

# Domain Name Service

## API Reference

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# 1 Before You Start

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## 1.1 Overview

Welcome to *Domain Name Service API Reference*. Domain Name Service (DNS) is highly available and scalable authoritative domain resolution service that translates domain names like `www.example.com` into IP addresses like `192.1.2.3` required for network connection. The DNS service allows users to visit your websites or web applications with domain names.

This document describes how to use APIs to perform operations such as creating, deleting, querying, or modifying DNS resources. For details about all supported operations, see [API Overview](#).

Before you access DNS by calling APIs, get yourself familiar with DNS concepts. For details, see [Service Overview](#).

## 1.2 API Calling

DNS supports REST APIs that can be called over HTTPS. For details about API calling, see [Calling APIs](#).

## 1.3 Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. For the endpoints of DNS, see [Regions and Endpoints](#).

## 1.4 Notes and Constraints

- The number of DNS resources you can create is determined by quota. To view or increase the quota, see [Quota Adjustment](#).
- For more details, see the constraints described in each API.

## 1.5 Concepts

- **Account**

An account is created upon successful registration. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity, which should not be used directly to perform routine management. For security purposes, create Identity and Access Management (IAM) users and grant them permissions for routine management.
- **User**

An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).

API authentication requires information such as the account name, username, and password.
- **Region**

Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

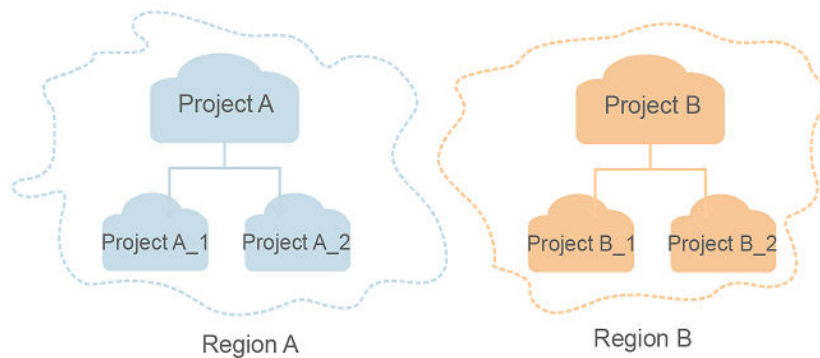
For details, see [Region and AZ](#).
- **AZ**

An AZ comprises of one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- **Project**

A project corresponds to a region. Default projects are defined to group and physically isolate resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources under their accounts in the region associated with the project. If you need more refined access control, create subprojects under a default project and create resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.



**Figure 1-1** Project isolation model



- **Enterprise project**  
Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.  
For details about enterprise projects and about how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).

# 2 API Overview

The DNS service provides RESTful APIs.

By calling these APIs, you can use all DNS functions, including creating, querying, modifying, and deleting public zones, private zones, and record sets.

**Table 2-1** provides an overview of the DNS APIs.

**Table 2-1** API overview

Category	Description
Version Management	Query version information of all DNS APIs or a specified API.
Public Zone Management	Create, delete, modify, and query public zones.
Private Zone Management	Create, delete, modify, and query private zones.
Record Set Management	Create, delete, modify, and query record sets in public and private zones.
Multi-line Record Set Management	Create, delete, modify, and query record sets of different resolution lines in public zones.
PTR Record Management	Create, delete, modify, and query PTR records that map EIPs to domain names.
Tag Management	Create, delete, modify, and query tags for specified DNS resources.
Line Group Management	Create, delete, modify, and query line groups.
Name Server Management	Query name servers.
Quota Management	Query DNS resource quotas.

## Version Management

Query DNS API versions.

**Table 2-2** Version management APIs

API	Description
<a href="#">Querying All the DNS API Versions</a>	Query the versions of all DNS APIs.
<a href="#">Querying the Specific API Version for DNS</a>	Queries the version of a specified DNS API.

## Public Zone Management

Create, query, delete, and modify public zones.

**Table 2-3** Public zone management APIs

API	Description
<a href="#">Creating a Public Zone</a>	Create a public zone.
<a href="#">Querying a Public Zone</a>	Query a public zone.
<a href="#">Querying Public Zones</a>	Query public zones in list.
<a href="#">Querying Name Servers in a Public Zone</a>	Query name servers in a public zone.
<a href="#">Deleting a Public Zone</a>	Delete a public zone.
<a href="#">Modifying a Public Zone</a>	Modify a public zone.
<a href="#">Setting the Status of a Public Zone</a>	Set the status of a public zone.

## Private Zone Management

Create, query, delete, and modify private zones.

**Table 2-4** Private zone management APIs

API	Description
<a href="#">Creating a Private Zone</a>	Create a private zone.
<a href="#">Associating a VPC with a Private Zone</a>	Associate a private zone with a VPC.
<a href="#">Disassociating a VPC from a Private Zone</a>	Disassociate a VPC from a private zone.
<a href="#">Querying a Private Zone</a>	Query a private zone.
<a href="#">Querying Private Zones</a>	Query private zones.

API	Description
<a href="#">Querying the Name Server in a Private Zone</a>	Query name servers in a private zone.
<a href="#">Deleting a Private Zone</a>	Delete a private zone.
<a href="#">Modifying a Private Zone</a>	Modify a private zone.

## Record Set Management

Create, query, delete, and modify record sets.

**Table 2-5** Record set management APIs

API	Description
<a href="#">Creating a Record Set</a>	Create a record set.
<a href="#">Querying a Record Set</a>	Query a record set.
<a href="#">Querying Record Sets</a>	Query record sets.
<a href="#">Querying Record Sets in a Zone</a>	Query record sets in a specified zone.
<a href="#">Deleting a Record Set</a>	Delete a record set.
<a href="#">Modifying a Record Set</a>	Modify a record set.

## Multi-line Record Set Management

Create, query, delete, and modify record sets with multiple resolution lines.

**Table 2-6** Multi-line record set management APIs

API	Description
<a href="#">Creating a Record Set</a>	Create a record set.
<a href="#">Batch Deleting Record Sets in a Zone</a>	Batch delete record sets in a zone.
<a href="#">Batch Modifying Record Sets</a>	Batch modify record sets.
<a href="#">Querying a Record Set</a>	Query a record set. This API applies only to public DNS servers.
<a href="#">Querying Record Sets</a>	Query record sets in list.

API	Description
<a href="#">Batch Creating Record Sets for Lines</a>	Batch create record sets. This API applies only to public DNS servers.
<a href="#">Querying Record Sets in a Zone</a>	Query all record sets in a specified zone.
<a href="#">Deleting a Record Set</a>	Delete a record set.
<a href="#">Modifying a Record Set</a>	Modify a record set.
<a href="#">Setting Record Set Status</a>	Set the status of a record set.

## PTR Record Management

Set, query, modify, and unset PTR records for EIPs.

**Table 2-7** PTR record management APIs

API	Description
<a href="#">Creating a PTR Record for an EIP</a>	Configure a PTR record for an EIP.
<a href="#">Querying PTR Records of an EIP</a>	Query the PTR record of an EIP.
<a href="#">Querying PTR Records</a>	Query PTR records of EIPs.
<a href="#">Restoring the PTR Record of the EIP to the Default Value</a>	Restore the PTR record of an EIP to the default value.
<a href="#">Modifying the PTR Record of an EIP</a>	Modify the PTR record for an EIP.

## Tag Management

Add, delete, and query resource tags.

**Table 2-8** Tag management APIs

API	Description
<a href="#">Adding a Tag to a Specific Resource</a>	Add tags to a specified resource. You can add up to 10 tags to a resource.
<a href="#">Deleting a Resource Tag</a>	Delete a resource tag.

API	Description
<a href="#">Batch Adding or Deleting Tags for a Specific Instance</a>	Add or delete tags for a specified resource in batches.
<a href="#">Querying Tags of a Specific Instance</a>	Query tags of a specified resource.
<a href="#">Querying All Tags of a Specific Resource</a>	Query all tags of a resource type.
<a href="#">Querying Resources Using Tags</a>	Query DNS resources by tag. Resources are sorted by creation time in descending order.

## Line Group Management

Table 2-9 Line group management APIs

API	Description
<a href="#">Creating a Line Group</a>	Create a line group.
<a href="#">Querying Line Groups</a>	Query line groups.
<a href="#">Querying a Line Group</a>	Query a line group.
<a href="#">Updating a Line Group</a>	Update a line group.
<a href="#">Deleting a Line Group</a>	Delete a line group.

## Name Server Management

Query name servers.

Table 2-10 Name server management API

API	Description
<a href="#">Querying Name Servers</a>	List the name servers.

# 3 Calling APIs

## 3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for **obtaining a user token** as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

### Request URI

A request URI is in the following format:

**{URI-scheme}://{Endpoint}/{resource-path}?{query-string}**

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

**Table 3-1** URI parameter description

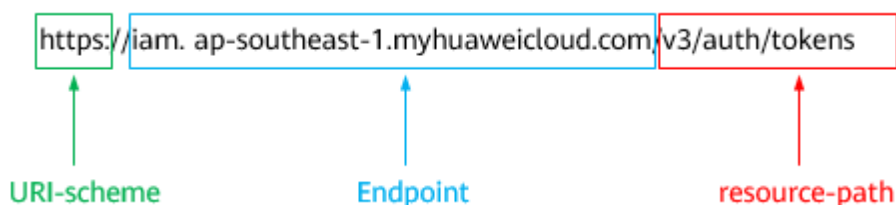
Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from <b>Regions and Endpoints</b> . For example, the endpoint of IAM in region <b>CN-Hong Kong</b> is <b>iam.ap-southeast-1.myhuaweicloud.com</b> .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the <b>resource-path</b> of the API used to obtain a user token is <b>/v3/auth/tokens</b> .

Parameter	Description
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of <i>Parameter name=Parameter value</i> . For example, <b>?limit=10</b> indicates that a maximum of 10 data records will be displayed.

For example, to obtain an IAM token in the **CN-Hong Kong** region, obtain the endpoint of IAM (iam.ap-southeast-1.myhuaweicloud.com) for this region and the resource-path (/v3/auth/tokens) in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

```
https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

**Figure 3-1** Example URI



**NOTE**

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

## Request Methods

The HTTP protocol defines the following request methods that can be used to send a request to the server.

**Table 3-2** HTTP methods

Method	Description
GET	Requests the server to return specified resources.
PUT	Requests the server to update specified resources.
POST	Requests the server to add resources or perform special operations.
DELETE	Requests the server to delete specified resources, for example, an object.
HEAD	Same as GET except that the server must return only the response header.



Method	Description
PATCH	Requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to [obtaining a user token](#), the request method is **POST**. The request is as follows:

POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens

## Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request header fields are as follows.

**Table 3-3** Common request header fields

Parameter	Description	Mandatory	Example Value
Host	Specifies the server domain name and port number of the resources being requested. The value can be obtained from the URL of the service API. The value is in the format of <i>Hostname:Port number</i> . If the port number is not specified, the default port is used. The default port number for <b>https</b> is <b>443</b> .	No This field is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Specifies the type (or format) of the message body. The default value <b>application/json</b> is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Specifies the length of the request body. The unit is byte.	No	3495

Parameter	Description	Mandatory	Example Value
X-Project-Id	Specifies the project ID. Obtain the project ID by following the instructions in <a href="#">Obtaining a Project ID</a> .	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4
X-Auth-Token	Specifies the user token. It is a response to the API for <a href="#">obtaining a user token</a> (This is the only API that does not require authentication). After the request is processed, the value of <b>X-Subject-Token</b> in the response header is the token value.	No This field is mandatory for token authentication.	The following is part of an example token: MIIPAgYJKoZlhvcNAQcCo...ggg1BBIINPXsidG9rZ

 **NOTE**

In addition to supporting authentication using tokens, APIs support authentication using AK/SK, which uses SDKs to sign a request. During the signature, the **Authorization** (signature authentication) and **X-Sdk-Date** (time when a request is sent) headers are automatically added in the request.

For more details, see "Authentication Using AK/SK" in [Authentication](#).

The API used to [obtain a user token](#) does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

## (Optional) Request Body

This part is optional. The body of a request is often sent in a structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The request body transfers content except the request header.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace *username*,

*domainname*, *\$ADMIN\_PASS* (login password), and *xxxxxxxxxxxxxxxxxxxx* (project name) with the actual values. Obtain a project name from [Regions and Endpoints](#).

 NOTE

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account. In the following example, the token takes effect only for the resources in a specified project. For more information about this API, see [Obtaining a User Token](#).

POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens  
Content-Type: application/json

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "$ADMIN_PASS", //You are advised to store it in ciphertext in the
configuration file or an environment variable and decrypt it when needed to ensure security.
        "domain": {
          "name": "domainname"
        }
      }
    }
  },
  "scope": {
    "project": {
      "name": "xxxxxxxxxxxxxxxxxxxx"
    }
  }
}
```

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding. In the response to the API used to obtain a user token, **X-Subject-Token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

## 3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- Token authentication: Requests are authenticated using tokens.
- AK/SK authentication: Requests are encrypted using AK/SK pairs. AK/SK authentication is recommended because it is more secure than token authentication.

### Token Authentication

 NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API. You can obtain a token by calling the [Obtaining User Token](#) API.

IMS is a project-level service. When you call the API, set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", // IAM user name
          "password": $ADMIN_PASS, //IAM user password. You are advised to store it in ciphertext in
the configuration file or an environment variable and decrypt it when needed to ensure security.
          "domain": {
            "name": "domainname" // Name of the account to which the IAM user belongs
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxxx" // Project name
      }
    }
  }
}
```

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## AK/SK Authentication

### NOTE

AK/SK authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token authentication is recommended.

In AK/SK authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- SK: secret access key, which is used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK authentication, you can use an AK/SK to sign requests based on the signature algorithm or using the signing SDK. For details about how to sign requests and use the signing SDK, see [API Request Signing Guide](#).

 NOTE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

## 3.3 Response

### Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [Status Code](#).

For example, if status code **201** is returned for calling the API used to [obtain a user token](#), the request is successful.

### Response Header

Similar to a request, a response also has a header, for example, **Content-Type**.

[Figure 3-2](#) shows the response header fields for the API used to [obtain a user token](#). The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

 NOTE

For security purposes, you are advised to set the token in ciphertext in configuration files or environment variables and decrypt it when using it.

**Figure 3-2** Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → [REDACTED]
x-xss-protection → 1; mode=block
```

## (Optional) Response Body

The body of a response is often returned in a structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following is part of the response body for the API used to [obtain a user token](#).

```
{
  "token": {
    "expires_at": "2019-02-13T06:52:13.855000Z",
    "methods": [
      "password"
    ],
    "catalog": [
      {
        "endpoints": [
          {
            "region_id": "az-01",
            .....

