Amazon Route 53

API Reference

API Version 2012-02-29

Amazon Route 53: API Reference

Welcome

This is the *Amazon Route 53 API Reference*. Route 53 is a web service that enables you to manage your DNS records.

The *Amazon Route 53 API Reference* contains descriptions of the following actions and elements.

For a guide to using Route 53, see the *Amazon Route 53 Developer Guide*.

Actions on Hosted Zones

Topics

This section describes actions you can perform on hosted zones.

For more information, see Hosted Zones in the *Amazon Route 53 Developer Guide*.

POST CreateHostedZone

Topics

Description

This action creates a new hosted zone.

To create a new hosted zone, send a `POST` request to the `2012-02-29/hostedzone` resource. The request body must include an XML document with a `CreateHostedZoneRequest` element. The response returns the `CreateHostedZoneResponse` element that contains metadata about the hosted zone.

> **Important**
> You cannot create a hosted zone for a top-level domain (TLD).

Amazon Route 53 automatically creates a default SOA record and four NS records for the zone. The NS records in the hosted zone are the name servers you give your registrar to delegate your domain to. 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*.

When you create a zone, its initial status is `PENDING`. This means that it is not yet available on all DNS servers. The status of the zone changes to `INSYNC` when the NS and SOA records are available on all Amazon Route 53 DNS servers. For more information on creating hosted zones, see Creating a Hosted Zone in the *Amazon Route 53 Developer Guide*.

Requests

Syntax

```
POST /2012-02-29/hostedzone HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneRequest xmlns="https://route53.amazonaws.com/doc/2012-02-29/">

   <Name>DNS domain name</Name>
   <CallerReference>unique description</CallerReference>
   <HostedZoneConfig>
      <Comment>optional comment</Comment>
   </HostedZoneConfig>
</CreateHostedZoneRequest>
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Elements

Name	Description	Required
`CreateHostedZoneRequest`	A complex type containing the hosted zone request information. Type: Complex Default: None Children: `Name`, `CallerReference`, `HostedZoneConfig`	Yes
`Name`	The name of the domain. For resource record types that include a domain name, specify a fully qualified domain name, for example, *www.example.com*. The trailing dot is optional; 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. This is the name you have registered with your DNS registrar. You should ask your registrar to change the authoritative name servers for your domain to the set of `NameServers` returned in `DelegationSet`. Type: String Default: None	Yes
`CallerReference`	A unique string that identifies the request and that allows failed `CreateHostedZone` requests to be retried without the risk of executing the operation twice. You must use a unique `CallerReference` string every time you create a hosted zone. CallerReference can be any unique string; you might choose to use a string that identifies your project, such as `MyDNSMigration_01`. Type: String Default: None Constraints: Allowable characters are any Unicode code points that are legal in an XML 1.0 document. The UTF-8 encoding of the value must be less than 128 bytes.	Yes
`HostedZoneConfig`	A complex type that contains configuration information for your hosted zone. Type: Complex Default: None Children: `Comment`	No
`Comment`	Any comments you want to include about the hosted zone. Type: String Default: None Constraints: Maximum 256 characters Parent: `HostedZoneConfig`	No

Responses

Syntax

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/
2012-02-29/">
   <HostedZone>
      <Id>/hostedzone/Route 53 hosted zone ID</Id>
      <Name>DNS domain name</Name>
      <CallerReference>unique description</CallerReference>
      <Config>
         <Comment>optional comment</Comment>
      </Config>
      <ResourceRecordSetCount>number of resource record sets
         in the hosted zone</ResourceRecordSetCount>
   </HostedZone>
   <ChangeInfo>
      <Id>/change/unique identifier for the
       change batch request</Id>
      <Status>PENDING | INSYNC</Status>
      <SubmittedAt>date and time in Coordinated Universal Time
         format</SubmittedAt>
   </ChangeInfo>
   <DelegationSet>
      <NameServers>
         <NameServer>DNS name for Route 53 name server</NameServer>
         <NameServer>DNS name for Route 53 name server</NameServer>
         <NameServer>DNS name for Route 53 name server</NameServer>
         <NameServer>DNS name for Route 53 name server</NameServer>
      </NameServers>
   </DelegationSet>
</CreateHostedZoneResponse>
```

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Elements

Name	Description
`CreateHostedZoneResponse`	A complex type containing the response information for the hosted zone. Type: Complex Children: `HostedZone`, `ChangeInfo`, `DelegationSet`
`HostedZone`	A complex type containing the specific identifying information about the hosted zone. Type: Complex Children: `Id`, `Name`, `CallerReference`, `Config`

Name	Description
`Id`	The ID of the hosted zone. Type: String Parent: `HostedZone`
`Name`	The name of the domain. For resource record types that include a domain name, specify a fully qualified domain name, for example, *www.example.com*. The trailing dot is optional; 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. This is the name you have registered with your DNS registrar. It is also the name you delegate from your registrar to the Route 53 delegation servers returned in response to this request. Type: String Parent: `HostedZone`
`CallerReference`	A unique string that identifies the request to create the hosted zone. Type: String Parent: `HostedZone`
`Config`	A complex type that includes the `Comment` element. Type: Complex Parent: `HostedZone` Children: `Comment`
`Comment`	The comment included in the `CreateHostedZoneRequest` element. Type: String Constraints: Maximum 256 characters Parent: `Config`
`ResourceRecordSetCount`	The number of resource record sets in the hosted zone. Type: Unsigned long integer Parent: `HostedZone`
`ChangeInfo`	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` action to get detailed information about the change. Type: Complex Children: `Id`, `Status`, `SubmittedAt`
`Id`	The ID of the request. Use this ID to track when the change has completed across all Route 53 DNS servers. Type: String Parent: `ChangeInfo`

Name	Description
`Status`	The current state of the request. `PENDING` indicates that this request has not yet been applied to all Route 53 DNS servers. Type: String Valid Values: `PENDING` | `INSYNC` Parent: `ChangeInfo`
`SubmittedAt`	The date and time the change was submitted, in the format `YYYY-MM-DDThh:mm:ssZ`, as specified in the ISO 8601 standard (for example, 2012-03-19T19:37:58Z). The `Z` after the time indicates that the time is listed in Coordinated Universal Time (UTC), which is synonymous with Greenwich Mean Time in this context. Type: Timestamp Parent: `ChangeInfo`
`DelegationSet`	A complex type that describes name server information. Type: Complex Children: `NameServers`
`NameServers`	A complex type that identifies the authoritative name servers for the hosted zone. You ask your registrar to add an NS record to your domain for each NameServer assigned to your hosted zone. Type: Complex Parent: `DelegationSet` Children: `NameServer`
`NameServer`	Identifies a name server that is authoritative for your domain. Type: String Parent: `NameServers`

Note
In the context of `CreateHostedZone`, the `ChangeInfo` element indicates the creation of the SOA records and records for the `NameServer` names.

Errors

The following table lists the errors returned for this action.

Name	Description
`DelegationSetNotAvailable`	Amazon Route 53 allows some duplication, but Amazon Route 53 has a maximum threshold of duplicated domains. This error is generated when you reach that threshold. In this case, the error indicates that too many hosted zones with the given domain name exist. If you want to create a hosted zone and Amazon Route 53 generates this error, contact Customer Support.
`InvalidDomainName`	The specified domain name is not valid.
`HostedZoneAlreadyExists`	The hosted zone you are attempting to create already exists. Amazon Route 53 returns this error when a hosted zone has already been created with the supplied CallerReference.

Name	Description
TooManyHostedZones	This hosted zone cannot be created. The hosted zone limit has been exceeded. To request a limit increase, contact Customer Support.
InvalidInput	The input is not valid.

