPACE_ID`, `SERVICE_ID`, `STATUS`, and `TYPE`. `EQ` is the default condition and can be omitted.
- `IN`: When you specify `IN` for the condition, you can specify a list of one or more values. `IN` is supported for `STATUS` and `TYPE`. An operation must match one of the specified values to be returned in the response.
- `BETWEEN`: Specify a start date and an end date in Unix date/time format and Coordinated Universal Time (UTC). The start date must be the first value. `BETWEEN` is supported for `UPDATE_DATE`.

Type: String

Valid Values: `EQ | IN | BETWEEN`

Required: No

Name

Specify the operations that you want to get:

- **NAMESPACE_ID**: Gets operations related to specified namespaces.
- **SERVICE_ID**: Gets operations related to specified services.
- **STATUS**: Gets operations based on the status of the operations: `SUBMITTED`, `PENDING`, `SUCCEED`, or `FAIL`.
- **TYPE**: Gets specified types of operation.
- **UPDATE_DATE**: Gets operations that changed status during a specified date/time range.

Type: String

Valid Values: `NAMESPACE_ID | SERVICE_ID | STATUS | TYPE | UPDATE_DATE`

Required: Yes

Values

Specify values that are applicable to the value that you specify for `Name`:

- **NAMESPACE_ID**: Specify one namespace ID.
- **SERVICE_ID**: Specify one service ID.
- **STATUS**: Specify one or more statuses: `SUBMITTED`, `PENDING`, `SUCCEED`, or `FAIL`.
- **TYPE**: Specify one or more of the following types: `CREATE_NAMESPACE`, `DELETE_NAMESPACE`, `UPDATE_SERVICE`, `REGISTER_INSTANCE`, or `DEREGISTER_INSTANCE`.
- **UPDATE_DATE**: Specify a start date and an end date in Unix date/time format and Coordinated Universal Time (UTC). The start date must be the first value.

Type: Array of strings

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

OperationSummary

Service: Amazon Route 53 Auto Naming

A complex type that contains information about an operation that matches the criteria that you specified in a ListOperations (p. 333) request.

Contents

Id

The ID for an operation.

Type: String

Length Constraints: Maximum length of 255.

Required: No

Status

The status of the operation. Values include the following:
- **SUBMITTED**: This is the initial state immediately after you submit a request.
- **PENDING**: Route 53 is performing the operation.
- **SUCCESS**: The operation succeeded.
- **FAIL**: The operation failed. For the failure reason, see `ErrorMessage`.

Type: String

Valid Values: `SUBMITTED | PENDING | SUCCESS | FAIL`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Service

Service: Amazon Route 53 Auto Naming

A complex type that contains information about the specified service.

Contents

Arn

The Amazon Resource Name (ARN) that Route 53 assigns to the service when you create it.

Type: String

Length Constraints: Maximum length of 255.

Required: No

CreateDate

The date and time that the service was created, in Unix format and Coordinated Universal Time (UTC). The value of `CreateDate` is accurate to milliseconds. For example, the value `1516925490.087` represents Friday, January 26, 2018 12:11:30.087 AM.

Type: Timestamp

Required: No

CreatorRequestId

A unique string that identifies the request and that allows failed requests to be retried without the risk of executing the operation twice. `CreatorRequestId` can be any unique string, for example, a date/time stamp.

Type: String

Length Constraints: Maximum length of 64.

Required: No

Description

The description of the service.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

DnsConfig

A complex type that contains information about the records that you want Route 53 to create when you register an instance.

Type: DnsConfig (p. 452) object

Required: No

HealthCheckConfig

Public DNS namespaces only. A complex type that contains settings for an optional health check. If you specify settings for a health check, Route 53 associates the health check with all the records that you specify in `DnsConfig`.

For information about the charges for health checks, see Amazon Route 53 Pricing.

Type: HealthCheckConfig (p. 458) object

Required: No

HealthCheckCustomConfig

A complex type that contains information about an optional custom health check.

> **Important**
> If you specify a health check configuration, you can specify either
> `HealthCheckCustomConfig` or `HealthCheckConfig` but not both.

Type: HealthCheckCustomConfig (p. 461) object

Required: No

Id

The ID that Route 53 assigned to the service when you created it.

Type: String

Length Constraints: Maximum length of 64.

Required: No

InstanceCount

The number of instances that are currently associated with the service. Instances that were previously associated with the service but that have been deleted are not included in the count.

Type: Integer

Required: No

Name

The name of the service.

Type: String

Pattern: `((?=^.{1,127}$)^([a-zA-Z0-9_][a-zA-Z0-9-_]{0,61}[a-zA-Z0-9_]|[a-zA-Z0-9])(\.([a-zA-Z0-9_][a-zA-Z0-9-_]{0,61}[a-zA-Z0-9_]|[a-zA-Z0-9]))*$)|(^\.$)`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ServiceChange

Service: Amazon Route 53 Auto Naming

A complex type that contains changes to an existing service.