```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{
  "error_msg": "Internal error.",
  "error_code": "DNS.0001"
}
```

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

# 4 APIs

---

## 4.1 Version Management

### 4.1.1 Querying All the DNS API Versions

#### Function

This API is used to query all the DNS API versions.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /

#### Request Parameters

None

#### Response Parameters

Status code: 200

**Table 4-1** Response body parameters

Parameter	Type	Description
versions	<a href="#">valueItem</a> object	API version list

**Table 4-2** valuesItem

Parameter	Type	Description
values	Array of <a href="#">ListApiVersionsItem</a> objects	List of all versions

**Table 4-3** ListApiVersionsItem

Parameter	Type	Description
status	String	Version status.Value options:- <b>CURRENT</b> : widely used version- <b>SUPPORTED</b> : an old version that is still supported- <b>DEPRECATED</b> : a deprecated version, which may be deleted later
id	String	Version
links	Array of <a href="#">LinksItem</a> objects	URL of the current version

**Table 4-4** LinksItem

Parameter	Type	Description
href	String	Shortcut link
rel	String	Shortcut link marker name

**Status code: 400**

**Table 4-5** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**



**Table 4-6** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-7** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying all the DNS API versions.

```
{
  "versions": {
    "values": [ {
      "status": "CURRENT",
      "id": "v2",
      "links": [ {
        "href": "https://Endpoint/v2",
        "rel": "self"
      } ]
    } ]
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListApiVersionsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListApiVersionsRequest request = new ListApiVersionsRequest();
        try {
            ListApiVersionsResponse response = client.listApiVersions(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = BasicCredentials(ak, sk) \

client = DnsClient.new_builder() \
  .with_credentials(credentials) \
  .with_region(DnsRegion.value_of("<YOUR REGION>")) \
  .build()

try:
  request = ListApiVersionsRequest()
  response = client.list_api_versions(request)
  print(response)
except exceptions.ClientRequestException as e:
  print(e.status_code)
  print(e.request_id)
  print(e.error_code)
  print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListApiVersionsRequest{}
    response, err := client.ListApiVersions(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying all the DNS API versions.
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.1.2 Querying the Specific API Version for DNS

### Function

This API is used to query a specific DNS API version.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /{version}

**Table 4-8** Path Parameters

Parameter	Mandatory	Type	Description
version	Yes	String	Version to be queried, for example, <b>v2</b> Minimum: <b>1</b> Maximum: <b>36</b>

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-9** Response body parameters

Parameter	Type	Description
version	<a href="#">VersionItem</a> object	Version to be queried. The value starts with <b>v</b> , for example, <b>v2</b> .

**Table 4-10** VersionItem

Parameter	Type	Description
id	String	Version, for example, <b>v2</b>
status	String	Version status. Value options: <ul style="list-style-type: none"> <li>• <b>CURRENT</b>: widely used version</li> <li>• <b>SUPPORTED</b>: an old version that is still supported</li> <li>• <b>DEPRECATED</b>: a deprecated version, which may be deleted later</li> </ul>
links	Array of <a href="#">LinksItem</a> objects	API URL
updated	String	Time when the API version was released
version	String	Maximum micro-version number. If the APIs do not support micro-versions, the value is left blank.
min_version	String	Minimum microversion number. If the APIs do not support microversions, the value is left blank.

**Table 4-11** LinksItem

Parameter	Type	Description
href	String	Shortcut link
rel	String	Shortcut link marker name

**Status code: 400**

**Table 4-12** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-13** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-14** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

API object information

```
{
  "version" : {
    "status" : "CURRENT",
    "id" : "v2",
    "links" : [ {
      "href" : "https://Endpoint/v2/",
      "rel" : "self"
    } ],
    "min_version" : "",
    "updated" : "2018-09-18T00:00:00Z",
    "version" : ""
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowApiInfoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowApiInfoRequest request = new ShowApiInfoRequest();
        try {
            ShowApiInfoResponse response = client.showApiInfo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowApiInfoRequest()
        response = client.show_api_info(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```



```

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ShowApiInfoRequest{}
response, err := client.ShowApiInfo(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	API object information
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

# 4.2 Public Zone Management

## 4.2.1 Querying Public Zones

### Function

This API is used to query public zones.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/zones

**Table 4-15** Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	Zone type. The value is <b>public</b> . Fuzzy search will work. It is left blank by default.
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> . The default value is <b>500</b> .
marker	No	String	Start resource ID at the beginning for paging query. If the parameter is left blank, only resources on the first page are queried. This parameter is left empty by default.
offset	No	Integer	Start offset of the pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> . If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
tags	No	String	Resource tag. The format is as follows: key1,value1 key2,value2. Multiple tags are separated by vertical bar ( ). The key and value of each tag are separated by comma (,). The tags are in AND relationship. For details about resource tags, see Adding Resource Tags. Exact matching will work. If the value starts with an asterisk (*), Fuzzy search will work for the string following the asterisk. This parameter is left blank by default.

Parameter	Mandatory	Type	Description
name	No	String	Zone name
status	No	String	Resource status
search_mode	No	String	Search mode. The options are as follows: <ul style="list-style-type: none"> <li>• <b>like</b>: fuzzy search</li> <li>• <b>equal</b>: exact search</li> </ul>
enterprise_project_id	No	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters. Default value: <b>0</b> .

## Request Parameters

**Table 4-16** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-17** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
zones	Array of <a href="#">PublicZoneResp</a> objects	Response to the request for querying public zones
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-18** PublicZoneResp

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>public</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
tags	Array of <a href="#">tag</a> objects	Resource tag
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information
enterprise_project_id	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters.

**Table 4-19** pageLink

Parameter	Type	Description
self	String	Link to the current resource

Parameter	Type	Description
next	String	Link to the next page

**Table 4-20** tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

**Table 4-21** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

**Status code: 400**

**Table 4-22** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-23** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-24** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying public zones

```
{
  "links" : {
    "self" : "https://Endpoint/v2/zones?type=public&limit=10",
    "next" : "https://Endpoint/v2/zones?
type=public&limit=10&marker=2c9eb155587194ec01587224c9f90149"
  },
  "zones" : [ {
    "id" : "2c9eb155587194ec01587224c9f90149",
    "name" : "example.com.",
    "description" : "This is an example zone.",
    "email" : "xx@example.com",
    "ttl" : 300,
    "serial" : 0,
    "masters" : [ ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
    }
  }
]
```

```
    },
    "pool_id" : "00000000570e54ee01570e9939b20019",
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "zone_type" : "public",
    "created_at" : "2016-11-17T11:56:03.439",
    "updated_at" : "2016-11-17T11:56:05.528",
    "record_num" : 2
  }, {
    "id" : "2c9eb155587228570158722996c50001",
    "name" : "example.org.",
    "description" : "This is an example zone.",
    "email" : "xx@example.org",
    "ttl" : 300,
    "serial" : 0,
    "masters" : [ ],
    "status" : "PENDING_CREATE",
    "links" : {
      "self" : "https://Endpoint/v2/zones/2c9eb155587228570158722996c50001"
    },
    "pool_id" : "00000000570e54ee01570e9939b20019",
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "zone_type" : "public",
    "created_at" : "2016-11-17T12:01:17.996",
    "updated_at" : "2016-11-17T12:01:18.528",
    "record_num" : 2
  } ],
  "metadata" : {
    "total_count" : 2
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListPublicZonesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
    }
}
```

```
ListPublicZonesRequest request = new ListPublicZonesRequest();
request.withType("<type>");
request.withLimit(<limit>);
request.withMarker("<marker>");
request.withOffset(<offset>);
request.withTags("<tags>");
request.withName("<name>");
request.withStatus("<status>");
request.withSearchMode("<search_mode>");
request.withEnterpriseProjectId("<enterprise_project_id>");
try {
    ListPublicZonesResponse response = client.listPublicZones(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListPublicZonesRequest()
        request.type = "<type>"
        request.limit = <limit>
        request.marker = "<marker>"
        request.offset = <offset>
        request.tags = "<tags>"
        request.name = "<name>"
        request.status = "<status>"
        request.search_mode = "<search_mode>"
        request.enterprise_project_id = "<enterprise_project_id>"
        response = client.list_public_zones(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```



```
print(e.error_code)
print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPublicZonesRequest{}
    typeRequest := "<type>"
    request.Type = &typeRequest
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
    offsetRequest := int32(<offset>)
    request.Offset = &offsetRequest
    tagsRequest := "<tags>"
    request.Tags = &tagsRequest
    nameRequest := "<name>"
    request.Name = &nameRequest
    statusRequest := "<status>"
    request.Status = &statusRequest
    searchModeRequest := "<search_mode>"
    request.SearchMode = &searchModeRequest
    enterpriseProjectIdRequest := "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    response, err := client.ListPublicZones(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying public zones
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.2.2 Querying a Public Zone

### Function

This API is used to query a public zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/zones/{zone\_id}

**Table 4-25** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID Minimum: <b>32</b> Maximum: <b>36</b>

## Request Parameters

**Table 4-26** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 4-27** Response body parameters

Parameter	Type	Description
id	String	Zone ID
name	String	Zone name
description	String	Zone description
email	String	Mailbox of the administrator managing the zone
zone_type	String	Zone type. The value is <b>public</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone, which is used for synchronization between the master and slave nodes.
status	String	Resource Status
record_num	Integer	Number of record sets in a zone
pool_id	String	Pool that hosts the zone. The pool is assigned by the system.
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated
enterprise_project_id	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
project_id	String	Project ID of the zone

**Table 4-28** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Status code: 400**

**Table 4-29** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-30** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-31** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

Response

```
{
  "id" : "2c9eb155587194ec01587224c9f90149",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 0,
  "masters" : [ ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
  },
  "pool_id" : "00000000570e54ee01570e9939b20019",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "public",
  "created_at" : "2016-11-17T11:56:03.439",
  "updated_at" : "2016-11-17T11:56:05.528",
  "record_num" : 2,
  "enterprise_project_id" : "0"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```

```
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowPublicZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowPublicZoneRequest request = new ShowPublicZoneRequest();
        try {
            ShowPublicZoneResponse response = client.showPublicZone(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowPublicZoneRequest()
```

```
response = client.show_public_zone(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowPublicZoneRequest{}
    response, err := client.ShowPublicZone(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response
400	Error response
404	Error response

Status Code	Description
500	Error response

## Error Codes

See [Error Codes](#).

## 4.2.3 Querying Name Servers in a Public Zone

### Function

This API is used to query the name servers in a public zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/zones/{zone\_id}/nameservers

**Table 4-32** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID. You can obtain the value by querying the public zone list. Minimum: <b>32</b> Maximum: <b>36</b>

### Request Parameters

**Table 4-33** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.



## Response Parameters

**Status code: 200**

**Table 4-34** Response body parameters

Parameter	Type	Description
nameservers	Array of <a href="#">nameserver</a> objects	Response to the request for querying the name servers in a public zone

**Table 4-35** nameserver

Parameter	Type	Description
hostname	String	Host name
priority	Integer	Priority

**Status code: 400**

**Table 4-36** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-37** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>

Parameter	Type	Description
message	String	Description Minimum: 2 Maximum: 512

**Status code: 500**

**Table 4-38** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: 8 Maximum: 36
message	String	Description Minimum: 2 Maximum: 512

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying the name servers in a public zone

```
{
  "nameservers" : [ {
    "hostname" : "ns1.example.com.",
    "priority" : 1
  }, {
    "hostname" : "ns2.example.com.",
    "priority" : 2
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
```

```
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowPublicZoneNameServerSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowPublicZoneNameServerRequest request = new ShowPublicZoneNameServerRequest();
        try {
            ShowPublicZoneNameServerResponse response = client.showPublicZoneNameServer(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
```

```

request = ShowPublicZoneNameServerRequest()
response = client.show_public_zone_name_server(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)

```

## Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowPublicZoneNameServerRequest{}
    response, err := client.ShowPublicZoneNameServer(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the name servers in a public zone
400	Error response

Status Code	Description
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.2.4 Deleting a Public Zone

### Function

This API is used to delete a public zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/zones/{zone\_id}

**Table 4-39** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to be deleted Minimum: <b>32</b> Maximum: <b>36</b>

### Request Parameters

**Table 4-40** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-41** Response body parameters

Parameter	Type	Description
id	String	Zone ID
name	String	Zone name
description	String	Zone description
email	String	Mailbox of the administrator managing the zone
zone_type	String	Zone type. The value is public.
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource Status
record_num	Integer	Number of record sets in a zone
pool_id	String	Pool that hosts the zone. The pool is assigned by the system.
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When the query needs to be displayed on multiple pages, a next link must be included to point to the next page.

**Table 4-42** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Status code: 400**

**Table 4-43** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-44** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-45** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Example Requests**

None

## Example Responses

### Status code: 200

Response to the request for deleting a public zone

```
{
  "id" : "2c9eb155587194ec01587224c9f90149",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 1,
  "masters" : [ ],
  "status" : "PENDING_DELETE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
  },
  "pool_id" : "00000000570e54ee01570e9939b20019",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "public",
  "created_at" : "2016-11-17T11:56:03.439",
  "updated_at" : "2016-11-17T11:56:05.057",
  "record_num" : 0
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeletePublicZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeletePublicZoneRequest request = new DeletePublicZoneRequest();
        try {
            DeletePublicZoneResponse response = client.deletePublicZone(request);
            System.out.println(response.toString());
        }
    }
}
```



```
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeletePublicZoneRequest()
        response = client.delete_public_zone(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
```

```

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.DeletePublicZoneRequest{}
response, err := client.DeletePublicZone(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for deleting a public zone
400	Error response
404	The resource does not exist.
500	Error response

## Error Codes

See [Error Codes](#).

## 4.2.5 Modifying a Public Zone

### Function

This API is used to modify a public zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

PATCH /v2/zones/{zone\_id}

**Table 4-46** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to be modified Minimum: <b>32</b> Maximum: <b>36</b>

## Request Parameters

**Table 4-47** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-48** Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Zone description. A maximum of 255 characters are allowed.
email	No	String	Email address of the administrator managing the zone. If this parameter is left blank, the original value is retained. It is left blank by default.
ttl	No	Integer	Caching duration of the SOA record set (in seconds)

## Response Parameters

**Status code: 200**

**Table 4-49** Response body parameters

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone

Parameter	Type	Description
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>public</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone, which is used for synchronization between the master and slave nodes. This parameter is reserved.
status	String	Resource status.
record_num	Integer	Number of record sets in the zone
pool_id	String	Pool that hosts the zone. The pool is assigned by the system.
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created. The UTC time format is YYYY-MM-DDTHH:MM:SSZ.
updated_at	String	Time when the zone was updated. The UTC time format is YYYY-MM-DDTHH:MM:SSZ.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information

**Table 4-50** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Status code: 400**

**Table 4-51** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404****Table 4-52** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500****Table 4-53** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Modifying the email address and description of a public zone and setting the TTL to 300s

```
PATCH https://{endpoint}/v2/zones/{zone_id}
```

```
{
  "description" : "This is an example zone.",
  "email" : "xx@example.org",
  "ttl" : 300
}
```

## Example Responses

### Status code: 200

Response to the request for modifying a public zone

```
{
  "id" : "2c9eb155587194ec01587224c9f90149",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 1,
  "masters" : [ ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
  },
  "pool_id" : "00000000570e54ee01570e9939b20019",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "public",
  "created_at" : "2016-11-17T11:56:03.439",
  "updated_at" : "2016-11-17T11:56:05.749",
  "record_num" : 2
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying the email address and description of a public zone and setting the TTL to 300s

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class UpdatePublicZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
```

```
        .withSk(sk);

    DnsClient client = DnsClient.newBuilder()
        .withCredential(auth)
        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
    UpdatePublicZoneRequest request = new UpdatePublicZoneRequest();
    UpdatePublicZoneInfo body = new UpdatePublicZoneInfo();
    body.withTtl(300);
    body.withEmail("xx@example.org");
    body.withDescription("This is an example zone.");
    request.withBody(body);
    try {
        UpdatePublicZoneResponse response = client.updatePublicZone(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

## Python

Modifying the email address and description of a public zone and setting the TTL to 300s

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdatePublicZoneRequest()
        request.body = UpdatePublicZoneInfo(
            ttl=300,
            email="xx@example.org",
            description="This is an example zone."
        )
        response = client.update_public_zone(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

## Go

Modifying the email address and description of a public zone and setting the TTL to 300s

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePublicZoneRequest{
        ttlUpdatePublicZoneInfo:= int32(300)
        emailUpdatePublicZoneInfo:= "xx@example.org"
        descriptionUpdatePublicZoneInfo:= "This is an example zone."
        request.Body = &model.UpdatePublicZoneInfo{
            Ttl: &ttlUpdatePublicZoneInfo,
            Email: &emailUpdatePublicZoneInfo,
            Description: &descriptionUpdatePublicZoneInfo,
        }
    }
    response, err := client.UpdatePublicZone(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.