Examples

Example Request

```
POST /2012-02-29/hostedzone HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneRequest xmlns="https://route53.amazonaws.com/
doc/2012-02-29/">
   <Name>example.com</Name>
   <CallerReference>myUniqueIdentifier</CallerReference>
   <HostedZoneConfig>
      <Comment>This is my first hosted zone.</Comment>
   </HostedZoneConfig>
</CreateHostedZoneRequest>
```

Example Response

```
HTTP/1.1 201 Created
<?xml version="1.0" encoding="UTF-8"?>
<CreateHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/
2012-02-29/">
   <HostedZone>
      <Id>/hostedzone/Z1PA6795UKMFR9</Id>
      <Name>example.com.</Name>
      <CallerReference>myUniqueIdentifier</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
      </Config>
      <ResourceRecordSetCount>2</ResourceRecordSetCount>
   </HostedZone>
   <ChangeInfo>
      <Id>/change/C1PA6795UKMFR9</Id>
      <Status>PENDING</Status>
      <SubmittedAt>2012-03-15T01:36:41.958Z</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>
```

GET GetHostedZone

Topics

Description

To retrieve information about a hosted zone, send a GET request to the `2012-02-29/hostedzone/`*`Route 53 hosted zone ID`* resource.

For more information about using this action to get name server information, see Getting the Name Servers for a Hosted Zone in the *Amazon Route 53 Developer Guide*.

Requests

Syntax

```
GET /2012-02-29/hostedzone/Route 53 hosted zone ID
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Parameters

The request must contain the hosted zone ID. Route 53 returns the hosted zone ID in the `HostedZone` element as part of the `CreateHostedZoneResponse` or `ListHostedZonesResponse`. For more information, see POST CreateHostedZone (p. 3) or GET ListHostedZones (p. 16).

Responses

Syntax

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <HostedZone>
      <Id>/hostedzone/Route 53 hosted zone ID</Id>
      <Name>DNS domain name</Name>
      <CallerReference>unique identifier that you specified
         when you created the hosted zone</CallerReference>
      <Config>
         <Comment>comment that you specified when you
            created the hosted zone</Comment>
```

```
      </Config>
      <ResourceRecordSetCount>number of resource record sets
         in the hosted zone</ResourceRecordSetCount>
   </HostedZone>
   <DelegationSet>
      <NameServers>
         <NameServer>DNS name for Route 53 name server</NameServer>
         <NameServer>DNS name for Route 53 name server</NameServer>
         <NameServer>DNS name for Route 53 name server</NameServer>
         <NameServer>DNS name for Route 53 name server</NameServer>
      </NameServers>
   </DelegationSet>
</GetHostedZoneResponse>
```

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Elements

Name	Description
`GetHostedZoneResponse`	A complex type containing information about a hosted zone. Type: Complex Children: `HostedZone`, `DelegationSet`
`HostedZone`	A complex type containing the specific identifying information about the hosted zone. Type: Complex Children: `Id`, `Name`, `CallerReference`, `Config`
`Id`	The ID of the hosted zone. Type: String Parent: `HostedZone`
`Name`	The name of the domain. For resource record types that include a domain name, specify a fully qualified domain name, for example, *www.example.com*. The trailing dot is optional; 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. This is the name you have registered with your DNS registrar. It is also the name you delegate from your registrar to the Route 53 delegation servers returned in response to this request. Type: String Parent: `HostedZone`
`CallerReference`	A unique string that identifies the request to create the hosted zone. Type: String Parent: `HostedZone`

Name	Description
`Config`	A complex type that includes the `Comment` element. Type: Complex Parent: `HostedZone` Children: `Comment`
`Comment`	The comment included in the `CreateHostedZoneRequest` element. Type: String Constraints: Maximum 256 characters Parent: `Config`
`ResourceRecordSetCount`	The number of resource record sets in the hosted zone. Type: Unsigned long integer Parent: `HostedZone`
`DelegationSet`	A complex type that describes name server information. Type: Complex Children: `NameServers`
`NameServers`	A complex type that identifies the authoritative name servers for the hosted zone. You ask your registrar to add an NS record to your domain for each NameServer assigned to your hosted zone. Type: Complex Parent: `DelegationSet` Children: `NameServer`
`NameServer`	Identifies a name server that is authoritative for your domain. Type: String Parent: `NameServers`

Errors

This action returns the following error.

Name	Description
`InvalidInput`	The input is not valid.
`NoSuchHostedZone`	A hosted zone with the specified hosted zone ID does not exist.

Examples

Example Request

The following shows a GET request for information about a hosted zone with an ID of Z1PA6795UKMFR9.

```
GET /2012-02-29/hostedzone/Z1PA6795UKMFR9
```

Example Response

The following shows the response to the GET request.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <HostedZone>
      <Id>/hostedzone/Z1PA6795UKMFR9</Id>
      <Name>example.com.</Name>
      <CallerReference>myUniqueIdentifier</CallerReference>
      <Config>
         <Comment>This is my first hosted zone.</Comment>
      </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>
```

DELETE DeleteHostedZone

Topics

Description

This action deletes a hosted zone. To delete a hosted zone, send a `DELETE` request to the `2012-02-29/hostedzone/`*`Route 53 hosted zone ID`* resource.

For more information about deleting a hosted zone, see Deleting a Hosted Zone in the *Amazon Route 53 Developer Guide*.

> **Important**
> You can delete a hosted zone only if there is no resource record set other than the default SOA record and NS records. If your hosted zone contains resource records other than the default SOA record and NS records, you must delete those resource records before you can delete your hosted zone. Any records you added to the hosted zone must be deleted first. If you try to delete a hosted zone that contains resource records other than the default records, Amazon Route 53 will deny your request with a `HostedZoneNotEmpty` error. For information about deleting records from your hosted zone, see POST ChangeResourceRecordSets (p. 23).

Requests

Syntax

```
DELETE /2012-02-29/hostedzone/Route 53 hosted zone ID
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Parameters

The request must contain the hosted zone ID. Route 53 returns the hosted zone ID in the `HostedZone` element as part of the `CreateHostedZoneResponse` or `ListHostedZonesResponse`. For more information, see POST CreateHostedZone (p. 3) or GET ListHostedZones (p. 16).

Responses

Syntax

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

```
<DeleteHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">

   <ChangeInfo>
      <Id>/change/unique identifier for the change batch request</Id>
      <Status>PENDING | INSYNC</Status>
      <SubmittedAt>date and time in Coordinated Universal Time
         format</SubmittedAt>
   </ChangeInfo>
</DeleteHostedZoneResponse>
```

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Elements

Name	Description
`DeleteHostedZoneResponse`	A complex type containing the response information for the request. Type: Complex Children: `ChangeInfo`
`ChangeInfo`	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` action to get detailed information about the change. Type: Complex Children: `Id`, `Status`, `SubmittedAt`
`Id`	The ID of the request. Use this ID to track when the change has completed across all Route 53 DNS servers. Type: String Parent: `ChangeInfo`
`Status`	The current state of the request. `PENDING` indicates that this request has not yet been applied to all Route 53 DNS servers. Type: String Valid Values: `PENDING` | `INSYNC` Parent: `ChangeInfo`
`SubmittedAt`	The date and time the change was submitted, in the format `YYYY-MM-DDThh:mm:ssZ`, as specified in the ISO 8601 standard (for example, 2012-03-19T19:37:58Z). The `Z` after the time indicates that the time is listed in Coordinated Universal Time (UTC), which is synonymous with Greenwich Mean Time in this context. Type: Timestamp Parent: `ChangeInfo`

Errors

The server might respond to this action with any of the following errors.