Contents

Description

A description for the service.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

DnsConfig

A complex type that contains information about the records that you want Route 53 to create when you register an instance.

Type: DnsConfigChange (p. 454) object

Required: Yes

HealthCheckConfig

Public DNS namespaces only. A complex type that contains settings for an optional health check. If you specify settings for a health check, Amazon Route 53 associates the health check with all the records that you specify in `DnsConfig`.

> **Important**
> If you specify a health check configuration, you can specify either `HealthCheckCustomConfig` or `HealthCheckConfig` but not both.

Custom health checks are basic Route 53 health checks that monitor an AWS endpoint. For information about pricing for health checks, see Amazon Route 53 Pricing.

Note the following about configuring health checks.

A and AAAA records

If `DnsConfig` includes configurations for both A and AAAA records, Route 53 creates a health check that uses the IPv4 address to check the health of the resource. If the endpoint that is specified by the IPv4 address is unhealthy, Route 53 considers both the A and AAAA records to be unhealthy.

CNAME records

You can't specify settings for `HealthCheckConfig` when the `DNSConfig` includes `CNAME` for the value of `Type`. If you do, the `CreateService` request will fail with an `InvalidInput` error.

Request interval

A Route 53 health checker in each health-checking region sends a health check request to an endpoint every 30 seconds. On average, your endpoint receives a health check request about every two seconds. However, health checkers don't coordinate with one another, so you'll sometimes see several requests per second followed by a few seconds with no health checks at all.

Health checking regions

Health checkers perform checks from all Route 53 health-checking regions. For a list of the current regions, see Regions.

Alias records

When you register an instance, if you include the `AWS_ALIAS_DNS_NAME` attribute, Route 53 creates an alias record. Note the following:

- Route 53 automatically sets `EvaluateTargetHealth` to true for alias records. When `EvaluateTargetHealth` is true, the alias record inherits the health of the referenced AWS resource. such as an ELB load balancer. For more information, see EvaluateTargetHealth.
- If you include `HealthCheckConfig` and then use the service to register an instance that creates an alias record, Route 53 doesn't create the health check.

Charges for health checks

Health checks are basic Route 53 health checks that monitor an AWS endpoint. For information about pricing for health checks, see Amazon Route 53 Pricing.

Type: HealthCheckConfig (p. 458) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ServiceFilter

Service: Amazon Route 53 Auto Naming

A complex type that lets you specify the namespaces that you want to list services for.

Contents

Condition

The operator that you want to use to determine whether a service is returned by `ListServices`. Valid values for `Condition` include the following:

- `EQ`: When you specify `EQ`, specify one namespace ID for `Values`. `EQ` is the default condition and can be omitted.
- `IN`: When you specify `IN`, specify a list of the IDs for the namespaces that you want `ListServices` to return a list of services for.
- `BETWEEN`: Not applicable.

Type: String

Valid Values: `EQ | IN | BETWEEN`

Required: No

Name

Specify `NAMESPACE_ID`.

Type: String

Valid Values: `NAMESPACE_ID`

Required: Yes

Values

The values that are applicable to the value that you specify for `Condition` to filter the list of services.

Type: Array of strings

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

ServiceSummary

Service: Amazon Route 53 Auto Naming

A complex type that contains information about a specified service.

Contents

Arn

The Amazon Resource Name (ARN) that Route 53 assigns to the service when you create it.

Type: String

Length Constraints: Maximum length of 255.

Required: No

Description

The description that you specify when you create the service.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Id

The ID that Route 53 assigned to the service when you created it.

Type: String

Length Constraints: Maximum length of 64.

Required: No

InstanceCount

The number of instances that are currently associated with the service. Instances that were previously associated with the service but that have been deleted are not included in the count.

Type: Integer

Required: No

Name

The name of the service.

Type: String

Pattern: `((?=^.{1,127}$)^([a-zA-Z0-9_][a-zA-Z0-9-_]{0,61}[a-zA-Z0-9_]|[a-zA-Z0-9])(\.([a-zA-Z0-9_][a-zA-Z0-9-_]{0,61}[a-zA-Z0-9_]|[a-zA-Z0-9]))*$)|(^\.$)`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

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 Signature Version 4 Signing Process in the *Amazon Web Services General Reference*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

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 Task 2: Create a String to Sign for Signature Version 4 in the *Amazon Web Services General Reference*.

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 Handling Dates in Signature Version 4 in the *Amazon Web Services General Reference*.

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 Security Token Service, go to AWS Services That Work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from the AWS Security Token Service, 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 Task 1: Create a Canonical Request For Signature Version 4 in the *Amazon Web Services General Reference*.

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 Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

InvalidAction

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

InvalidClientTokenId

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

InvalidQueryParameter

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400