## Status Codes

Status Code	Description
200	Response to the request for modifying a public zone
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.2.6 Setting the Status of a Public Zone

### Function

This API is used to set the status of a public zone. You can suspend or enable a zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/zones/{zone\_id}/statuses

**Table 4-54** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone whose status is to be set

## Request Parameters

**Table 4-55** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-56** Request body parameters

Parameter	Mandatory	Type	Description
status	Yes	String	Zone status. Value: ENABLE: Enable the parsing. DISABLE: Pause the parsing.

## Response Parameters

Status code: 200

**Table 4-57** Response body parameters

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>public</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone

Parameter	Type	Description
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information

**Table 4-58** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Status code: 400**

**Table 4-59** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-60** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Disabling a public zone

```
PUT https://{endpoint}/v2/zones/{zone_id}/statuses
{
  "status": "DISABLE"
}
```

## Example Responses

**Status code: 200**

Response to the request for updating the status of a public zone

```
{
  "id": "2c9eb155587194ec01587224c9f90149",
  "name": "example.com.",
  "description": "This is an example zone.",
  "email": "xx@example.com",
  "ttl": 300,
  "serial": 0,
  "masters": [ ],
  "status": "DISABLE",
  "links": {
    "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
  },
  "pool_id": "00000000570e54ee01570e9939b20019",
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type": "public",
  "created_at": "2016-11-17T11:56:03.439",
  "updated_at": "2016-11-17T11:56:05.528",
  "record_num": 2
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Disabling a public zone

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
```

```
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class UpdatePublicZoneStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdatePublicZoneStatusRequest request = new UpdatePublicZoneStatusRequest();
        UpdatePublicZoneStatusRequestBody body = new UpdatePublicZoneStatusRequestBody();
        body.withStatus("DISABLE");
        request.withBody(body);
        try {
            UpdatePublicZoneStatusResponse response = client.updatePublicZoneStatus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

### Disabling a public zone

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *
```

```
if __name__ == "__main__":
```

```
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
```

```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = BasicCredentials(ak, sk) \

client = DnsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DnsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = UpdatePublicZoneStatusRequest()
    request.body = UpdatePublicZoneStatusRequestBody(
        status="DISABLE"
    )
    response = client.update_public_zone_status(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Disabling a public zone

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePublicZoneStatusRequest{}
    request.Body = &model.UpdatePublicZoneStatusRequestBody{
        Status: "DISABLE",
    }
    response, err := client.UpdatePublicZoneStatus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for updating the status of a public zone
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.2.7 Creating a Public Zone

### Function

This API is used to create a public zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/zones

### Request Parameters

**Table 4-61** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-62** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Zone name
description	No	String	Description
zone_type	No	String	Zone type. The value is <b>public</b> .
email	No	String	Mailbox of the administrator managing the zone
ttl	No	Integer	Caching duration of the SOA record set generated by default, in seconds
enterprise_project_id	No	String	ID of the enterprise project associated with the domain name. The value contains a maximum of 36 characters.
tags	No	Array of <b>tag</b> objects	Resource tag

**Table 4-63** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

Status code: 202



**Table 4-64** Response body parameters

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>public</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created. The UTC time format is YYYY-MM-DDTHH:MM:SSZ.
updated_at	String	Time when the zone was updated. The UTC time format is YYYY-MM-DDTHH:MM:SSZ.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
enterprise_project_id	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information. This parameter is reserved.

**Table 4-65** pageLink

Parameter	Type	Description
self	String	Link to the current resource

Parameter	Type	Description
next	String	Link to the next page

**Status code: 400**

**Table 4-66** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-67** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Creating a public zone with the TTL set to 300s

POST https://{endpoint}/v2/zones

```
{
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "zone_type" : "public",
  "email" : "xx@example.org",
  "ttl" : 300,
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  } ]
}
```

## Example Responses

### Status code: 202

Response to the request for creating a public zone

```
{
  "id" : "2c9eb155587194ec01587224c9f90149",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 1,
  "masters" : [ ],
  "status" : "PENDING_CREATE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
  },
  "pool_id" : "00000000570e54ee01570e9939b20019",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "public",
  "created_at" : "2016-11-17T11:56:03.439",
  "updated_at" : null,
  "record_num" : 0
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a public zone with the TTL set to 300s

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreatePublicZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
    }
}
```

```
CreatePublicZoneRequest request = new CreatePublicZoneRequest();
CreatePublicZoneReq body = new CreatePublicZoneReq();
List<Tag> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new Tag()
        .withKey("key1")
        .withValue("value1")
);
body.withTags(listbodyTags);
body.withTtl(300);
body.withEmail("xx@example.org");
body.withZoneType("public");
body.withDescription("This is an example zone.");
body.withName("example.com.");
request.withBody(body);
try {
    CreatePublicZoneResponse response = client.createPublicZone(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating a public zone with the TTL set to 300s

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreatePublicZoneRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            )
        ]
        request.body = CreatePublicZoneReq(
            tags=listTagsbody,
```

```
        ttl=300,  
        email="xx@example.org",  
        zone_type="public",  
        description="This is an example zone.",  
        name="example.com."  
    )  
    response = client.create_public_zone(request)  
    print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

### Creating a public zone with the TTL set to 300s

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := dns.NewDnsClient(  
        dns.DnsClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CreatePublicZoneRequest{}  
    valueTags := "value1"  
    var listTagsbody = []model.Tag{  
        {  
            Key: "key1",  
            Value: &valueTags,  
        },  
    }  
    ttlCreatePublicZoneReq := int32(300)  
    emailCreatePublicZoneReq := "xx@example.org"  
    zoneTypeCreatePublicZoneReq := "public"  
    descriptionCreatePublicZoneReq := "This is an example zone."  
    request.Body = &model.CreatePublicZoneReq{  
        Tags: &listTagsbody,  
        Ttl: &ttlCreatePublicZoneReq,  
        Email: &emailCreatePublicZoneReq,  
        ZoneType: &zoneTypeCreatePublicZoneReq,  
        Description: &descriptionCreatePublicZoneReq,  
        Name: "example.com",  
    }  
    response, err := client.CreatePublicZone(request)
```

```
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for creating a public zone
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

# 4.3 Private Zone Management

## 4.3.1 Creating a Private Zone

### Function

This API is used to create a private zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/zones

## Request Parameters

**Table 4-68** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-69** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Zone to be created
description	No	String	Zone description
zone_type	Yes	String	Zone type. The value is <b>private</b> .
email	No	String	Email address of the administrator managing the zone
ttl	No	Integer	Caching duration of the SOA record set (in seconds)
router	Yes	<b>Router</b> object	VPC to be disassociated
proxy_pattern	No	String	Recursive resolution proxy mode for subdomain names of private zones. Value options: <ul style="list-style-type: none"> <li>• <b>AUTHORITY</b>: Recursive resolution is not performed for this zone.</li> <li>• <b>RECURSIVE</b>: Enable the recursive resolution proxy.</li> </ul>
tags	No	Array of <b>tag</b> objects	Resource tag
enterprise_project_id	No	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters. The default value is <b>0</b> .

**Table 4-70 Router**

Parameter	Mandatory	Type	Description
router_id	Yes	String	ID of the VPC associated with the zone
router_region	No	String	Region of the VPC
status	No	String	Resource status

**Table 4-71 tag**

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

Status code: 202

**Table 4-72 Response body parameters**

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>private</b> .
ttl	Integer	TTL value of the SOA record set in the zone



Parameter	Type	Description
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes. This parameter is reserved.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
proxy_pattern	String	Recursive resolution proxy mode for subdomain names of private zones. Value options: <ul style="list-style-type: none"> <li>● <b>AUTHORITY</b>: Recursive resolution is not performed for this zone.</li> <li>● <b>RECURSIVE</b>: Enable the recursive resolution proxy.</li> </ul>
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created. The UTC time format is YYYY-MM-DDTHH:MM:SSZ.
updated_at	String	Time when the zone was updated. The UTC time format is YYYY-MM-DDTHH:MM:SSZ.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information
router	<a href="#">RouterWithStatus</a> object	List of VPC associated with the zone

**Table 4-73** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-74 RouterWithStatus**

Parameter	Type	Description
status	String	Resource status
router_id	String	ID of the VPC associated with the zone
router_region	String	Region of the VPC

**Status code: 400**

**Table 4-75 Response body parameters**

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-76 Response body parameters**

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-77** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Creating a private zone and setting the recursive resolution proxy mode to **AUTHORITY** for subdomains

```
POST https://{endpoint}/v2/zones
{
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "zone_type" : "private",
  "email" : "xx@example.org",
  "router" : {
    "router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",
    "router_region" : "xx"
  },
  "proxy_pattern" : "AUTHORITY",
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  } ]
}
```

## Example Responses

**Status code: 202**

Response to the request for creating a private zone

```
{
  "id" : "ff8080825b8fc86c015b94bc6f8712c3",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 1,
  "masters" : [ ],
  "status" : "PENDING_CREATE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/ff8080825b8fc86c015b94bc6f8712c3"
  },
  "pool_id" : "ff8080825ab738f4015ab7513298010e",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "private",
  "created_at" : "2017-04-22T08:17:08.997",
  "updated_at" : null,
  "record_num" : 0,
  "proxy_pattern" : "AUTHORITY",
  "router" : {
```

```
"status" : "PENDING_CREATE",  
"router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",  
"router_region" : "xx"  
}  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a private zone and setting the recursive resolution proxy mode to **AUTHORITY** for subdomains

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CreatePrivateZoneSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CreatePrivateZoneRequest request = new CreatePrivateZoneRequest();  
        CreatePrivateZoneReq body = new CreatePrivateZoneReq();  
        List<Tag> listbodyTags = new ArrayList<>();  
        listbodyTags.add(  
            new Tag()  
                .withKey("key1")  
                .withValue("value1")  
        );  
        Router routerbody = new Router();  
        routerbody.withRouterId("19664294-0bf6-4271-ad3a-94b8c79c6558")  
            .withRouterRegion("xx");  
        body.withTags(listbodyTags);  
        body.withProxyPattern("AUTHORITY");  
        body.withRouter(routerbody);  
        body.withEmail("xx@example.org");  
        body.withZoneType("private");  
        body.withDescription("This is an example zone.");  
        body.withName("example.com.");  
        request.withBody(body);  
    }  
}
```

```
try {
    CreatePrivateZoneResponse response = client.createPrivateZone(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating a private zone and setting the recursive resolution proxy mode to **AUTHORITY** for subdomains

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreatePrivateZoneRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            )
        ]
        routerbody = Router(
            router_id="19664294-0bf6-4271-ad3a-94b8c79c6558",
            router_region="xx"
        )
        request.body = CreatePrivateZoneReq(
            tags=listTagsbody,
            proxy_pattern="AUTHORITY",
            router=routerbody,
            email="xx@example.org",
            zone_type="private",
            description="This is an example zone.",
            name="example.com."
        )
        response = client.create_private_zone(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

```
print(e.status_code)
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

## Go

### Creating a private zone and setting the recursive resolution proxy mode to **AUTHORITY** for subdomains

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreatePrivateZoneRequest{}
    valueTags := "value1"
    var listTagsbody = []model.Tag{
        {
            Key: "key1",
            Value: &valueTags,
        },
    }
    routerRegionRouter := "xx"
    routerbody := &model.Router{
        RouterId: "19664294-0bf6-4271-ad3a-94b8c79c6558",
        RouterRegion: &routerRegionRouter,
    }
    proxyPatternCreatePrivateZoneReq := "AUTHORITY"
    emailCreatePrivateZoneReq := "xx@example.org"
    descriptionCreatePrivateZoneReq := "This is an example zone."
    request.Body = &model.CreatePrivateZoneReq{
        Tags: &listTagsbody,
        ProxyPattern: &proxyPatternCreatePrivateZoneReq,
        Router: routerbody,
        Email: &emailCreatePrivateZoneReq,
        ZoneType: "private",
        Description: &descriptionCreatePrivateZoneReq,
        Name: "example.com.",
    }
    response, err := client.CreatePrivateZone(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
```

```

        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for creating a private zone
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.3.2 Associating a VPC with a Private Zone

### Function

This API is used to associate a VPC with a private zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/zones/{zone\_id}/associaterouter

**Table 4-78** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone associated with the VPC

## Request Parameters

**Table 4-79** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-80** Request body parameters

Parameter	Mandatory	Type	Description
router	Yes	<b>Router</b> object	VPC associated with the endpoint rule

**Table 4-81** Router

Parameter	Mandatory	Type	Description
router_id	Yes	String	ID of the VPC associated with the zone
router_region	No	String	Region of the VPC
status	No	String	Resource status

## Response Parameters

**Status code: 202**

**Table 4-82** Response body parameters

Parameter	Type	Description
router_id	String	VPC ID
router_region	String	Region of the VPC
status	String	Resource status