Name	Description
`HostedZoneNotEmpty`	The hosted zone contains resource records that are not SOA or NS records.
`InvalidInput`	The input is not valid.
`NoSuchHostedZone`	A hosted zone with the specified hosted zone ID does not exist.

Examples

Example Request

The following example shows the `DELETE` request with the hosted zone ID (beginning with the letter Z).

```
DELETE /2012-02-29/hostedzone/Z1PA6795UKMFR9
```

Example Response

When the status of this change becomes `INSYNC`, your hosted zone has been removed from all Amazon Route 53 DNS servers.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<DeleteHostedZoneResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">

   <ChangeInfo>
      <Id>/change/C1PA6795UKMFR9</Id>
      <Status>PENDING</Status>
      <SubmittedAt>2012-03-10T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</DeleteHostedZoneResponse>
```

GET ListHostedZones

Topics

Description

To retrieve a list of your hosted zones, send a `GET` request to the `2012-02-29/hostedzone` resource. The response to this request includes a `HostedZones` element with zero, one, or multiple `HostedZone` child elements. By default, the list of hosted zones is displayed on a single page. You can control the length of the page that is displayed by using the `MaxItems` parameter. You can use the `Marker` parameter to control the hosted zone that the list begins with. For more information about listing hosted zones, see Listing the Hosted Zones for an AWS Account in the *Amazon Route 53 Developer Guide*.

> **Note**
> 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 hosted zones. To get the next group of `maxitems` hosted zones, submit another request to `ListHostedZones`.

Requests

Syntax

```
GET /2012-02-29/hostedzone?marker=Route 53 hosted zone ID&
 maxitems=maximum number of hosted zones to include in the response
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Parameters

Name	Description	Required
`marker`	If you have more hosted zones than the value of `maxitems`, `ListHostedZones` returns only the first `maxitems` hosted zones. To get the next group of `maxitems` hosted zones, submit another request to `ListHostedZones`. For the value of `marker`, specify the value of the `NextMarker` element that was returned in the previous response. Hosted zones are listed in the order in which they were created. Type: String	No

Name	Description	Required
maxitems	The maximum number of hosted zones to be included in the response body for this request. If you have more than maxitems hosted zones, the value of the IsTruncated element in the response is true, and the value of the NextMarker element is the hosted zone ID of the first hosted zone in the next group of maxitems hosted zones. Type: String Default: 100 Constraint: maximum value is 100. If you specify a value greater than 100, ListHostedZones returns the first group of 100 hosted zones.	No

Responses

Syntax

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">

   <HostedZones>
      <HostedZone>
         <Id>/hostedzone/Route 53 hosted zone ID</Id>
         <Name>DNS domain name</Name>
         <CallerReference>unique description that you specified
            when you created the hosted zone</CallerReference>
         <Config>
            <Comment>comment that you specified when you
               created the hosted zone</Comment>
         </Config>
         <ResourceRecordSetCount>number of resource record sets
            in the hosted zone</ResourceRecordSetCount>
      </HostedZone>
      ...
   </HostedZones>
   <Marker>value of the marker parameter,
      if any, in the previous request</Marker>
   <IsTruncated>true | false</IsTruncated>
   <NextMarker>if IsTruncated is true,
    the hosted zone ID of the first hosted zone
    in the next group of maxitems hosted zones</NextMarker>
   <MaxItems>value of the maxitems parameter,
      if any, in the previous request</MaxItems>
</ListHostedZonesResponse>
```

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Elements

Name	Description
`ListHostedZoneResponse`	A complex type containing the response information for the request. Type: Complex Children: `Marker`, `HostedZones`, `MaxItems`, `IsTruncated`, `NextMarker`
`HostedZones`	The parent element to `HostedZone`, this element can contain zero, one, or more `HostedZone` elements. Type: Complex Children: `HostedZone`
`HostedZone`	A complex type containing the specific identifying information about the hosted zone. Type: Complex Children: `Id`, `Name`, `CallerReference`, `Config`
`Id`	The ID of the hosted zone. Type: String Parent: `HostedZone`
`Name`	The name of the domain. For resource record types that include a domain name, specify a fully qualified domain name, for example, *www.example.com*. The trailing dot is optional; 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. This is the name you have registered with your DNS registrar. It is also the name you delegate from your registrar to the Route 53 delegation servers returned in response to this request. Type: String Parent: `HostedZone`
`CallerReference`	A unique string that identifies the request to create the hosted zone. Type: String Parent: `HostedZone`
`Config`	A complex type that includes the `Comment` element. Type: Complex Parent: `HostedZone` Children: `Comment`
`Comment`	The comment included in the `CreateHostedZoneRequest` element. Type: String Constraints: Maximum 256 characters Parent: `Config`
`ResourceRecordSetCount`	The number of resource record sets in the hosted zone. Type: Unsigned long integer Parent: `HostedZone`

Name	Description
`Marker`	For the second and subsequent calls to `ListHostedZones`, `Marker` is the value that you specified for the `marker` parameter in the request that produced the current response. Type: String
`IsTruncated`	A flag indicating 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 `ListHostedZones` again and specifying the value of the `NextMarker` element in the `marker` parameter. Type: String Valid Values: `true` | `false`
`NextMarker`	If `IsTruncated` is `true`, the value of `NextMarker` identifies the first hosted zone in the next group of `maxitems` hosted zones. Call `ListHostedZones` again and specify the value of `NextMarker` in the `marker` parameter. This element is present only if `IsTruncated` is `true`. Type: String
`MaxItems`	The value that you specified for the `maxitems` parameter in the call to `ListHostedZones` that produced the current response. Type: String

Errors

This action returns the following error.

Name	Description
`InvalidInput`	The input is not valid.

Examples

Example Request

The following example shows a request in which `maxitems` is `1`.

```
GET /2012-02-29/hostedzone?maxitems=1
```

Example Response

This example shows the response for the previous request.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
```

```
   <HostedZones>
      <HostedZone>
         <Id>/hostedzone/Z111111QQQQQQQ</Id>
         <Name>example2.com.</Name>
         <CallerReference>MyUniqueIdentifier2</CallerReference>
         <Config>
            <Comment>This is my second hosted zone.</Comment>
         </Config>
         <ResourceRecordSetCount>42</ResourceRecordSetCount>
      </HostedZone>
   </HostedZones>
   <IsTruncated>true</IsTruncated>
   <NextMarker>Z222222VVVVVVV</NextMarker>
   <MaxItems>1</MaxItems>
</ListHostedZonesResponse>
```

Example Follow-up Request

This example shows the follow-up request to the previous request. In this request, the `maxitems` parameter has been changed to 10, and the `marker` parameter is the value of the `NextMarker` element (`Z222222VVVVVVV`) in the previous response.

```
GET /2012-02-29/hostedzone?marker=Z222222VVVVVVV&maxitems=10
```

Example Follow-up Response

This example shows the response for the previous request.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListHostedZonesResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">

   <HostedZones>
      <HostedZone>
         <Id>/hostedzone/Z222222VVVVVVV</Id>
         <Name>example3.com.</Name>
         <CallerReference>MyUniqueIdentifier3</CallerReference>
         <Config>
            <Comment>This is my third hosted zone.</Comment>
         </Config>
         <ResourceRecordSetCount>17</ResourceRecordSetCount>
      </HostedZone>
      <HostedZone>
         <Id>/hostedzone/Z2682N5HXP0BZ4</Id>
         <Name>example.com.</Name>
         <CallerReference>MyUniqueIdentifier4</CallerReference>
         <Config>
            <Comment>This is my fourth hosted zone.</Comment>
         </Config>
         <ResourceRecordSetCount>117</ResourceRecordSetCount>
      </HostedZone>
   </HostedZones>
   <Marker>Z222222VVVVVVV</Marker>
   <IsTruncated>true</IsTruncated>
   <NextMarker>Z333333YYYYYYY</NextMarker>
```