**Status code: 400**



**Table 4-83** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-84** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-85** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Associating a VPC with a private zone

```
POST https://{endpoint}/v2/zones/{zone_id}/associaterouter
```

```
{
  "router" : {
    "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
    "router_region" : "xx"
  }
}
```

## Example Responses

### Status code: 202

Response to the request for associating a VPC with a private zone

```
{
  "status" : "PENDING_CREATE",
  "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
  "router_region" : "xx"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Associating a VPC with a private zone

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class AssociateRouterSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        AssociateRouterRequest request = new AssociateRouterRequest();
        AssociateRouterRequestBody body = new AssociateRouterRequestBody();
        Router routerbody = new Router();
        routerbody.withRouterId("f0791650-db8c-4a20-8a44-a06c6e24b15b")
            .withRouterRegion("xx");
        body.withRouter(routerbody);
        request.withBody(body);
        try {
```

```
AssociateRouterResponse response = client.associateRouter(request);
System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Associating a VPC with a private zone

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AssociateRouterRequest()
        routerbody = Router(
            router_id="f0791650-db8c-4a20-8a44-a06c6e24b15b",
            router_region="xx"
        )
        request.body = AssociateRouterRequestBody(
            router=routerbody
        )
        response = client.associate_router(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Associating a VPC with a private zone

```
package main

import (
    "fmt"
```

```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.AssociateRouterRequest{}
    routerRegionRouter:= "xx"
    routerbody := &model.Router{
        RouterId: "f0791650-db8c-4a20-8a44-a06c6e24b15b",
        RouterRegion: &routerRegionRouter,
    }
    request.Body = &model.AssociateRouterRequestBody{
        Router: routerbody,
    }
    response, err := client.AssociateRouter(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for associating a VPC with a private zone
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

### 4.3.3 Disassociating a VPC from a Private Zone

#### Function

This API is used to disassociate a VPC with a private zone.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v2/zones/{zone\_id}/disassociaterouter

**Table 4-86** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to be disassociated

#### Request Parameters

**Table 4-87** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-88** Request body parameters

Parameter	Mandatory	Type	Description
router	Yes	<a href="#">Router</a> object	VPC to be disassociated

**Table 4-89** Router

Parameter	Mandatory	Type	Description
router_id	Yes	String	ID of the VPC associated with the zone
router_region	No	String	Region of the VPC
status	No	String	Resource status

## Response Parameters

**Status code: 202**

**Table 4-90** Response body parameters

Parameter	Type	Description
router_id	String	VPC ID
router_region	String	Region of the VPC
status	String	Resource status

**Status code: 400**

**Table 4-91** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-92** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-93** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Disassociating a VPC from a private zone

POST https://{endpoint}/v2/zones/{zone\_id}/disassociaterouter

```
{
  "router" : {
    "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
    "router_region" : "xx"
  }
}
```

## Example Responses

**Status code: 202**

Response

```
{
  "status" : "PENDING_DELETE",
  "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
  "router_region" : "xx"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Disassociating a VPC from a private zone

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DisassociateRouterSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();

        DisassociateRouterRequest request = new DisassociateRouterRequest();
        DisassociaterouterRequestBody body = new DisassociaterouterRequestBody();
        Router routerbody = new Router();
        routerbody.withRouterId("f0791650-db8c-4a20-8a44-a06c6e24b15b")
            .withRouterRegion("xx");
        body.withRouter(routerbody);
        request.withBody(body);
        try {
            DisassociateRouterResponse response = client.disassociateRouter(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

### Python

#### Disassociating a VPC from a private zone



```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DisassociateRouterRequest()
        routerbody = Router(
            router_id="f0791650-db8c-4a20-8a44-a06c6e24b15b",
            router_region="xx"
        )
        request.body = DisassociaterouterRequestBody(
            router=routerbody
        )
        response = client.disassociate_router(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Disassociating a VPC from a private zone

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
```

```

dns.DnsClientBuilder().
    WithRegion(region.ValueOf("<YOUR REGION>")).
    WithCredential(auth).
    Build())

request := &model.DisassociateRouterRequest{}
routerRegionRouter:= "xx"
routerbody := &model.Router{
    RouterId: "f0791650-db8c-4a20-8a44-a06c6e24b15b",
    RouterRegion: &routerRegionRouter,
}
request.Body = &model.DisassociaterouterRequestBody{
    Router: routerbody,
}
response, err := client.DisassociateRouter(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

### 4.3.4 Querying a Private Zone

#### Function

This API is used to query a private zone.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/zones/{zone\_id}

**Table 4-94** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

## Request Parameters

**Table 4-95** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 4-96** Response body parameters

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>private</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
pool_id	String	Pool that hosts the zone. The pool is assigned by the system.

Parameter	Type	Description
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
masters	Array of strings	Primary DNS servers, from which the secondary DNS servers get DNS information
routers	Array of <a href="#">Router</a> objects	VPCs associated with the zone
proxy_pattern	String	Recursive resolution proxy mode for subdomain names of private zones. The options are as follows: <ul style="list-style-type: none"> <li>• <b>AUTHORITY</b>: Recursive resolution is not performed for this zone.</li> <li>• <b>RECURSIVE</b>: Enable the recursive resolution proxy.</li> </ul>
enterprise_project_id	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters.

**Table 4-97** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-98** Router

Parameter	Type	Description
router_id	String	ID of the VPC associated with the zone
router_region	String	Region of the VPC
status	String	Resource status

**Status code: 400**

**Table 4-99** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-100** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-101** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Example Requests**

None

## Example Responses

### Status code: 200

Response to the request for querying a private zone

```
{
  "id" : "ff8080825b8fc86c015b94bc6f8712c3",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 0,
  "masters" : [ ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/ff8080825b8fc86c015b94bc6f8712c3"
  },
  "pool_id" : "ff8080825ab738f4015ab7513298010e",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "private",
  "created_at" : "2017-04-22T08:17:08.997",
  "updated_at" : "2017-04-22T08:17:09.997",
  "record_num" : 2,
  "proxy_pattern" : "AUTHORITY",
  "enterprise_project_id" : "0",
  "routers" : [ {
    "status" : "ACTIVE",
    "router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",
    "router_region" : "xx"
  }, {
    "status" : "ACTIVE",
    "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
    "router_region" : "xx"
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowPrivateZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
```

```
.withAk(ak)
.withSk(sk);

DnsClient client = DnsClient.newBuilder()
    .withCredential(auth)
    .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
    .build();
ShowPrivateZoneRequest request = new ShowPrivateZoneRequest();
try {
    ShowPrivateZoneResponse response = client.showPrivateZone(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowPrivateZoneRequest()
        response = client.show_private_zone(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
```

```

    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowPrivateZoneRequest{}
    response, err := client.ShowPrivateZone(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying a private zone
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

### 4.3.5 Querying Private Zones

#### Function

This API is used to query private zones.



## Calling Method

For details, see [Calling APIs](#).

## URI

GET /v2/zones

**Table 4-102** Query Parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Zone type. The value is <b>private</b> . Default: <b>private</b>
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> , and the default value is <b>500</b> .
marker	No	String	Start resource ID at the beginning for paging query. If the parameter is left blank, only resources on the first page are queried. This parameter is left empty by default.
offset	No	Integer	Start offset of the pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> . If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
tags	No	String	Resource tag
name	No	String	Zone name
status	No	String	Resource status

Parameter	Mandatory	Type	Description
search_mode	No	String	Search mode. The options are as follows: <ul style="list-style-type: none"> <li>• <b>like</b>: fuzzy search</li> <li>• <b>equal</b>: exact search</li> </ul>
enterprise_project_id	No	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters. It is set to <b>0</b> by default.

## Request Parameters

**Table 4-103** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-104** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition
zones	Array of <a href="#">PrivateZoneResp</a> objects	Zone list

**Table 4-105** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

**Table 4-106** PrivateZoneResp

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>private</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
proxy_pattern	String	Recursive resolution proxy mode for subdomain names of private zones. Value options: <ul style="list-style-type: none"> <li>• <b>AUTHORITY</b>: Recursive resolution is not performed for this zone.</li> <li>• <b>RECURSIVE</b>: Enable the recursive resolution proxy.</li> </ul>
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
tags	Array of <a href="#">tag</a> objects	Resource tag
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information
routers	Array of <a href="#">RouterWithStatus</a> objects	List of VPCs associated with the zone
enterprise_project_id	String	ID of the enterprise project associated with the zone. The value contains a maximum of 36 characters.

**Table 4-107** [pageLink](#)

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-108** [tag](#)

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

**Table 4-109** [RouterWithStatus](#)

Parameter	Type	Description
status	String	Resource status
router_id	String	ID of the VPC associated with the zone

Parameter	Type	Description
router_region	String	Region of the VPC

**Status code: 400**

**Table 4-110** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-111** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-112** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>

Parameter	Type	Description
message	String	Description Minimum: 2 Maximum: 512

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying private zones

```
{
  "links" : {
    "self" : "https://Endpoint/v2/zones?type=private&limit=10",
    "next" : "https://Endpoint/v2/zones?type=private&limit=10&marker=ff8080825b8fc86c015b94bc6f8712c3"
  },
  "zones" : [ {
    "id" : "ff8080825b8fc86c015b94bc6f8712c3",
    "name" : "example.com.",
    "description" : "This is an example zone.",
    "email" : "xx@example.com",
    "ttl" : 300,
    "serial" : 0,
    "masters" : [ ],
    "tags" : [ ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2/zones/ff8080825b8fc86c015b94bc6f8712c3"
    }
  },
  "pool_id" : "ff8080825ab738f4015ab7513298010e",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "private",
  "created_at" : "2017-04-22T08:17:08.997",
  "updated_at" : "2017-04-22T08:17:09.997",
  "record_num" : 2,
  "proxy_pattern" : "AUTHORITY",
  "routers" : [ {
    "status" : "ACTIVE",
    "router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",
    "router_region" : "xx"
  }, {
    "status" : "ACTIVE",
    "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
    "router_region" : "xx"
  } ],
  "enterprise_project_id" : 0
}, {
  "id" : "ff8080825b95142f015b951f87280029",
  "name" : "example.org.",
  "description" : "This is an example zone.",
  "email" : "xx@example.org",
  "ttl" : 300,
  "serial" : 0,
  "masters" : [ ],
  "tags" : [ ],
  "status" : "ACTIVE",
  "links" : {
```

```
"self" : "https://Endpoint/v2/zones/ff8080825b95142f015b951f87280029"
},
"pool_id" : "ff8080825ab738f4015ab7513298010e",
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
"zone_type" : "private",
"created_at" : "2017-04-22T08:17:08.997",
"updated_at" : "2017-04-22T08:17:09.997",
"record_num" : 2,
"proxy_pattern" : "AUTHORITY",
"routers" : [ {
  "status" : "ACTIVE",
  "router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",
  "router_region" : "xx"
}, {
  "status" : "ACTIVE",
  "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
  "router_region" : "xx"
} ],
"enterprise_project_id" : 0
}],
"metadata" : {
  "total_count" : 2
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListPrivateZonesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListPrivateZonesRequest request = new ListPrivateZonesRequest();
        request.withType("<type>");
        request.withLimit(<limit>);
        request.withMarker("<marker>");
        request.withOffset(<offset>);
        request.withTags("<tags>");
    }
}
```

```
request.withName("<name>");
request.withStatus("<status>");
request.withSearchMode("<search_mode>");
request.withEnterpriseProjectId("<enterprise_project_id>");
try {
    ListPrivateZonesResponse response = client.listPrivateZones(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListPrivateZonesRequest()
        request.type = "<type>"
        request.limit = <limit>
        request.marker = "<marker>"
        request.offset = <offset>
        request.tags = "<tags>"
        request.name = "<name>"
        request.status = "<status>"
        request.search_mode = "<search_mode>"
        request.enterprise_project_id = "<enterprise_project_id>"
        response = client.list_private_zones(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main
```



```

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPrivateZonesRequest{}
    request.Type = "<type>"
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
    offsetRequest := int32(<offset>)
    request.Offset = &offsetRequest
    tagsRequest := "<tags>"
    request.Tags = &tagsRequest
    nameRequest := "<name>"
    request.Name = &nameRequest
    statusRequest := "<status>"
    request.Status = &statusRequest
    searchModeRequest := "<search_mode>"
    request.SearchMode = &searchModeRequest
    enterpriseProjectIdRequest := "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    response, err := client.ListPrivateZones(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying private zones

Status Code	Description
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

### 4.3.6 Querying the Name Server in a Private Zone

#### Function

This API is used to query the name server in a private zone.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/zones/{zone\_id}/nameservers

**Table 4-113** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the private zone to be queried

#### Request Parameters

**Table 4-114** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

Table 4-115 Response body parameters

Parameter	Type	Description
nameservers	Array of <a href="#">PrivateNameServer</a> objects	Name server list

Table 4-116 PrivateNameServer

Parameter	Type	Description
priority	Integer	Priority. If the value of <b>priority</b> is <b>1</b> , the DNS server is the first one to resolve domain names.
address	String	Address of the DNS server

Status code: 400

Table 4-117 Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

Status code: 404

Table 4-118 Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>

Parameter	Type	Description
message	String	Description Minimum: 2 Maximum: 512

**Status code: 500**

**Table 4-119** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: 8 Maximum: 36
message	String	Description Minimum: 2 Maximum: 512

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying the name server in a private zone

```
{
  "nameservers": [ {
    "priority": 1,
    "address": "100.125.0.81"
  }, {
    "priority": 2,
    "address": "100.125.0.82"
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
```

```
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowPrivateZoneNameServerSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowPrivateZoneNameServerRequest request = new ShowPrivateZoneNameServerRequest();
        try {
            ShowPrivateZoneNameServerResponse response = client.showPrivateZoneNameServer(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
```

```

request = ShowPrivateZoneNameServerRequest()
response = client.show_private_zone_name_server(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)

```

## Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowPrivateZoneNameServerRequest{}
    response, err := client.ShowPrivateZoneNameServer(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the name server in a private zone
400	Error response

Status Code	Description
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.3.7 Deleting a Private Zone

### Function

This API is used to delete a private zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/zones/{zone\_id}

**Table 4-120** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to be deleted

### Request Parameters

**Table 4-121** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

### Response Parameters

Status code: 200

**Table 4-122** Response body parameters

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>private</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone. The sequence number is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information
routers	Array of <a href="#">RouterWithStatus</a> objects	List of the VPCs associated with the zone

**Table 4-123** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page



**Table 4-124** RouterWithStatus

Parameter	Type	Description
status	String	Resource status
router_id	String	ID of the VPC associated with the zone
router_region	String	Region of the VPC

**Status code: 400**

**Table 4-125** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-126** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-127** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for deleting a private zone

```
{
  "id" : "ff8080825b8fc86c015b94bc6f8712c3",
  "name" : "example.com.",
  "description" : "This is an example zone.",
  "email" : "xx@example.com",
  "ttl" : 300,
  "serial" : 1,
  "masters" : [ ],
  "status" : "PENDING_DELETE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/ff8080825b8fc86c015b94bc6f8712c3"
  },
  "pool_id" : "ff8080825ab738f4015ab7513298010e",
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type" : "private",
  "created_at" : "2017-04-22T10:05:23.110",
  "updated_at" : "2017-04-22T10:05:23.959",
  "record_num" : 0,
  "routers" : [ {
    "status" : "ACTIVE",
    "router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",
    "router_region" : "xx"
  }, {
    "status" : "ACTIVE",
    "router_id" : "f0791650-db8c-4a20-8a44-a06c6e24b15b",
    "router_region" : "xx"
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeletePrivateZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeletePrivateZoneRequest request = new DeletePrivateZoneRequest();
        try {
            DeletePrivateZoneResponse response = client.deletePrivateZone(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
```

```
.with_region(DnsRegion.value_of("<YOUR REGION>")) \
.build()

try:
    request = DeletePrivateZoneRequest()
    response = client.delete_private_zone(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeletePrivateZoneRequest{}
    response, err := client.DeletePrivateZone(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for deleting a private zone

Status Code	Description
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.3.8 Modifying a Private Zone

### Function

This API is used to modify a private zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

PATCH /v2/zones/{zone\_id}

**Table 4-128** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to be modified

### Request Parameters

**Table 4-129** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-130** Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Zone description. A maximum of 255 characters are allowed.
email	No	String	Email address of the administrator managing the zone
ttl	No	Integer	Caching duration of the SOA record set (in seconds)

## Response Parameters

Status code: 202

**Table 4-131** Response body parameters

Parameter	Type	Description
id	String	Zone ID, which is a UUID used to identify the zone
name	String	Zone name
description	String	Zone description
email	String	Email address of the administrator managing the zone
zone_type	String	Zone type. The value is <b>private</b> .
ttl	Integer	TTL value of the SOA record set in the zone
serial	Integer	Sequence number used to identify zone file changes in the SOA record set of the zone, which is used for synchronization between the master and slave nodes.
status	String	Resource status
record_num	Integer	Number of record sets in the zone
pool_id	String	Pool ID of the zone, which is assigned by the system
project_id	String	Project ID of the zone
created_at	String	Time when the zone was created
updated_at	String	Time when the zone was updated

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
masters	Array of strings	Master DNS servers, from which the slave servers get DNS information
routers	Array of <a href="#">RouterWithStatus</a> objects	Information about the VPC associated with the private zone

**Table 4-132** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-133** RouterWithStatus

Parameter	Type	Description
status	String	Resource status
router_id	String	ID of the VPC associated with the zone
router_region	String	Region of the VPC

**Status code: 400**

**Table 4-134** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 404**

**Table 4-135** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-136** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Modifying the email address and description of a private zone and setting the TTL to 300s

```
PATCH https://v2/zones/{zone_id}
{
  "description": "This is an example zone.",
  "email": "xx@example.org",
  "ttl": 300
}
```

## Example Responses

**Status code: 202**

Response to the request for modifying a private zone

```
{
  "id": "ff8080825b8fc86c015b94bc6f8712c3",
  "name": "example.com.",
  "description": "This is an example zone.",
  "email": "xx@example.com",
  "ttl": 300,
  "serial": 1,
  "masters": [ ],
```



```
"status" : "ACTIVE",
"links" : {
  "self" : "https://Endpoint/v2/zones/ff8080825b8fc86c015b94bc6f8712c3"
},
"pool_id" : "ff8080825ab738f4015ab7513298010e",
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
"zone_type" : "private",
"created_at" : "2017-04-22T08:17:08.997",
"updated_at" : "2017-04-22T08:17:10.849",
"record_num" : 2,
"routers" : [ {
  "status" : "ACTIVE",
  "router_id" : "19664294-0bf6-4271-ad3a-94b8c79c6558",
  "router_region" : "xx"
} ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying the email address and description of a private zone and setting the TTL to 300s

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class UpdatePrivateZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdatePrivateZoneRequest request = new UpdatePrivateZoneRequest();
        UpdatePrivateZoneInfoReq body = new UpdatePrivateZoneInfoReq();
        body.withTtl(300);
        body.withEmail("xx@example.org");
        body.withDescription("This is an example zone.");
        request.withBody(body);
        try {
            UpdatePrivateZoneResponse response = client.updatePrivateZone(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```

```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

Modifying the email address and description of a private zone and setting the TTL to 300s

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdatePrivateZoneRequest()
        request.body = UpdatePrivateZoneInfoReq(
            ttl=300,
            email="xx@example.org",
            description="This is an example zone."
        )
        response = client.update_private_zone(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Modifying the email address and description of a private zone and setting the TTL to 300s

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
```

```

"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePrivateZoneRequest{
        ttlUpdatePrivateZoneInfoReq:= int32(300)
        emailUpdatePrivateZoneInfoReq:= "xx@example.org"
        descriptionUpdatePrivateZoneInfoReq:= "This is an example zone."
        request.Body = &model.UpdatePrivateZoneInfoReq{
            Ttl: &ttlUpdatePrivateZoneInfoReq,
            Email: &emailUpdatePrivateZoneInfoReq,
            Description: &descriptionUpdatePrivateZoneInfoReq,
        }
        response, err := client.UpdatePrivateZone(request)
        if err == nil {
            fmt.Printf("%+v\n", response)
        } else {
            fmt.Println(err)
        }
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for modifying a private zone
400	Error response
404	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.4 Record Set Management

### 4.4.1 Creating a Record Set

#### Function

This API is used to create a record set.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

POST /v2/zones/{zone\_id}/recordsets

**Table 4-137** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

#### Request Parameters

**Table 4-138** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-139** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Fully qualified domain name (FQDN) suffixed with a zone name, which is a complete host name ended with a dot

Parameter	Mandatory	Type	Description
description	No	String	(Optional) Description of the domain name. The description contains no more than 255 characters. It is left blank by default.
type	Yes	String	Record set type. <ul style="list-style-type: none"> <li>Public zones: The type can be A, AAAA, MX, CNAME, TXT, NS, SRV or CAA.</li> <li>Private zones: The value can be A, AAAA, MX, CNAME, TXT or SRV.</li> </ul>
status	No	String	Resource status
ttl	No	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect. If your service address changes frequently, set TTL to a smaller value.
records	Yes	Array of strings	Value of the record set. The value rules vary depending on the record set type.
tags	No	Array of <b>tag</b> objects	Specifies the resource tag.

**Table 4-140** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

Status code: 202

**Table 4-141** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type. <ul style="list-style-type: none"> <li>Public zones: The type can be A, AAAA, MX, CNAME, TXT, NS, SRV or CAA.</li> <li>Private zones: The value can be A, AAAA, MX, CNAME, TXT or SRV.</li> </ul>
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect. If your service address changes frequently, set TTL to a smaller value.
records	Array of strings	Record set value
create_at	String	Time when the record set was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS
update_at	String	Time when the record set was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

**Table 4-142** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

## Example Requests

Creating an A record set, with its TTL set to 3600s, value to 192.168.10.1 and 192.168.10.2

```
POST https://{endpoint}/v2/zones/{zone_id}/recordsets
{
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 3600,
  "records": [ "192.168.10.1", "192.168.10.2" ],
  "tags": [ {
    "key": "key1",
    "value": "value1"
  } ]
}
```

## Example Responses

**Status code: 202**

Response for creating a record set

```
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 300,
  "records": [ "192.168.10.1", "192.168.10.2" ],
  "status": "PENDING_CREATE",
  "links": {
    "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "create_at": "2016-11-17T12:03:17.827",
  "update_at": null,
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating an A record set, with its TTL set to 3600s, value to 192.168.10.1 and 192.168.10.2

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateRecordSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateRecordSetRequest request = new CreateRecordSetRequest();
        CreateRecordSetRequestBody body = new CreateRecordSetRequestBody();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key1")
                .withValue("value1")
        );
        List<String> listbodyRecords = new ArrayList<>();
        listbodyRecords.add("192.168.10.1");
        listbodyRecords.add("192.168.10.2");
        body.withTags(listbodyTags);
        body.withRecords(listbodyRecords);
        body.withTtl(3600);
        body.withType("A");
        body.withDescription("This is an example record set.");
        body.withName("www.example.com.");
        request.withBody(body);
        try {
            CreateRecordSetResponse response = client.createRecordSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```



## Python

Creating an A record set, with its TTL set to 3600s, value to 192.168.10.1 and 192.168.10.2

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateRecordSetRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            )
        ]
        listRecordsbody = [
            "192.168.10.1",
            "192.168.10.2"
        ]
        request.body = CreateRecordSetRequestBody(
            tags=listTagsbody,
            records=listRecordsbody,
            ttl=3600,
            type="A",
            description="This is an example record set.",
            name="www.example.com."
        )
        response = client.create_record_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Creating an A record set, with its TTL set to 3600s, value to 192.168.10.1 and 192.168.10.2

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
```

```

    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateRecordSetRequest{
        valueTags:= "value1"
        var listTagsbody = []model.Tag{
            {
                Key: "key1",
                Value: &valueTags,
            },
        }
        var listRecordsbody = []string{
            "192.168.10.1",
            "192.168.10.2",
        }
        ttlCreateRecordSetRequestBody:= int32(3600)
        descriptionCreateRecordSetRequestBody:= "This is an example record set."
        request.Body = &model.CreateRecordSetRequestBody{
            Tags: &listTagsbody,
            Records: listRecordsbody,
            Ttl: &ttlCreateRecordSetRequestBody,
            Type: "A",
            Description: &descriptionCreateRecordSetRequestBody,
            Name: "www.example.com.",
        }
    }
    response, err := client.CreateRecordSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response for creating a record set

## Error Codes

See [Error Codes](#).

## 4.4.2 Querying Record Sets in a Zone

### Function

This API is used to query record sets in a zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/zones/{zone\_id}/recordsets

**Table 4-143** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID Minimum: <b>32</b> Maximum: <b>36</b>

**Table 4-144** Query Parameters

Parameter	Mandatory	Type	Description
search_mode	No	String	Search mode. The options are as follows: <ul style="list-style-type: none"> <li>• <b>like</b>: fuzzy search</li> <li>• <b>equal</b>: exact search</li> </ul>
marker	No	String	Start resource ID at the beginning for paging query. If the parameter is left blank, only resources on the first page are queried. This parameter is left empty by default.
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> . The default value is <b>500</b> .

Parameter	Mandatory	Type	Description
offset	No	Integer	Start offset of pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> . If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
tags	No	String	Resource tag. The format is as follows: key1,value1 key2,value2. Multiple tags are separated by vertical bar ( ). The key and value of each tag are separated by comma (,).
status	No	String	Status of the record set to be queried. The value can be <b>ACTIVE, ERROR, DISABLE, FREEZE, PENDING_CREATE, PENDING_UPDATE, or PENDING_DELETE</b> .
type	No	String	Record set type. Public zones: The value can be <b>A, AAAA, MX, CNAME, TXT, NS, SRV</b> or <b>CAA</b> . Private zones: The value can be <b>A, AAAA, MX, CNAME, TXT, or SRV</b> .
name	No	String	Name of the record set to be queried. Fuzzy search will work. It is left blank by default.
id	No	String	ID of the record set to be queried. Fuzzy search will work. It is left blank by default.

Parameter	Mandatory	Type	Description
sort_key	No	String	Sorting field of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>name</b>: domain name</li> <li>• <b>type</b>: record set type</li> </ul> The default value is left blank, indicating that the record sets are not sorted.
sort_dir	No	String	Sorting order of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>desc</b>: descending order</li> <li>• <b>asc</b>: ascending order</li> </ul> The default value is left blank, indicating that the record sets are not sorted.

## Request Parameters

**Table 4-145** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-146** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

Parameter	Type	Description
recordsets	Array of <a href="#">ListRecordSets</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-147** ListRecordSets

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
create_at	String	Time when the record set was created
update_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

**Table 4-148** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-149** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying record sets in a zone

```
{
  "links" : {
    "self" : "https://Endpoint/v2/recordsets?
limit=10&marker=&name=&status=&zone_id=2c9eb155587194ec01587224c9f90149",
    "next" : "https://Endpoint/v2/recordsets?
limit=10&marker=2c9eb155587194ec01587224c9f9014a&name=&status=&zone_id=2c9eb155587194ec0158
7224c9f90149"
  },
  "recordsets" : [ {
    "id" : "2c9eb155587194ec01587224c9f9014a",
    "name" : "example.com.",
    "type" : "SOA",
    "ttl" : 300,
    "records" : [ "ns1.hotrot.de. xx.example.com. (1 7200 900 1209600 300)" ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/
2c9eb155587194ec01587224c9f9014a"
    },
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "create_at" : "2016-11-17T11:56:03.439",
    "update_at" : "2016-11-17T12:56:03.827",
    "default" : true,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
  }, {
    "id" : "2c9eb155587194ec01587224c9f9014c",
    "name" : "example.com.",
    "type" : "NS",
    "ttl" : 172800,
    "records" : [ "ns2.hotrot.de.", "ns1.hotrot.de." ],
    "status" : "ACTIVE",
    "links" : {
```

```
"self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014c"
},
"zone_id" : "2c9eb155587194ec01587224c9f90149",
"zone_name" : "example.com.",
"create_at" : "2016-11-17T11:56:03.439",
"update_at" : "2016-11-17T12:56:03.827",
"default" : true,
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
}, {
"id" : "2c9eb155587228570158722b6ac30007",
"name" : "www.example.com.",
"description" : "This is an example record set.",
"type" : "A",
"ttl" : 300,
"records" : [ "192.168.10.2", "192.168.10.1" ],
"status" : "PENDING_CREATE",
"links" : {
"self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
},
"zone_id" : "2c9eb155587194ec01587224c9f90149",
"zone_name" : "example.com.",
"create_at" : "2016-11-17T12:03:17.827",
"update_at" : "2016-11-17T12:56:03.827",
"default" : false,
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
}],
"metadata" : {
"total_count" : 3
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListRecordSetsByZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
```



```
        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
ListRecordSetsByZoneRequest request = new ListRecordSetsByZoneRequest();
request.withSearchMode("<search_mode>");
request.withMarker("<marker>");
request.withLimit(<limit>);
request.withOffset(<offset>);
request.withTags("<tags>");
request.withStatus("<status>");
request.withType("<type>");
request.withName("<name>");
request.withId("<id>");
request.withSortKey("<sort_key>");
request.withSortDir("<sort_dir>");
try {
    ListRecordSetsByZoneResponse response = client.listRecordSetsByZone(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListRecordSetsByZoneRequest()
        request.search_mode = "<search_mode>"
        request.marker = "<marker>"
        request.limit = <limit>
        request.offset = <offset>
        request.tags = "<tags>"
        request.status = "<status>"
        request.type = "<type>"
        request.name = "<name>"
        request.id = "<id>"
        request.sort_key = "<sort_key>"
        request.sort_dir = "<sort_dir>"
```

```
response = client.list_record_sets_by_zone(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListRecordSetsByZoneRequest{
        searchModeRequest:= "<search_mode>"
        request.SearchMode = &searchModeRequest
        markerRequest:= "<marker>"
        request.Marker = &markerRequest
        limitRequest:= int32(<limit>)
        request.Limit = &limitRequest
        offsetRequest:= int32(<offset>)
        request.Offset = &offsetRequest
        tagsRequest:= "<tags>"
        request.Tags = &tagsRequest
        statusRequest:= "<status>"
        request.Status = &statusRequest
        typeRequest:= "<type>"
        request.Type = &typeRequest
        nameRequest:= "<name>"
        request.Name = &nameRequest
        idRequest:= "<id>"
        request.Id = &idRequest
        sortKeyRequest:= "<sort_key>"
        request.SortKey = &sortKeyRequest
        sortDirRequest:= "<sort_dir>"
        request.SortDir = &sortDirRequest
        response, err := client.ListRecordSetsByZone(request)
        if err == nil {
            fmt.Printf("%+v\n", response)
        } else {
            fmt.Println(err)
        }
    }
}
```

```
}  
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying record sets in a zone

## Error Codes

See [Error Codes](#).

## 4.4.3 Querying a Record Set

### Function

This API is used to query a record set.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/zones/{zone\_id}/recordsets/{recordset\_id}

**Table 4-150** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID Minimum: <b>32</b> Maximum: <b>36</b>
recordset_id	Yes	String	ID of the record set to be queried Minimum: <b>32</b> Maximum: <b>36</b>

### Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-151** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
create_at	String	Time when the record set was created
update_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
bundle	String	Specification, which is the default specification. This field is reserved.

**Table 4-152** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying a record set