```
   <MaxItems>10</MaxItems>
</ListHostedZonesResponse>
```

Actions on Resource Record Sets

Topics

This section describes actions you can perform on resource record sets:

Action	Description
`ChangeResourceRecordSets`	Adds, deletes, and changes resource record sets in an Amazon Route 53 hosted zone.
`ListResourceRecordSets`	Lists details about all of the resource record sets in a hosted zone.
`GetChange`	Returns the current status of a change batch request that you submitted by using `ChangeResourceRecordSets`.

For more information, see Working with Resource Record Sets in the *Amazon Route 53 Developer Guide*.

POST ChangeResourceRecordSets

Topics

Description

Use this action to create or change your authoritative DNS information. To use this action, send a `POST` request to the `2012-02-29/hostedzone/`*`Route 53 hosted zone ID`*`/rrset` resource. The request body must include an XML document with a `ChangeResourceRecordSetsRequest` element.

Changes are a list of change items and are considered transactional. For more information on transactional changes, also known as change batches, see Creating, Changing, and Deleting Resource Record Sets Using the Route 53 API in the *Amazon Route 53 Developer Guide*.

> **Important**
> Due to the nature of transactional changes, you cannot delete the same resource record set more than once in a single change batch. In addition, if you submit the same change batch request more than once, Route 53 returns an `InvalidChangeBatch` error.

In response to a `ChangeResourceRecordSets` request, your DNS data is changed on all Route 53 DNS servers. Initially, the status of a change is `PENDING`. This means the change has not yet propagated to all the authoritative Route 53 DNS servers. When the change is propagated to all hosts, the change returns a status of `INSYNC`.

Note the following limitations on a `ChangeResourceRecordSets` request:

- A request cannot contain more than 100 `Change` elements.
- A request cannot contain more than 1000 `ResourceRecord` elements.
- The sum of the number of characters (including spaces) in all `Value` elements in a request cannot exceed 32,000 characters.

For more information about changing resource record sets using the Route 53 API, see Creating, Changing, and Deleting Resource Record Sets Using the Route 53 API in the *Amazon Route 53 Developer Guide*.

Requests

Syntax

The syntax for each `<Change>` element in a change batch request depends on the type of resource record set that you want to create or delete. See the applicable syntax:

- Latency Alias Resource Record Set Syntax (p. 26)

Basic Syntax

```
POST /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeBatch>
      <Comment>
      optional comment about the changes in this change batch request
      </Comment>
      <Changes>
         <Change>
            <Action>CREATE | DELETE</Action>
            <ResourceRecordSet>
               <Name>DNS 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>
            </ResourceRecordSet>
         </Change>
         ...
      </Changes>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

Weighted Resource Record Set Syntax

```
POST /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeBatch>
      <Comment>
      optional comment about the changes in this change batch request
      </Comment>
      <Changes>
         <Change>
            <Action>CREATE | DELETE</Action>
            <ResourceRecordSet>
               <Name>DNS 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>
```

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

Alias Resource Record Set Syntax

```
POST /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeBatch>
      <Comment>
      optional comment about the changes in this change batch request
      </Comment>
      <Changes>
         <Change>
            <Action>CREATE | DELETE</Action>
            <ResourceRecordSet>
               <Name>DNS domain name</Name>
               <Type>DNS record type</Type>
               <AliasTarget>
                  <HostedZoneId>hosted zone ID for your
                     Elastic Load Balancing load balancer, Amazon S3 bucket,
                     or Route 53 hosted zone</HostedZoneId>
                  <DNSName>DNS domain name for your
                     load balancer, Amazon S3 bucket, or another
                     resource record set in this hosted zone</DNSName>
               </AliasTarget>
            </ResourceRecordSet>
         </Change>
         ...
      </Changes>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

Weighted Alias Resource Record Set Syntax

```
POST /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeBatch>
      <Comment>
      optional comment about the changes in this change batch request
      </Comment>
      <Changes>
         <Change>
            <Action>CREATE | DELETE</Action>
            <ResourceRecordSet>
               <Name>DNS 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
                     Elastic Load Balancing load balancer, Amazon S3 bucket,
                     or Route 53 hosted zone</HostedZoneId>
                  <DNSName>DNS domain name for your
                     load balancer, Amazon S3 bucket, or another
                     resource record set in this hosted zone</DNSName>
               </AliasTarget>
            </ResourceRecordSet>
         </Change>
         ...
      </Changes>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

Latency Resource Record Set Syntax

```
POST /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeBatch>
      <Comment>
      optional comment about the changes in this change batch request
      </Comment>
      <Changes>
         <Change>
            <Action>CREATE | DELETE</Action>
            <ResourceRecordSet>
               <Name>DNS 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>
            </ResourceRecordSet>
         </Change>
         ...
      </Changes>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

Latency Alias Resource Record Set Syntax

```
POST /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
```

```
   <ChangeBatch>
      <Comment>
      optional comment about the changes in this change batch request
      </Comment>
      <Changes>
         <Change>
            <Action>CREATE | DELETE</Action>
            <ResourceRecordSet>
               <Name>DNS 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
                     Elastic Load Balancing load balancer, Amazon S3 bucket,
                     or Route 53 hosted zone</HostedZoneId>
                  <DNSName>DNS domain name for your
                     load balancer, Amazon S3 bucket, or another
                     resource record set in this hosted zone</DNSName>
               </AliasTarget>
            </ResourceRecordSet>
         </Change>
         ...
      </Changes>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Parameters

The request must contain the hosted zone ID. Route 53 returns the hosted zone ID in the `HostedZone` element as part of the `CreateHostedZoneResponse` or `ListHostedZonesResponse`. For more information, see POST CreateHostedZone (p. 3) or GET ListHostedZones (p. 16).

Elements

Name	Description	Required to Create or Delete Resource Record Sets
`ChangeResourceRecordSetsRequest`	A complex type that contains change information for the resource record set. Type: Complex Default: None Children: ChangeBatch	Yes

Name	Description	Required to Create or Delete Resource Record Sets
`ChangeBatch`	The information for a change request. Type: Complex Default: None Children: `Comment`, `Changes`	Yes
`Comment`	Any comments you want to include about the changes in this change batch. Type: String Default: None Constraints: Maximum 256 characters Parent: `ChangeBatch`	No
`Changes`	Information about the changes to make to the record sets. Type: Complex Default: None Parent: ChangeBatch Children: Change	Yes
`Change`	The information for each resource record set that you want to change. Type: Complex Default: None Parent: Changes Children: Action, ResourceRecordSet	Yes
`Action`	The action to perform. Type: String Default: None Valid values: `CREATE` | `DELETE` Parent: member	Yes

Name	Description	Required to Create or Delete Resource Record Sets
`ResourceRecordSet`	Information about the resource record set to create or delete. Type: Complex Default: None Parent: member Children: `Name`, `Type`, `AliasTarget`, `SetIdentifier`, `Region`, `Weight`, `TTL`, `ResourceRecords`	Yes
`Name`	The name of the domain you want to perform the action on. Enter a fully qualified domain name; for example, *www.example.com.*. If you omit the trailing dot, Route 53 assumes that the domain name that you specify is fully qualified; Route 53 treats *www.example.com* (without a trailing dot) and *www.example.com.* (with a trailing dot) as identical. Type: String Default: None Parent: `ResourceRecordSet`	Yes
`Type`	The DNS record type. For information about different record types and how data is encoded for them, see Supported DNS Resource Record Types in the *Amazon Route 53 Developer Guide*. If you're creating an alias resource record set for an Elastic Load Balancing load balancer or an Amazon S3 bucket, specify `A`. If you're creating an alias resource record set for another resource record set in this hosted zone, specify the type (`A` or `AAAA`) of the resource record set for which you're creating the alias. Type: String Default: None Valid values: A | AAAA | CNAME | MX | NS | PTR | SOA | SPF | SRV | TXT Values for Weighted Resource Record Sets: A | AAAA | CNAME | TXT Values for Latency Resource Record Sets: A | AAAA | CNAME | TXT Values for Alias Resource Record Sets: A | AAAA Parent: `ResourceRecordSet`	Yes

Name	Description	Required to Create or Delete Resource Record Sets
`TTL`	The resource record cache time to live (TTL), in seconds. **Note** If you are creating an alias resource record set, omit `TTL`. Route 53 uses the Elastic Load Balancing TTL. For the current TTL value for Elastic Load Balancing, see the introduction to Using Domain Names With Elastic Load Balancing. Type: Integer Default: None Parent: `ResourceRecordSet`	Yes, for all except alias resource record sets
`ResourceRecords`	Information about the resource records to act upon. **Note** If you are creating an alias resource record set, omit `ResourceRecords`. Type: Complex Default: None Parent: `ResourceRecordSet` Children: `ResourceRecord`	Yes, for all except alias resource record sets
`ResourceRecord`	Information specific to the resource record. **Note** If you are creating an alias resource record set, omit `ResourceRecord`. Type: Complex Default: None Parent: `ResourceRecords` Children: `Value`	Yes, for all except alias resource record sets

Name	Description	Required to Create or Delete Resource Record Sets
`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*. **Note** If you are creating an alias resource record set, omit `Value`. Type: String Default: None Parent: `ResourceRecord`	Yes, for all except alias resource record sets
`SetIdentifier`	*Weighted and latency resource record sets only:* An identifier that differentiates among multiple resource record sets that have the same combination of DNS name and type. The value of `SetIdentifier` must be unique for each resource record set that has the same combination of DNS name and type. Type: String Default: None Valid values: 1-128 characters, including upper- and lower-case letters, numbers, spaces, and punctuation. Parent: `ResourceRecordSet` For more information and an example, see Creating Weighted Resource Record Sets or Creating Latency Resource Record Sets in the *Amazon Route 53 Developer Guide*.	Yes, for weighted and latency resource record sets

Name	Description	Required to Create or Delete Resource Record Sets
`Weight`	*Weighted resource record sets only:* Among resource record sets that have the same combination of DNS name and type, a value that determines what portion of traffic for the current resource record set is routed to the associated location. Route 53 calculates the sum of the weights for the resource record sets that have the same combination of DNS name and type. Queries are then routed 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. • To disable routing to a resource, set `Weight` to 0. • 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. • You can only specify one `ResourceRecord` per weighted resource record set. • You cannot create both weighted and latency resource record sets that have the same values for the `Name` and `Type` elements. Type: Integer Default: None Valid values: 0-255 Parent: `ResourceRecordSet` For more information and an example, see Creating Weighted Resource Record Sets in the *Amazon Route 53 Developer Guide*.	Yes, for weighted resource record sets
`AliasTarget`	*Alias resource record sets only:* Information about the Elastic Load Balancing load balancer, the Amazon S3 bucket, or the Route 53 resource record set to which you are redirecting queries. Type: Complex Default: None Parent: `ResourceRecordSet` Children: `HostedZoneId`, `DNSName` For more information and an example, see the following topics in the *Amazon Route 53 Developer Guide*: • Creating Alias Resource Record Sets for Elastic Load Balancing • Creating Latency Resource Record Sets	Yes, for alias resource record sets

Name	Description	Required to Create or Delete Resource Record Sets
`HostedZoneId`	*Alias resource record sets only.* If you are routing queries to: • **An Elastic Load Balancing load balancer:** Specify the value of the hosted zone ID for the load balancer (`CanonicalHostedZoneNameId`). • **Another Route 53 resource record set in your hosted zone:** Specify the hosted zone ID of your hosted zone. (An alias resource record set cannot reference a resource record set in a different hosted zone.) • **An Amazon S3 bucket:** Specify the hosted zone ID for the Amazon S3 website endpoint in which you created the bucket. For more information about valid values, see the table Amazon Simple Storage Service (S3) Website Endpoints in the *Amazon Web Services General Reference*. Type: String Default: None Parent: `AliasTarget` For more information, an example, and several ways to get the hosted zone ID for a load balancer, see the applicable topic in the *Amazon Route 53 Developer Guide*: • How to Create an Alias Resource Record Set • How to Create Weighted Alias Resource Record Sets	Yes, for alias resource record sets

Name	Description	Required to Create or Delete Resource Record Sets
`DNSName`	*Alias resource record sets only:* If you are routing queries to: • **An Elastic Load Balancing load balancer:** Specify the external DNS name associated with the load balancer. • **Another Route 53 resource record set:** Specify the value of the `Name` element for a resource record set in the current hosted zone. • **An Amazon S3 bucket:** Specify the domain name of the Amazon S3 website endpoint in which you created the bucket; for example, `s3-website-us-east-1.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 Amazon S3 buckets for websites, see Hosting Websites on Amazon S3 in the *Amazon Simple Storage Service Developer Guide*. Type: String Default: None Parent: `AliasTarget` For more information, an example, and several ways to get the DNS name for a load balancer, see the applicable topic in the *Amazon Route 53 Developer Guide*: • How to Create an Alias Resource Record Set • How to Create Weighted Alias Resource Record Sets	Yes, for alias resource record sets

Name	Description	Required to Create or Delete Resource Record Sets
`Region`	*Latency resource record sets only:* The Amazon EC2 region where the resource that is specified in this resource record set resides. The resource typically is an AWS resource, for example, Amazon EC2 instance or an Elastic Load Balancing load balancer, and is referred to by an IP address or a DNS domain name, depending on the record type. When 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 are not 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 for which you create latency resource record sets. • You cannot create both weighted and latency resource record sets that have the same values for the `Name` and `Type` elements. Valid values include: **Asia Pacific (Tokyo) Region:** `ap-northeast-1` **Asia Pacific (Singapore) Region:** `ap-southeast-1` **Asia Pacific (Sydney) Region:** `ap-southeast-2` **EU (Ireland) Region:** `eu-west-1` **South America (Sao Paulo) Region:** `sa-east-1` **US East (Northern Virginia) Region:** `us-east-1` **US West (Northern California) Region:** `us-west-1` **US West (Oregon) Region:** `us-west-2` Type: String Parent: `ResourceRecordSet`	Yes, for latency resource record sets

Responses

Syntax

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsResponse xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeInfo>
      <Id>/change/unique identifier for the change batch request</Id>
      <Status>PENDING | INSYNC</Status>
      <SubmittedAt>date and time in Coordinated Universal Time
         format</SubmittedAt>
   </ChangeInfo>
</ChangeResourceRecordSetsResponse>
```

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Elements

Name	Description
`ChangeResourceRecordSetsResponse`	A complex type containing the response information for the request. This element contains the hosted zone ID parameter. Type: Complex Children: `ChangeInfo`
`ChangeInfo`	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` action to get detailed information about the change. Type: Complex Children: `Id`, `Status`, `SubmittedAt`
`Id`	The ID of the request. Use this ID to track when the change has completed across all Route 53 DNS servers. Type: String Parent: `ChangeInfo`
`Status`	The current state of the request. `PENDING` indicates that this request has not yet been applied to all Route 53 DNS servers. Type: String Valid Values: `PENDING` | `INSYNC` Parent: `ChangeInfo`

Name	Description
SubmittedAt	The date and time the change was submitted, in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard (for example, 2012-03-19T19:37:58Z). The Z after the time indicates that the time is listed in Coordinated Universal Time (UTC), which is synonymous with Greenwich Mean Time in this context. Type: Timestamp Parent: ChangeInfo

Errors

The following table lists the errors returned for this action.

Name	Description
InvalidInput	The input is not valid.
NoSuchHostedZone	A hosted zone with the specified hosted zone ID does not exist.
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. For more information, see Example InvalidChangeBatch Errors (p. 39).
PriorRequestNotComplete	If 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.

Examples

For additional examples, see the applicable topics in the *Amazon Route 53 Developer Guide*:

- Creating Weighted Resource Record Sets
- Creating Alias Resource Record Sets for Elastic Load Balancing
- Creating Latency Resource Record Sets

Example Request

This example creates an *A* record for www.example.com and changes the *A* record for foo.example.com from 192.0.2.3 to 192.0.2.1.