```
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 300,
  "records": [ "192.168.10.2", "192.168.10.1" ],
  "status": "PENDING_CREATE",
  "links": {
    "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "create_at": "2016-11-17T12:03:17.827",
  "update_at": "2016-11-17T12:03:18.827",
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "bundle": "free"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowRecordSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
```

```

        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
ShowRecordSetRequest request = new ShowRecordSetRequest();
try {
    ShowRecordSetResponse response = client.showRecordSet(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
}

```

## Python

```

# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowRecordSetRequest()
        response = client.show_record_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)

```

## Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security

```

```

risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ShowRecordSetRequest{}
response, err := client.ShowRecordSet(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying a record set

## Error Codes

See [Error Codes](#).

### 4.4.4 Querying Record Sets

#### Function

This API is used to query record sets.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2/recordsets

**Table 4-153** Query Parameters

Parameter	Mandatory	Type	Description
zone_type	No	String	<p>Zone type of the record set to be queried. The value can be <b>public</b> or <b>private</b>.</p> <ul style="list-style-type: none"> <li>• <b>public</b> (default): Record sets of public zones are queried.</li> <li>• <b>private</b>: Record sets of private zones are queried.</li> </ul> <p>Fuzzy search will work. If the value is left blank, record sets of public zones are queried by default.</p>
marker	No	String	<p>Start resource ID of pagination query. If the parameter is left blank, only resources on the first page are queried. It is left blank by default.</p>
search_mode	No	String	<p>Search mode. The options are as follows:</p> <ul style="list-style-type: none"> <li>• <b>like</b>: fuzzy search</li> <li>• <b>equal</b>: exact search</li> </ul>
limit	No	Integer	<p>Number of resources on each page. The value ranges from <b>0</b> to <b>500</b>. Commonly used values are <b>10</b>, <b>20</b>, and <b>50</b>. The default value is <b>500</b>.</p>
offset	No	Integer	<p>Start offset of pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b>. The default value is <b>0</b>. If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b>.</p>



Parameter	Mandatory	Type	Description
tags	No	String	Resource tag. The format is as follows: key1,value1 key2,value2. Multiple tags are separated by vertical bar ( ). The key and value of each tag are separated by comma (,).
status	No	String	Status of the record sets to be queried. The value can be <b>ACTIVE, ERROR, DISABLE, FREEZE, PENDING_CREATE, PENDING_UPDATE, or PENDING_DELETE.</b>
type	No	String	Record set type.- Public zones: The type can be A, AAAA, MX, CNAME, TXT, NS, SRV or CAA.- Private zones: The value can be A, AAAA, MX, CNAME, TXT or SRV.
name	No	String	Name of the record set to be queried. Fuzzy search will work. It is left blank by default.
id	No	String	ID of the record set to be queried. Fuzzy search will work. It is left blank by default.
records	No	String	Records included in the values of record sets to be queried. Fuzzy search will work. It is left blank by default.
sort_key	No	String	Sorting field of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>name</b>: domain name</li> <li>• <b>type</b>: record set type</li> </ul> The default value is left blank, indicating that the record sets are not sorted.

Parameter	Mandatory	Type	Description
sort_dir	No	String	Sorting order of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>desc</b>: descending order</li> <li>• <b>asc</b>: ascending order</li> </ul> The default value is left blank, indicating that the record sets are not sorted.

## Request Parameters

**Table 4-154** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-155** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
recordsets	Array of <a href="#">ListRecordSetWithTags</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-156** ListRecordSetsWithTags

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
create_at	String	Time when the record set was created
update_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
tags	Array of <a href="#">tag</a> objects	Resource tag

**Table 4-157** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-158** tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

**Table 4-159** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying the record sets

```
{
  "links" : {
    "self" : "https://Endpoint/v2/recordsets",
    "next" : "https://Endpoint/v2/recordsets?id=&limit=10&marker=2c9eb155587194ec01587224c9f9014a"
  },
  "recordsets" : [ {
    "id" : "2c9eb155587194ec01587224c9f9014a",
    "name" : "example.com.",
    "type" : "SOA",
    "ttl" : 300,
    "records" : [ "ns1.hotrot.de. xx.example.com. (1 7200 900 1209600 300)" ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014a"
    },
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "create_at" : "2016-11-17T11:56:03.439",
    "update_at" : "2016-11-17T11:56:03.827",
    "default" : true,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
  }, {
    "id" : "2c9eb155587194ec01587224c9f9014c",
    "name" : "example.com.",
```

```

"type" : "NS",
"ttl" : 172800,
"records" : [ "ns2.hotrot.de.", "ns1.hotrot.de." ],
"status" : "ACTIVE",
"links" : {
  "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014c"
},
"zone_id" : "2c9eb155587194ec01587224c9f90149",
"zone_name" : "example.com.",
"create_at" : "2016-11-17T11:56:03.439",
"update_at" : "2016-11-17T11:56:03.827",
"default" : true,
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
}, {
  "id" : "2c9eb155587228570158722996ca0002",
  "name" : "example.org.",
  "type" : "SOA",
  "ttl" : 300,
  "records" : [ "ns1.hotrot.de. xx.example.org. (1 7200 900 1209600 300)" ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587228570158722996c50001/recordsets/2c9eb155587228570158722996ca0002"
  },
  "zone_id" : "2c9eb155587228570158722996c50001",
  "zone_name" : "example.org.",
  "create_at" : "2016-11-17T12:01:17.996",
  "update_at" : "2016-11-17T12:56:03.827",
  "default" : true,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
}, {
  "id" : "2c9eb155587228570158722996ca0004",
  "name" : "example.org.",
  "type" : "NS",
  "ttl" : 172800,
  "records" : [ "ns2.hotrot.de.", "ns1.hotrot.de." ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587228570158722996c50001/recordsets/2c9eb155587228570158722996ca0004"
  },
  "zone_id" : "2c9eb155587228570158722996c50001",
  "zone_name" : "example.org.",
  "create_at" : "2016-11-17T12:01:17.996",
  "update_at" : "2016-11-17T12:56:03.827",
  "default" : true,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
}, {
  "id" : "2c9eb155587228570158722b6ac30007",
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
  "type" : "A",
  "ttl" : 300,
  "records" : [ "192.168.10.2", "192.168.10.1" ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id" : "2c9eb155587194ec01587224c9f90149",
  "zone_name" : "example.com.",
  "create_at" : "2016-11-17T12:03:17.827",
  "update_at" : "2016-11-17T12:56:03.827",
  "default" : false,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"
}],
"metadata" : {
  "total_count" : 5
}

```

```
}  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
public class ListRecordSetsSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListRecordSetsRequest request = new ListRecordSetsRequest();  
        request.withZoneType("<zone_type>");  
        request.withMarker("<marker>");  
        request.withSearchMode("<search_mode>");  
        request.withLimit("<limit>");  
        request.withOffset("<offset>");  
        request.withTags("<tags>");  
        request.withStatus("<status>");  
        request.withType("<type>");  
        request.withName("<name>");  
        request.withId("<id>");  
        request.withRecords("<records>");  
        request.withSortKey("<sort_key>");  
        request.withSortDir("<sort_dir>");  
        try {  
            ListRecordSetsResponse response = client.listRecordSets(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

```
}  
}
```

## Python

```
# coding: utf-8  
  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkdns.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = BasicCredentials(ak, sk) \  
  
    client = DnsClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListRecordSetsRequest()  
        request.zone_type = "<zone_type>"  
        request.marker = "<marker>"  
        request.search_mode = "<search_mode>"  
        request.limit = <limit>  
        request.offset = <offset>  
        request.tags = "<tags>"  
        request.status = "<status>"  
        request.type = "<type>"  
        request.name = "<name>"  
        request.id = "<id>"  
        request.records = "<records>"  
        request.sort_key = "<sort_key>"  
        request.sort_dir = "<sort_dir>"  
        response = client.list_record_sets(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

## Go

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

```

ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListRecordSetsRequest{}
zoneTypeRequest:= "<zone_type>"
request.ZoneType = &zoneTypeRequest
markerRequest:= "<marker>"
request.Marker = &markerRequest
searchModeRequest:= "<search_mode>"
request.SearchMode = &searchModeRequest
limitRequest:= int32(<limit>)
request.Limit = &limitRequest
offsetRequest:= int32(<offset>)
request.Offset = &offsetRequest
tagsRequest:= "<tags>"
request.Tags = &tagsRequest
statusRequest:= "<status>"
request.Status = &statusRequest
typeRequest:= "<type>"
request.Type = &typeRequest
nameRequest:= "<name>"
request.Name = &nameRequest
idRequest:= "<id>"
request.Id = &idRequest
recordsRequest:= "<records>"
request.Records = &recordsRequest
sortKeyRequest:= "<sort_key>"
request.SortKey = &sortKeyRequest
sortDirRequest:= "<sort_dir>"
request.SortDir = &sortDirRequest
response, err := client.ListRecordSets(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the record sets



## Error Codes

See [Error Codes](#).

## 4.4.5 Deleting a Record Set

### Function

This API is used to delete a record set. To delete a record set with intelligent resolution configured, you need to use the API in the multi-line record set management.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2/zones/{zone\_id}/recordsets/{recordset\_id}

**Table 4-160** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to which the record set belongs
recordset_id	Yes	String	Record set ID

### Request Parameters

**Table 4-161** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

### Response Parameters

Status code: 200

**Table 4-162** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
create_at	String	Time when the record set was created
update_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

**Table 4-163** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

## Example Requests

None

## Example Responses

**Status code: 200**

## Response to the request for deleting a record set

```
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 300,
  "status": "PENDING_DELETE",
  "links": {
    "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "create_at": "2016-11-17T12:03:17.827",
  "update_at": "2016-11-17T12:56:03.827",
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c"
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeleteRecordSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteRecordSetRequest request = new DeleteRecordSetRequest();
        try {
            DeleteRecordSetResponse response = client.deleteRecordSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteRecordSetRequest()
        response = client.delete_record_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```

```

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.DeleteRecordSetRequest{}
response, err := client.DeleteRecordSet(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for deleting a record set

## Error Codes

See [Error Codes](#).

## 4.4.6 Modifying a Record Set

### Function

This API is used to modify a record set.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2/zones/{zone\_id}/recordsets/{recordset\_id}

**Table 4-164** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID
recordset_id	Yes	String	ID of the record set to be modified

## Request Parameters

**Table 4-165** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-166** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Fully qualified domain name (FQDN) suffixed with a zone name, which is a complete host name ended with a dot
description	No	String	(Optional) Domain name description
type	Yes	String	Record set type
ttl	No	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	No	Array of strings	Value of the record set. The value rules vary depending on the record set type.

## Response Parameters

**Status code: 202**

**Table 4-167** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set

Parameter	Type	Description
zone_name	String	Zone name of the record set
type	String	Record set type. <ul style="list-style-type: none"> <li>Public zones: The type can be A, AAAA, MX, CNAME, TXT, NS, SRV or CAA.</li> <li>Private zones: The type can be A, AAAA, MX, CNAME, TXT or SRV.</li> </ul>
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
create_at	String	Time when the record set was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS
update_at	String	Time when the record set was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

**Table 4-168** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

## Example Requests

Modifying a record set, with the type set to A, TTL to 3600 seconds and value to 192.168.10.1 and 192.168.10.2

```
PUT https://{endpoint}/v2/zones/{zone_id}/recordsets/{recordset_id}
```

```
{
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
```

```
"type" : "A",  
"ttl" : 3600,  
"records" : [ "192.168.10.1", "192.168.10.2" ]  
}
```

## Example Responses

### Status code: 202

Response to the request for modifying a record set

```
{  
  "id" : "2c9eb155587228570158722b6ac30007",  
  "name" : "www.example.com.",  
  "description" : "This is an example record set.",  
  "type" : "A",  
  "ttl" : 3600,  
  "records" : [ "192.168.10.1", "192.168.10.2" ],  
  "status" : "PENDING_UPDATE",  
  "links" : {  
    "self" : "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/  
2c9eb155587228570158722b6ac30007"  
  },  
  "zone_id" : "2c9eb155587194ec01587224c9f90149",  
  "zone_name" : "example.com.",  
  "create_at" : "2016-11-17T12:03:17.827",  
  "update_at" : "2016-11-17T12:56:03.827",  
  "default" : false,  
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying a record set, with the type set to A, TTL to 3600 seconds and value to 192.168.10.1 and 192.168.10.2

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class UpdateRecordSetSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()
```



```
.withAk(ak)
.withSk(sk);

DnsClient client = DnsClient.newBuilder()
    .withCredential(auth)
    .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateRecordSetRequest request = new UpdateRecordSetRequest();
UpdateRecordSetReq body = new UpdateRecordSetReq();
List<String> listbodyRecords = new ArrayList<>();
listbodyRecords.add("192.168.10.1");
listbodyRecords.add("192.168.10.2");
body.withRecords(listbodyRecords);
body.withTtl(3600);
body.withType("A");
body.withDescription("This is an example record set.");
body.withName("www.example.com.");
request.withBody(body);
try {
    UpdateRecordSetResponse response = client.updateRecordSet(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Modifying a record set, with the type set to A, TTL to 3600 seconds and value to 192.168.10.1 and 192.168.10.2

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateRecordSetRequest()
        listRecordsbody = [
            "192.168.10.1",
            "192.168.10.2"
        ]
    ]
```

```
request.body = UpdateRecordSetReq(  
    records=listRecordsbody,  
    ttl=3600,  
    type="A",  
    description="This is an example record set.",  
    name="www.example.com."  
)  
response = client.update_record_set(request)  
print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

Modifying a record set, with the type set to A, TTL to 3600 seconds and value to 192.168.10.1 and 192.168.10.2

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := dns.NewDnsClient(  
        dns.DnsClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.UpdateRecordSetRequest{}  
    var listRecordsbody = []string{  
        "192.168.10.1",  
        "192.168.10.2",  
    }  
    ttlUpdateRecordSetReq:= int32(3600)  
    descriptionUpdateRecordSetReq:= "This is an example record set."  
    request.Body = &model.UpdateRecordSetReq{  
        Records: &listRecordsbody,  
        Ttl: &ttlUpdateRecordSetReq,  
        Type: "A",  
        Description: &descriptionUpdateRecordSetReq,  
        Name: "www.example.com.",  
    }  
    response, err := client.UpdateRecordSet(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

```
}  
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for modifying a record set

## Error Codes

See [Error Codes](#).