```
POST /2012-02-29/hostedzone/Z1PA6795UKMFR9/rrset HTTP/1.1
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsRequest xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeBatch>
      <Comment>
      This change batch creates a TXT record for www.example.com.,
```

```
     and changes the A record for foo.example.com. from 192.0.2.3 to 192.0.2.1.

      </Comment>
      <Changes>
         <Change>
            <Action>CREATE</Action>
            <ResourceRecordSet>
               <Name>www.example.com.</Name>
               <Type>TXT</Type>
               <TTL>600</TTL>
               <ResourceRecords>
                  <ResourceRecord>
                     <Value>"item 1" "item 2" "item 3"</Value>
                  </ResourceRecord>
               </ResourceRecords>
            </ResourceRecordSet>
         </Change>
         <Change>
            <Action>DELETE</Action>
            <ResourceRecordSet>
               <Name>foo.example.com.</Name>
               <Type>A</Type>
               <TTL>600</TTL>
               <ResourceRecords>
                  <ResourceRecord>
                     <Value>192.0.2.3</Value>
                  </ResourceRecord>
               </ResourceRecords>
            </ResourceRecordSet>
         </Change>
         <Change>
            <Action>CREATE</Action>
            <ResourceRecordSet>
               <Name>foo.example.com.</Name>
               <Type>A</Type>
               <TTL>600</TTL>
               <ResourceRecords>
                  <ResourceRecord>
                     <Value>192.0.2.1</Value>
                  </ResourceRecord>
               </ResourceRecords>
            </ResourceRecordSet>
         </Change>
      </Changes>
   </ChangeBatch>
</ChangeResourceRecordSetsRequest>
```

Example Response

This is an example response to the request in the previous example.

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ChangeResourceRecordSetsResponse xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ChangeInfo>
```

```
      <Id>/change/C2682N5HXP0BZ4</Id>
      <Status>PENDING</Status>
      <SubmittedAt>2010-09-10T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</ChangeResourceRecordSetsResponse>
```

Example InvalidChangeBatch Errors

The `InvalidChangeBatch` error contains a list of messages that contain zero, one or more error messages. This section describes `InvalidChangeBatch` and some of the errors it might return.

> **Note**
> Route 53 locates as many errors as possible, but some errors can only be detected after other errors are fixed. As a result, you might need to repeat your request to locate all the errors.

Example 1

If you already have a resource record set called `duplicate.example.com.` with type *A* records, and you try to create the same resource record set again, you receive the following `InvalidChangeBatch` exception.

```
HTTP/1.1 400 Bad Request
<?xml version="1.0"?>
<InvalidChangeBatch xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <Messages>
      <Message>
      Tried to create resource record set duplicate.example.com. type A,
      but it already exists
      </Message>
   </Messages>
</InvalidChangeBatch>
```

Example 2

If you don't have the resource record set `noexist.example.com.` with type *A* records, but you try to delete it, you will get the following `InvalidChangeBatch` error.

```
HTTP/1.1 400 Bad Request
<?xml version="1.0"?>
<InvalidChangeBatch xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <Messages>
      <Message>
      Tried to delete resource record set noexist.example.com. type A,
      but it was not found
      </Message>
   </Messages>
</InvalidChangeBatch>
```

Example 3

If you put the above two changes into a single change batch and you call `ChangeResourceRecordSets`, you receive this error.

```
HTTP/1.1 400 Bad Request
<?xml version="1.0"?>
<InvalidChangeBatch xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <Messages>
      <Message>
      Tried to create resource record set duplicate.example.com. type A,
      but it already exists
      </Message>
      <Message>
      Tried to delete resource record set noexist.example.com. type A,
      but it was not found
      </Message>
   </Messages>
</InvalidChangeBatch>
```

GET ListResourceRecordSets

Topics

Description

To list your resource record sets, send a GET request to the `2012-02-29/hostedzone/`*`Route 53 hosted zone ID`*`/rrset` resource.

The action retrieves a specified number of resource record sets in order, beginning at a position specified by the `name` and `type` elements. The action sorts results first by DNS name (with the labels reversed; for example `com.amazon.www`), and second by the record type.

You can use the `name` and `type` elements to adjust the beginning position of the list of resource record sets returned. For more information on using this action to retrieve information about your resource record sets, see Listing Resource Record Sets in the *Amazon Route 53 Developer Guide*.

> **Note**
> This action returns the most current version of the records. This includes records that are `PENDING`, and that are not yet available on all Amazon Route 53 DNS servers.

Requests

Syntax

```
GET /2012-02-29/hostedzone/Route 53 hosted zone ID/rrset?
   name=DNS domain name at which to start listing resource record sets&
   type=resource record set type&
   identifier=value of SetIdentifier&
   maxitems=maximum number of resource record sets in the response
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Parameters

Name	Description	Required
`Route 53 hosted zone ID`	The ID of the hosted zone containing the resource records sets to be retrieved. Type: String Default: None	Yes

Name	Description	Required
`name`	The first name in the lexicographic ordering of domain names to be retrieved in the response to the `ListResourceRecordSets` request. Type: String Default: None	No.
`type`	The type of resource record set to begin the record listing from. 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*. Type: String Default: None Valid values: A | AAAA | CNAME | MX | NS | PTR | SOA | SPF | SRV | TXT Values for weighted resource record sets: A | AAAA | CNAME | TXT Values for alias resource record sets: A | AAAA Values for latency resource record sets: A | AAAA | CNAME | TXT Constraint: Specifying `type` without specifying `name` returns an `InvalidInput` error.	No
`identifier`	*Weighted and latency resource record sets only:* 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. Type: String Default: None	Yes, if you are using weighted or latency resource record sets.
`maxitems`	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 next group of `maxitems` resource record sets. Type: String Default: 100 Constraint: maximum value is 100. If you specify a value greater than 100, `ListResourceRecordSets` returns the first 100 resource record sets.	No

Responses

Syntax

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListResourceRecordSetsResponse xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ResourceRecordSets>

      <!-- Basic syntax -->
      <ResourceRecordSet>
         <Name>DNS domain name</Name>
         <Type>DNS record type</Type>
         <TTL>time to live in seconds</TTL>
         <ResourceRecords>
            <ResourceRecord>
               <Value>applicable value for the DNS record type</Value>
            </ResourceRecord>
         </ResourceRecords>
      </ResourceRecordSet>

      <!-- Weighted resource record set syntax -->
      <ResourceRecordSet>
         <Name>DNS 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>
      </ResourceRecordSet>

      <!-- Alias resource record set syntax -->
      <ResourceRecordSet>
         <Name>DNS domain name</Name>
         <Type>DNS record type</Type>
         <AliasTarget>
            <HostedZoneId>hosted zone ID for your
               Elastic Load Balancing load balancer, Amazon S3 bucket,
               or Route 53 hosted zone</HostedZoneId>
            <DNSName>DNS domain name for your
               load balancer, Amazon S3 bucket, or another
               resource record set in this hosted zone</DNSName>
         </AliasTarget>
      </ResourceRecordSet>

      <!-- Weighted alias resource record set syntax -->
      <ResourceRecordSet>
         <Name>DNS 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
               Elastic Load Balancing load balancer, Amazon S3 bucket,
               or Route 53 hosted zone</HostedZoneId>
            <DNSName>DNS domain name for your
               load balancer, Amazon S3 bucket, or another
               resource record set in this hosted zone</DNSName>
         </AliasTarget>
      </ResourceRecordSet>

      <!-- Latency resource record set syntax -->
      <ResourceRecordSet>
         <Name>DNS 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>
      </ResourceRecordSet>

      <!-- Latency alias resource record set syntax -->
      <ResourceRecordSet>
         <Name>DNS 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
               Elastic Load Balancing load balancer, Amazon S3 bucket,
               or Route 53 hosted zone</HostedZoneId>
            <DNSName>DNS domain name for your
               load balancer, Amazon S3 bucket, or another
               resource record set in this hosted zone</DNSName>
         </AliasTarget>
      </ResourceRecordSet>

</ResourceRecordSets>
   <IsTruncated>true | false</IsTruncated>
   <MaxItems>value of maxitems parameter in the previous request</MaxItems>
   <NextRecordName>if IsTruncated is true,
      the DNS domain name of the first resource record set
      in the next group of maxitems resource record sets</NextRecordName>
   <NextRecordType>if IsTruncated is true,
      the DNS record type of the first resource record set
      in the next group of maxitems resource record sets</NextRecordType>
   <NextRecordIdentifier>if IsTruncated is true
      and results were truncated for a weighted or latency
      resource record set, the value of SetIdentifier for the
      first resource record set in the next group of maxitems
```

```
      resource record sets</NextRecordIdentifier>
<ListResourceRecordSetsResponse>
```