# 4.5 Multi-line Record Set Management

## 4.5.1 Creating a Record Set

### Function

This API is used to create a record set. This API applies only to public zones.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2.1/zones/{zone\_id}/recordsets

**Table 4-169** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

## Request Parameters

**Table 4-170** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-171** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Fully qualified domain name (FQDN) suffixed with a zone name, which is a complete host name ended with a dot
description	No	String	(Optional) Domain name description
type	Yes	String	Record set type
status	No	String	Status of the record set. The default value is <b>ENABLE</b> .
ttl	No	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	No	Array of strings	Value of the record set. The value rules vary depending on the record set type.
line	No	String	Resolution line ID
tags	No	Array of <b>tag</b> objects	Resource Tag
weight	No	Integer	Weight of the record set
alias_target	No	<b>alias_target</b> object	Domain name alias

**Table 4-172** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

**Table 4-173** alias\_target

Parameter	Mandatory	Type	Description
resource_type	No	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	No	String	Domain name of the target service

## Response Parameters

**Status code: 200**

**Table 4-174** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set

Parameter	Type	Description
type	String	Record set type. The value can be A, AAAA, MX, CNAME, TXT, NS, SRV, or CAA.
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias

**Table 4-175** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-176** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

## Example Requests

Creating an A record set, with the TTL set to 3600s, line type to default\_view, value to 192.168.10.1 and 192.168.10.2, and weight to 1

POST https://{endpoint}/v2.1/zones/{zone\_id}/recordsets

```
{
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
  "type" : "A",
  "ttl" : 3600,
  "records" : [ "192.168.10.1", "192.168.10.2" ],
  "line" : "default_view",
  "weight" : 1,
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  } ]
}
```

## Example Responses

**Status code: 200**

Response to the request for creating a record set

```
{
  "id" : "2c9eb155587228570158722b6ac30007",
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
  "type" : "A",
  "ttl" : 300,
  "records" : [ "192.168.10.1", "192.168.10.2" ],
  "status" : "PENDING_CREATE",
  "links" : {
    "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id" : "2c9eb155587194ec01587224c9f90149",
  "zone_name" : "example.com.",
  "created_at" : "2016-11-17T12:03:17.827",
  "updated_at" : null,
  "default" : false,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line" : "default_view",
  "weight" : 1,
  "health_check_id" : null
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating an A record set, with the TTL set to 3600s, line type to default\_view, value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateRecordSetWithLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();

        CreateRecordSetWithLineRequest request = new CreateRecordSetWithLineRequest();
        CreateRecordSetWithLineRequestBody body = new CreateRecordSetWithLineRequestBody();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key1")
                .withValue("value1")
        );
        List<String> listbodyRecords = new ArrayList<>();
        listbodyRecords.add("192.168.10.1");
        listbodyRecords.add("192.168.10.2");
        body.withWeight(1);
        body.withTags(listbodyTags);
        body.withLine("default_view");
        body.withRecords(listbodyRecords);
        body.withTtl(3600);
        body.withType("A");
        body.withDescription("This is an example record set.");
        body.withName("www.example.com.");
        request.withBody(body);
        try {
            CreateRecordSetWithLineResponse response = client.createRecordSetWithLine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
```



```
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

Creating an A record set, with the TTL set to 3600s, line type to default\_view, value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateRecordSetWithLineRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            )
        ]
        listRecordsbody = [
            "192.168.10.1",
            "192.168.10.2"
        ]
        request.body = CreateRecordSetWithLineRequestBody(
            weight=1,
            tags=listTagsbody,
            line="default_view",
            records=listRecordsbody,
            ttl=3600,
            type="A",
            description="This is an example record set.",
            name="www.example.com."
        )
        response = client.create_record_set_with_line(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Creating an A record set, with the TTL set to 3600s, line type to default\_view, value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateRecordSetWithLineRequest{}
    valueTags := "value1"
    var listTagsbody = []model.Tag{
        {
            Key: "key1",
            Value: &valueTags,
        },
    }
    var listRecordsbody = []string{
        "192.168.10.1",
        "192.168.10.2",
    }
    weightCreateRecordSetWithLineRequestBody := int32(1)
    lineCreateRecordSetWithLineRequestBody := "default_view"
    ttlCreateRecordSetWithLineRequestBody := int32(3600)
    descriptionCreateRecordSetWithLineRequestBody := "This is an example record set."
    request.Body = &model.CreateRecordSetWithLineRequestBody{
        Weight: &weightCreateRecordSetWithLineRequestBody,
        Tags: &listTagsbody,
        Line: &lineCreateRecordSetWithLineRequestBody,
        Records: &listRecordsbody,
        Ttl: &ttlCreateRecordSetWithLineRequestBody,
        Type: "A",
        Description: &descriptionCreateRecordSetWithLineRequestBody,
        Name: "www.example.com.",
    }
    response, err := client.CreateRecordSetWithLine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for creating a record set

## Error Codes

See [Error Codes](#).

## 4.5.2 Batch Deleting Record Sets in a Zone

### Function

This API is used to batch delete record sets in a zone. If the record sets to be deleted do not exist, the record sets are considered deleted by default. The response contains only record sets that are actually deleted.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2.1/zones/{zone\_id}/recordsets

**Table 4-177** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

## Request Parameters

**Table 4-178** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-179** Request body parameters

Parameter	Mandatory	Type	Description
recordset_ids	Yes	Array of strings	List of record set IDs You can specify a maximum of 100 IDs.

## Response Parameters

Status code: 200

**Table 4-180** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
recordsets	Array of <a href="#">QueryRecordSetWithLineResp</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-181** QueryRecordSetWithLineResp

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description

Parameter	Type	Description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias
bundle	String	Specification, which is the default specification. This field is reserved.

**Table 4-182** [pageLink](#)

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-183** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

**Table 4-184** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

Deleting record sets added to a zone in batches

```
DELETE https://{endpoint}/v2.1/zones/{zone_id}/recordsets
{
  "recordset_ids": [ "2c9eb155587194ec01587224c9f9014a", "2c9eb155587194ec01587224c9f9014c" ]
}
```

## Example Responses

**Status code: 200**

Response to the request for batch deleting record sets in a zone

```
{
  "links": {
    "self": "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets"
  },
  "recordsets": [ {
    "id": "2c9eb155587194ec01587224c9f9014a",
    "name": "example.com.",
    "type": "A",
    "ttl": 300,
    "records": [ "1.1.1.1" ],
    "status": "PENDING_DELETE",
    "links": {
      "self": "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014a"
    },
    "zone_id": "2c9eb155587194ec01587224c9f90149",
    "zone_name": "example.com.",
    "created_at": "2016-11-17T11:56:03.439",
    "updated_at": "2016-11-17T11:56:06.439",
    "default": false,
    "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  }
}
```

```
"line": "default_view",
"weight": null,
"set_id": null
}, {
  "id": "2c9eb155587194ec01587224c9f9014c",
  "name": "1.example.com.",
  "type": "A",
  "ttl": 172800,
  "records": [ "2.2.2.2" ],
  "status": "PENDING_DELETE",
  "links": {
    "self": "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014c"
  },
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "created_at": "2016-11-17T11:56:03.439",
  "updated_at": "2016-11-17T11:56:06.439",
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line": "default_view",
  "weight": null,
  "set_id": null
}],
"metadata": {
  "total_count": 2
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Deleting record sets added to a zone in batches

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchDeleteRecordSetWithLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
BatchDeleteRecordSetWithLineRequest request = new BatchDeleteRecordSetWithLineRequest();
BatchDeleteRecordSetWithLineRequestBody body = new BatchDeleteRecordSetWithLineRequestBody();
List<String> listbodyRecordsetIds = new ArrayList<>();
listbodyRecordsetIds.add("2c9eb155587194ec01587224c9f9014a");
listbodyRecordsetIds.add("2c9eb155587194ec01587224c9f9014c");
body.withRecordsetIds(listbodyRecordsetIds);
request.withBody(body);
try {
    BatchDeleteRecordSetWithLineResponse response = client.batchDeleteRecordSetWithLine(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Deleting record sets added to a zone in batches

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteRecordSetWithLineRequest()
        listRecordsetIdsbody = [
            "2c9eb155587194ec01587224c9f9014a",
            "2c9eb155587194ec01587224c9f9014c"
        ]
        request.body = BatchDeleteRecordSetWithLineRequestBody(
            recordset_ids=listRecordsetIdsbody
        )
        response = client.batch_delete_record_set_with_line(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```



```
print(e.error_code)
print(e.error_msg)
```

## Go

### Deleting record sets added to a zone in batches

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteRecordSetWithLineRequest{}
    var listRecordsetIdsbody = []string{
        "2c9eb155587194ec01587224c9f9014a",
        "2c9eb155587194ec01587224c9f9014c",
    }
    request.Body = &model.BatchDeleteRecordSetWithLineRequestBody{
        RecordsetIds: listRecordsetIdsbody,
    }
    response, err := client.BatchDeleteRecordSetWithLine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for batch deleting record sets in a zone

## Error Codes

See [Error Codes](#).

## 4.5.3 Batch Modifying Record Sets

### Function

This API is used to batch modify record sets. This operation is atomic. It either modifies all record sets or does not modify any record set. Only public zones are supported.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2.1/zones/{zone\_id}/recordsets

**Table 4-185** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

### Request Parameters

**Table 4-186** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-187** Request body parameters

Parameter	Mandatory	Type	Description
recordsets	Yes	Array of <a href="#">batchUpdate RecordSet</a> objects	Record set list

**Table 4-188** batchUpdateRecordSet

Parameter	Mandatory	Type	Description
id	Yes	String	Record set ID
description	No	String	Record set description
ttl	No	Integer	Caching duration of the record set, in seconds. The value ranges from <b>300</b> to <b>2147483647</b> . The default value is <b>300</b> .
weight	No	Integer	Weight of the record set. The default value is <b>null</b> . If <b>weight</b> is set to <b>null</b> , no weight is set for the record set. If <b>weight</b> is set to <b>0</b> , the record set is a secondary one. If <b>weight</b> is larger than 0, the record set is a primary one. The value ranges from <b>0</b> to <b>100</b> . For record sets with the same domain name, type, and line, the rules are as follows: - Set weights for all record sets or do not set any weight.- If no weight is set, only one record set can be created. - When a weight is set, a maximum of 20 record sets can be created.
records	Yes	Array of strings	Value of the record set. The value rules vary depending on the record set type.

## Response Parameters

Status code: 200

**Table 4-189** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

Parameter	Type	Description
recordsets	Array of <a href="#">QueryRecordSetWithLineResp</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-190** QueryRecordSetWithLineResp

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID

Parameter	Type	Description
alias_target	<a href="#">alias_target</a> object	Domain name alias
bundle	String	Specification, which is the default specification. This field is reserved.

**Table 4-191** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-192** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>• <b>cloudsite</b>: CloudSite</li> <li>• <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

**Table 4-193** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

Modifying record sets in batches, with the TTL of the record set (ID: 2c9eb155587194ec01587224c9f9014a) set to 3600s, value to 192.168.10.1 and 192.168.10.2, and weight to 10, and the TTL of another record set (ID: 2c9eb155587194ec01587224c9f9014c) to 300s, value to fe80:0:0:0:202:b3ff:fe1e:8329 and ff03:0db8:85a3:0:0:8a2e:0370. 7334, and weight to 5

```
PUT https://{endpoint}/v2.1/zones/{zone_id}/recordsets
```

```
{
```

```
"recordsets" : [ {
  "id" : "2c9eb155587194ec01587224c9f9014a",
  "description" : "This is an type A record set.",
  "ttl" : 3600,
  "weight" : 10,
  "records" : [ "192.168.10.1", "192.168.10.2" ]
}, {
  "id" : "2c9eb155587194ec01587224c9f9014c",
  "description" : "This is an type AAAA record set.",
  "ttl" : 300,
  "weight" : 5,
  "records" : [ "fe80:0:0:0:202:b3ff:fe1e:8329", "ff03:0db8:85a3:0:0:8a2e:0370:7334" ]
} ]
}
```