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Elements

Name	Description
`ListResourceRecordSetsResponse`	A complex type that contains list information for the resource record set. Type: Complex Children: `ResourceRecordSets`, `IsTruncated`, `MaxItems`, `NextRecordName`, `NextRecordType`
`ResourceRecordSets`	Information about multiple resource record sets. Type: Complex Parent: `ListResourceRecordSetsResponse` Children: `ResourceRecordSet`
`ResourceRecordSet`	Information about multiple resource records. Type: Complex Parent: `ResourceRecordSets` Children: `Name`, `Type`, `AliasTarget`, `SetIdentifier`, `Weight`, `TTL`, `ResourceRecords`
`Name`	The name of the domain. If the name includes characters other than a to z, 0 to 9, - (hyphen), or _ (underscore), `ListResourceRecordSets` returns the characters as escape codes in the format *three-digit octal code*. This is true whether you specified the characters as characters or as escape codes when you created the resource record set. **Note** For alphabetic characters, regardless of whether you specify upper-case letters, lower-case letters, or the corresponding letters in escape codes, Route 53 stores them internally as lower-case letters. Type: String Parent: `ResourceRecordSet`

Name	Description
`Type`	The resource record set type the record listing begins from. For more information about resource record types, see Supported DNS Resource Record Types in the *Amazon Route 53 Developer Guide*. Type: String Valid Values: A | AAAA | CNAME | MX | NS | PTR | SOA | SPF | SRV | TXT Valid Values for Weighted Resource Record Sets: A | AAAA | CNAME | TXT Valid Values for Latency Resource Record Sets: A | AAAA | CNAME | TXT Valid Values for Alias Resource Record Sets: A | AAAA Parent: `ResourceRecordSet`
`TTL`	*All resource record sets except aliases:* The resource record cache time to live (TTL), in seconds. Type: Integer Parent: `ResourceRecordSet`
`ResourceRecords`	Information about the resource records. Type: Complex Parent: `ResourceRecordSet` Children: `ResourceRecord`
`ResourceRecord`	Information about the resource record. Type: Complex Parent: `ResourceRecords` Children: `Value`
`Value`	Content for the resource record. Type: String Parent: ResourceRecord
`SetIdentifier`	*Weighted and latency resource record sets only:* An identifier that differentiates among multiple resource record sets that have the same combination of DNS name and type. Type: String Parent: `ResourceRecordSet`
`Weight`	*Weighted resource record sets only:* Among resource record sets that have the same combination of DNS name and type, a value that determines what portion of traffic for the current resource record set is routed to the associated location. Type: Integer Parent: `ResourceRecordSet`

Name	Description
`AliasTarget`	*Alias resource record sets only:* Information about the Elastic Load Balancing load balancer, the Amazon S3 bucket, or the Route 53 resource record set to which you are redirecting queries. Type: Complex Parent: `ResourceRecordSet` Children: `HostedZoneId`, `DNSName`
`HostedZoneId`	*Alias resource record sets only.* If you're routing queries to: • **An Elastic Load Balancing load balancer:** The value of the hosted zone ID for the load balancer (`CanonicalHostedZoneNameId`). • **Another Route 53 resource record set in your hosted zone:** The hosted zone ID of your hosted zone. (An alias resource record set cannot reference a resource record set in a different hosted zone.) • **An Amazon S3 bucket:** The hosted zone ID for the Amazon S3 website endpoint in which you created the bucket. For more information about valid values, see the table Amazon Simple Storage Service (S3) Website Endpoints in the *Amazon Web Services General Reference*. Type: String Parent: `AliasTarget`
`DNSName`	*Alias resource record sets only:* If you are routing queries to: • **An Elastic Load Balancing load balancer:** The external DNS name associated with the load balancer. • **An Amazon S3 bucket that is configured as a static website:** The domain name of the Amazon S3 website endpoint in which you created the bucket; for example, `s3-website-us-east-1.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 Amazon S3 buckets for websites, see Hosting Websites on Amazon S3 in the *Amazon Simple Storage Service Developer Guide*. • **Another Route 53 resource record set:** The value of the `Name` element for a resource record set in the current hosted zone. Type: String Parent: `AliasTarget`

Name	Description
Region	*Latency resource record sets only:* The Amazon EC2 region where the resource that is specified in this resource record set resides. Valid values include: **Asia Pacific (Tokyo) Region:** ap-northeast-1 **Asia Pacific (Singapore) Region:** ap-southeast-1 **Asia Pacific (Sydney) Region:** ap-southeast-2 **EU (Ireland) Region:** eu-west-1 **South America (Sao Paulo) Region:** sa-east-1 **US East (Northern Virginia) Region:** us-east-1 **US West (Northern California) Region:** us-west-1 **US West (Oregon) Region:** us-west-2 Type: String Parent: ResourceRecordSet
IsTruncated	A flag that indicates whether more resource record sets remain to be listed. If your results were truncated, you can make a follow-up pagination request by using the NextRecordName element. Type: String Valid Values: true | false Parent: ListResourceRecordSetsResponse
MaxItems	The maximum number of records you requested. Type: String representation of a number, not to exceed 100 Parent: ListResourceRecordSetsResponse
NextRecordName	If the results were truncated, the name of the next record in the list. This element is present only if IsTruncated is true. Type: String Parent: ListResourceRecordSetsResponse
NextRecordType	If the results were truncated, the type of the next record in the list. This element is present only if IsTruncated is true. Type: String Parent: ListResourceRecordSetsResponse
NextRecord Identifier	*Weighted and latency resource record sets only:* 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. Type: String Default: None Parent: ListResourceRecordSetsResponse

Errors

The following table lists the error returned for this action.

Name	Description
`InvalidInput`	The input is not valid.
`NoSuchHostedZone`	A hosted zone with the specified hosted zone ID does not exist.

Example 1

This example returns a single known record set by setting `MaxItems` to 1.

Example Request

```
GET /2012-02-29/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/2012-
02-29/">
   <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>testdoc2.example.com</NextRecordName>
   <NextRecordType>NS</NextRecordType>
</ListResourceRecordSetsResponse>
```

Example 2

This example returns a list of record sets by specifying `Name` and `Type`, and setting `MaxItems` to 10.

Example Request

```
GET /2012-02-29/hostedzone/Z1PA6795UKMFR9/rrset?type=NS&name=example.com&max
items=10
```

Example Response

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<ListResourceRecordSetsResponse xmlns="https://route53.amazonaws.com/doc/2012-
02-29/">
   <ResourceRecordSets>
      <ResourceRecordSet>
         <Name>example.com.</Name>
         <Type>NS</Type>
         <TTL>172800</TTL>
         <ResourceRecords>
            <ResourceRecord>
               <Value>ns-2048.awsdns-64.com.</Value>
            </ResourceRecord>
            <ResourceRecord>
               <Value>ns-2049.awsdns-65.net.</Value>
            </ResourceRecord>
            <ResourceRecord>
               <Value>ns-2050.awsdns-66.org.</Value>
            </ResourceRecord>
            <ResourceRecord>
               <Value>ns-2051.awsdns-67.co.uk.</Value>
            </ResourceRecord>
         </ResourceRecords>
      </ResourceRecordSet>
   </ResourceRecordSets>
   <IsTruncated>false</IsTruncated>
   <MaxItems>10</MaxItems>
</ListResourceRecordSetsResponse>
```

GET GetChange

Topics

Description

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

Requests

Syntax

```
GET /2012-02-29/change/change ID
```

Headers

The request must include the headers that are required in all Route 53 requests. For more information, see Common Headers (p. 54).

Parameters

Name	Description	Required
`change ID`	The ID of the change batch request. The value that you specify here is the value that POST ChangeResourceRecordSets (p. 23) returned in the `Id` element when you submitted the request. Type: String Default: None	Yes

Responses

Syntax

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

```
<GetChangeResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <ChangeInfo>
      <Id>unique identifier for the change batch request</Id>
      <Status>PENDING | INSYNC</Status>
      <SubmittedAt>date and time in Coordinated Universal Time
         format</SubmittedAt>
   </ChangeInfo>
</GetChangeResponse>
```

Elements

Name	Description
`GetChangeResponse`	A complex type that contains the `ChangeInfo` element. Type: Complex Children: `ChangeInfo`
`ChangeInfo`	A complex type that contains information about the specified change batch. Type: Complex Parent: GetChangeResponse Children: `Id`, `Status`, `SubmittedAt`
`Id`	The ID of the change batch. This is the value that you specified in the `change ID` parameter when you submitted the request. Type: String Parent: `ChangeInfo`
`Status`	The current status of the change batch request: • `PENDING` indicates that the changes in this request have not replicated to all Amazon Route 53 DNS servers. • `INSYNC` indicates that the changes have replicated to all Amazon Route 53 DNS servers. Type: String Valid Values: `PENDING` | `INSYNC` Parent: `ChangeInfo`
`SubmittedAt`	The date and time that the change batch request was submitted. The `Z` after the time indicates that the time is listed in Coordinated Universal Time (UTC), which is synonymous with Greenwich Mean Time in this context. Type: Timestamp Parent: `ChangeInfo`

Headers

The response will include the headers in all Route 53 responses. For more information, see Common Headers (p. 54).

Errors

This action returns the following error.

Name	Description
`InvalidInput`	The input is not valid.
`NoSuchChange`	A change with the specified change ID does not exist.

Examples

Request

```
GET /2012-02-29/change/C2682N5HXP0BZ4
```

Response

```
HTTP/1.1 200 OK
<?xml version="1.0" encoding="UTF-8"?>
<GetChangeResponse xmlns="https://route53.amazonaws.com/doc/2012-02-29/">
   <ChangeInfo>
      <Id>C2682N5HXP0BZ4</Id>
      <Status>INSYNC</Status>
      <SubmittedAt>2011-09-10T01:36:41.958Z</SubmittedAt>
   </ChangeInfo>
</GetChangeResponse>
```

Common Headers

This section lists the common HTTP headers that Route 53 uses in REST requests.

Request Headers

Header Name	Description	Required
`X-Amzn-Authorization`	The information required for request authentication. For more information, go to Authenticating REST Requests in the *Amazon Route 53 Developer Guide*.	Yes
`Content-Length`	Length of the message (without the headers) according to the RFC 2616 specification. Condition: Required if the request body itself contains information (most toolkits add this header automatically).	Conditional
`Content-Type`	The content type of the resource. Example: `text/plain`. Condition: Required for POST and PUT requests.	Conditional
`Date`	The date used to create the signature contained in the `X-Amzn-Authorization` header. Condition: Required unless you provide the `x-amz-date` header. For more information about the request time stamp, and for information on formatting dates, go to REST Requests in the *Amazon Route 53 Developer Guide*).	Conditional
`Host`	The host being requested. The value must be `route53.amazonaws.com`. Condition: Required for HTTP 1.1 (most toolkits add this header automatically)	Conditional

Header Name	Description	Required
`x-amz-date`	The date used to create the signature contained in the `X-Amzn-Authorization` header. Condition: Required if you do not provide the `Date` header. If both this header and the `Date` header are present, the `Date` header is ignored. For more information about the request time stamp, and for information on formatting date, go to REST Requests in the *Amazon Route 53 Developer Guide*).	Conditional

Request ID Response Header

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`.

Common Errors

The following table lists the errors that all Amazon Route 53 actions return. Errors specific to a particular action are listed in the topic for that action. For information about the format of error responses, go to REST Responses in the *Amazon Route 53 Developer Guide*.

Error	Description	HTTP Status Code
`AccessDenied`	Access denied.	403
`InappropriateXML`	The XML document you provided was well-formed and valid, but not appropriate for this operation.	400
`InternalError`	We encountered an internal error. Please try again.	500
`InvalidAction`	The action specified is not valid.	400
`InvalidArgument`	*<Parameter name and problem>*	400
`UnrecognizedClient`	The security token included in the request is invalid.	403
`MissingAuthenticationToken`	The HTTP authorization header is bad, use the format: `AWS3-HTTPS AWSAccessKeyId=AccessKey, Algorithm=ALGORITHM,Signature=Base64( Algorithm((ValueOfDateHeader), SigningKey) )`	403
`InvalidHTTPRequest`	There was an error in the body of your HTTP request.	400
`InvalidURI`	Could not parse the specified URI.	400

Error	Description	HTTP Status Code
`MalformedXML`	The XML you provided was not well-formed or did not validate against our published schema.	400
`MissingRequiredParameter`	Authorized request must have a date or x-amz-date header.	400
`AccessDenied`	The API version specified does not exist.	400
`NotImplemented`	Not implemented.	501
`OptInRequired`	The AWS Access Key ID needs a subscription for the service.	403
`RequestExpired`	Request has expired. Time stamp date is *<the value of the Date or x-amz-date header you submitted in the request>*.	400
`InvalidSignature`	The request signature Amazon Route 53 calculated does not match the signature you provided. Check your AWS Secret Access Key and signing method. Consult the service documentation for details.	403
`Throttling`	Rate exceeded. Route 53 allows up to five requests per second per AWS account.	400