## Example Responses

**Status code: 200**

Response to the request for batch modifying record sets

```
{
  "links" : {
    "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/batch/lines"
  },
  "recordsets" : [ {
    "id" : "2c9eb155587228570158722b6ac30007",
    "name" : "www.example.com.",
    "description" : "This is an example record set.",
    "type" : "A",
    "ttl" : 300,
    "records" : [ "192.168.10.2", "192.168.10.1" ],
    "status" : "PENDING_CREATE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
    },
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "created_at" : "2016-11-17T12:03:17.827",
    "updated_at" : null,
    "health_check_id" : "e55c6f3dc4e34c8e86353b664ae0e89f",
    "default" : false,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "default_view",
    "weight" : 0
  }, {
    "id" : "2c9eb155587228570158722b6ac30008",
    "name" : "www.example.com.",
    "description" : "This is an example record set.",
    "type" : "A",
    "ttl" : 300,
    "records" : [ "192.168.10.2", "192.168.10.1" ],
    "status" : "PENDING_CREATE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30008"
    },
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "created_at" : "2016-11-17T12:03:17.827",
    "updated_at" : null,
    "health_check_id" : "e55c6f3dc4e34c8e86353b664ae0e89c",
    "default" : false,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "Abroad",
    "weight" : 0
  } ],
  "metadata" : {
```

```
"total_count" : 2
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying record sets in batches, with the TTL of the record set (ID: 2c9eb155587194ec01587224c9f9014a) set to 3600s, value to 192.168.10.1 and 192.168.10.2, and weight to 10, and the TTL of another record set (ID: 2c9eb155587194ec01587224c9f9014c) to 300s, value to fe80:0:0:0:202:b3ff:fe1e:8329 and ff03:0db8:85a3:0:0:8a2e:0370. 7334, and weight to 5

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchUpdateRecordSetWithLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();

        BatchUpdateRecordSetWithLineRequest request = new BatchUpdateRecordSetWithLineRequest();
        BatchUpdateRecordSetWithLineReq body = new BatchUpdateRecordSetWithLineReq();
        List<String> listRecordsetsRecords = new ArrayList<>();
        listRecordsetsRecords.add("fe80:0:0:0:202:b3ff:fe1e:8329");
        listRecordsetsRecords.add("ff03:0db8:85a3:0:0:8a2e:0370:7334");
        List<String> listRecordsetsRecords1 = new ArrayList<>();
        listRecordsetsRecords1.add("192.168.10.1");
        listRecordsetsRecords1.add("192.168.10.2");
        List<BatchUpdateRecordSet> listbodyRecordsets = new ArrayList<>();
        listbodyRecordsets.add(
            new BatchUpdateRecordSet()
                .withId("2c9eb155587194ec01587224c9f9014a")
                .withDescription("This is an type A record set.")
                .withTtl(3600)
                .withWeight(10)
                .withRecords(listRecordsetsRecords1)
        );
    }
}
```

```
);
listbodyRecordsets.add(
    new BatchUpdateRecordSet(
        .withId("2c9eb155587194ec01587224c9f9014c")
        .withDescription("This is an type AAAA record set.")
        .withTtl(300)
        .withWeight(5)
        .withRecords(listRecordsetsRecords)
    );
body.withRecordsets(listbodyRecordsets);
request.withBody(body);
try {
    BatchUpdateRecordSetWithLineResponse response = client.batchUpdateRecordSetWithLine(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Modifying record sets in batches, with the TTL of the record set (ID: 2c9eb155587194ec01587224c9f9014a) set to 3600s, value to 192.168.10.1 and 192.168.10.2, and weight to 10, and the TTL of another record set (ID: 2c9eb155587194ec01587224c9f9014c) to 300s, value to fe80:0:0:0:202:b3ff:fe1e:8329 and ff03:0db8:85a3:0:0:8a2e:0370. 7334, and weight to 5

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchUpdateRecordSetWithLineRequest()
        listRecordsRecordsets = [
            "fe80:0:0:0:202:b3ff:fe1e:8329",
            "ff03:0db8:85a3:0:0:8a2e:0370:7334"
        ]
        listRecordsRecordsets1 = [
```



```
"192.168.10.1",
"192.168.10.2"
]
listRecordsetsbody = [
  BatchUpdateRecordSet(
    id="2c9eb155587194ec01587224c9f9014a",
    description="This is an type A record set.",
    ttl=3600,
    weight=10,
    records=listRecordsRecordsets1
  ),
  BatchUpdateRecordSet(
    id="2c9eb155587194ec01587224c9f9014c",
    description="This is an type AAAA record set.",
    ttl=300,
    weight=5,
    records=listRecordsRecordsets
  )
]
request.body = BatchUpdateRecordSetWithLineReq(
  recordsets=listRecordsetsbody
)
response = client.batch_update_record_set_with_line(request)
print(response)
except exceptions.ClientRequestException as e:
  print(e.status_code)
  print(e.request_id)
  print(e.error_code)
  print(e.error_msg)
```

## Go

Modifying record sets in batches, with the TTL of the record set (ID: 2c9eb155587194ec01587224c9f9014a) set to 3600s, value to 192.168.10.1 and 192.168.10.2, and weight to 10, and the TTL of another record set (ID: 2c9eb155587194ec01587224c9f9014c) to 300s, value to fe80:0:0:0:202:b3ff:fe1e:8329 and ff03:0db8:85a3:0:0:8a2e:0370. 7334, and weight to 5

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

```

Build()

request := &model.BatchUpdateRecordSetWithLineRequest{}
var listRecordsRecordsets = []string{
    "fe80:0:0:0:202:b3ff:fe1e:8329",
    "ff03:0db8:85a3:0:0:8a2e:0370:7334",
}
var listRecordsRecordsets1 = []string{
    "192.168.10.1",
    "192.168.10.2",
}
descriptionRecordsets:= "This is an type A record set."
ttlRecordsets:= int32(3600)
weightRecordsets:= int32(10)
descriptionRecordsets1:= "This is an type AAAA record set."
ttlRecordsets1:= int32(300)
weightRecordsets1:= int32(5)
var listRecordsbody = []model.BatchUpdateRecordSet{
    {
        Id: "2c9eb155587194ec01587224c9f9014a",
        Description: &descriptionRecordsets,
        Ttl: &ttlRecordsets,
        Weight: &weightRecordsets,
        Records: listRecordsRecordsets1,
    },
    {
        Id: "2c9eb155587194ec01587224c9f9014c",
        Description: &descriptionRecordsets1,
        Ttl: &ttlRecordsets1,
        Weight: &weightRecordsets1,
        Records: listRecordsRecordsets,
    },
}
request.Body = &model.BatchUpdateRecordSetWithLineReq{
    Recordsets: listRecordsbody,
}
response, err := client.BatchUpdateRecordSetWithLine(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for batch modifying record sets

## Error Codes

See [Error Codes](#).

## 4.5.4 Querying a Record Set

### Function

This API is used to query a record set. This API applies only to public zones.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2.1/zones/{zone\_id}/recordsets/{recordset\_id}

**Table 4-194** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID
recordset_id	Yes	String	ID of the record set to be queried

### Request Parameters

**Table 4-195** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

### Response Parameters

**Status code: 200**

**Table 4-196** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description

Parameter	Type	Description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias
bundle	String	Specification, which is the default specification. This field is reserved.

**Table 4-197** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-198** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying a record set

```
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 300,
  "records": [ "192.168.10.2", "192.168.10.1" ],
  "status": "ACTIVE",
  "links": {
    "self": "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "alias_target": null,
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "created_at": "2016-11-17T12:03:17.827",
  "updated_at": "2016-11-17T12:56:03.827",
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line": "default_view",
  "weight": 1,
  "health_check_id": null,
  "bundle": "free"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
```

```
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowRecordSetWithLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowRecordSetWithLineRequest request = new ShowRecordSetWithLineRequest();
        try {
            ShowRecordSetWithLineResponse response = client.showRecordSetWithLine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
```

```

request = ShowRecordSetWithLineRequest()
response = client.show_record_set_with_line(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)

```

## Go

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowRecordSetWithLineRequest{}
    response, err := client.ShowRecordSetWithLine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying a record set

## Error Codes

See [Error Codes](#).

## 4.5.5 Querying Record Sets

### Function

This API is used to query record sets.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2.1/recordsets

**Table 4-199** Query Parameters

Parameter	Mandatory	Type	Description
zone_type	No	String	Zone type of the record set to be queried. The value is <b>public</b> (default). Fuzzy search will work.
marker	No	String	Start resource ID of pagination query. If the parameter is left blank, only resources on the first page are queried. It is left blank by default.
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> . The default value is <b>500</b> .
offset	No	Integer	Start offset of pagination query. The query will start from the next resource of the offset value.  The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> .  If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
line_id	No	String	Resolution line ID



Parameter	Mandatory	Type	Description
tags	No	String	Resource tag. The format is as follows: key1,value1 key2,value2. Multiple tags are separated by vertical bar ( ). The key and value of each tag are separated by comma (,).
status	No	String	Status of the record sets to be queried. The value can be <b>ACTIVE</b> , <b>ERROR</b> , <b>DISABLE</b> , <b>FREEZE</b> , <b>PENDING_CREATE</b> , <b>PENDING_UPDATE</b> , or <b>PENDING_DELETE</b> .
type	No	String	Record set type. The value can be A, CNAME, MX, AAAA, TXT, SRV, NS, or CAA.
name	No	String	Name of the record set to be queried. Fuzzy search will work. It is left blank by default.
id	No	String	ID of the record set to be queried. Fuzzy search will work. It is left blank by default.
records	No	String	Records included in the values of record sets to be queried. Fuzzy search will work. It is left blank by default.
sort_key	No	String	Sorting field of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>name</b>: domain name</li> <li>• <b>type</b>: record set type</li> </ul> The default value is left blank, indicating that the record sets are not sorted.

Parameter	Mandatory	Type	Description
sort_dir	No	String	Sorting order of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>desc</b>: descending order</li> <li>• <b>asc</b>: ascending order</li> </ul> The default value is left blank, indicating that the record sets are not sorted.
health_check_id	No	String	Health check ID. Fuzzy search will work. It is left blank by default.
search_mode	No	String	Search mode. The options are as follows: <ul style="list-style-type: none"> <li>• <b>like</b>: fuzzy search</li> <li>• <b>equal</b>: exact search</li> </ul>

## Request Parameters

**Table 4-200** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-201** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

Parameter	Type	Description
recordsets	Array of <a href="#">QueryRecordSetWithLineAndTagsResp</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-202** QueryRecordSetWithLineAndTagsResp

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
tags	Array of <a href="#">tag</a> objects	Resource tag
line	String	Resolution line ID

Parameter	Type	Description
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias

**Table 4-203** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-204** tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

**Table 4-205** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

**Table 4-206** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

None

## Example Responses

**Status code: 200**

Record set list

```
{
  "links" : {
    "self" : "https://Endpoint/v2.1/recordsets",
    "next" : "https://Endpoint/v2.1/recordsets?id=&limit=10&marker=2c9eb155587194ec01587224c9f9014a"
  },
  "recordsets" : [ {
    "id" : "2c9eb155587194ec01587224c9f9014a",
    "name" : "example.com.",
    "type" : "SOA",
    "ttl" : 300,
    "records" : [ "ns1.hotrot.de. xx.example.com. (1 7200 900 1209600 300)" ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014a"
    }
  },
  "alias_target" : null,
  "zone_id" : "2c9eb155587194ec01587224c9f90149",
  "zone_name" : "example.com.",
  "created_at" : "2016-11-17T11:56:03.439",
  "updated_at" : "2016-11-17T11:56:06.439",
  "default" : true,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line" : "default_view",
  "weight" : 1,
  "health_check_id" : null
}, {
  "id" : "2c9eb155587194ec01587224c9f9014c",
  "name" : "example.com.",
  "type" : "NS",
  "ttl" : 172800,
  "records" : [ "ns2.hotrot.de.", "ns1.hotrot.de." ],
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587194ec01587224c9f9014c"
  }
},
  "alias_target" : null,
  "zone_id" : "2c9eb155587194ec01587224c9f90149",
  "zone_name" : "example.com.",
  "created_at" : "2016-11-17T11:56:03.439",
  "updated_at" : "2016-11-17T11:56:06.439",
  "default" : true,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line" : "default_view",
  "weight" : 1,

```

```

    "health_check_id" : null
  }, {
    "id" : "2c9eb155587228570158722996ca0002",
    "name" : "example.org.",
    "type" : "SOA",
    "ttl" : 300,
    "records" : [ "ns1.hotrot.de. xx.example.org. (1 7200 900 1209600 300)" ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587228570158722996c50001/recordsets/2c9eb155587228570158722996ca0002"
    },
    "alias_target" : null,
    "zone_id" : "2c9eb155587228570158722996c50001",
    "zone_name" : "example.org.",
    "created_at" : "2016-11-17T12:01:17.996",
    "updated_at" : "2016-11-17T12:56:06.439",
    "default" : true,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "xxx",
    "weight" : 1,
    "health_check_id" : null
  }, {
    "id" : "2c9eb155587228570158722996ca0004",
    "name" : "example.org.",
    "type" : "NS",
    "ttl" : 172800,
    "records" : [ "ns2.hotrot.de.", "ns1.hotrot.de." ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587228570158722996c50001/recordsets/2c9eb155587228570158722996ca0004"
    },
    "alias_target" : null,
    "zone_id" : "2c9eb155587228570158722996c50001",
    "zone_name" : "example.org.",
    "created_at" : "2016-11-17T12:01:17.996",
    "updated_at" : "2016-11-17T12:56:06.439",
    "default" : false,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "xxx",
    "weight" : 1,
    "health_check_id" : null
  }, {
    "id" : "2c9eb155587228570158722b6ac30007",
    "name" : "www.example.com.",
    "description" : "This is an example record set.",
    "type" : "A",
    "ttl" : 300,
    "records" : [ "abc.bcd.com." ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
    },
    "alias_target" : {
      "resource_type" : "cloudsite",
      "resource_domain_name" : "2018122216193840mjysxoqn.cname.ysjianzhan.cn."
    },
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "created_at" : "2016-11-17T12:03:17.827",
    "updated_at" : "2016-11-17T12:56:06.439",
    "default" : false,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "default_view",
    "weight" : 1,
    "health_check_id" : null
  } ],

```

```
"metadata" : {  
  "total_count" : 5  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
public class ListRecordSetsWithLineSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListRecordSetsWithLineRequest request = new ListRecordSetsWithLineRequest();  
        request.withZoneType("<zone_type>");  
        request.withMarker("<marker>");  
        request.withLimit("<limit>");  
        request.withOffset("<offset>");  
        request.withLineId("<line_id>");  
        request.withTags("<tags>");  
        request.withStatus("<status>");  
        request.withType("<type>");  
        request.withName("<name>");  
        request.withId("<id>");  
        request.withRecords("<records>");  
        request.withSortKey("<sort_key>");  
        request.withSortDir("<sort_dir>");  
        request.withHealthCheckId("<health_check_id>");  
        request.withSearchMode("<search_mode>");  
        try {  
            ListRecordSetsWithLineResponse response = client.listRecordSetsWithLine(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
        }  
    }  
}
```

```
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListRecordSetsWithLineRequest()
        request.zone_type = "<zone_type>"
        request.marker = "<marker>"
        request.limit = <limit>
        request.offset = <offset>
        request.line_id = "<line_id>"
        request.tags = "<tags>"
        request.status = "<status>"
        request.type = "<type>"
        request.name = "<name>"
        request.id = "<id>"
        request.records = "<records>"
        request.sort_key = "<sort_key>"
        request.sort_dir = "<sort_dir>"
        request.health_check_id = "<health_check_id>"
        request.search_mode = "<search_mode>"
        response = client.list_record_sets_with_line(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)
```



```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListRecordSetsWithLineRequest{}
    zoneTypeRequest := "<zone_type>"
    request.ZoneType = &zoneTypeRequest
    markerRequest := "<marker>"
    request.Marker = &markerRequest
    limitRequest := int32(<limit>)
    request.Limit = &limitRequest
    offsetRequest := int32(<offset>)
    request.Offset = &offsetRequest
    lineIdRequest := "<line_id>"
    request.LineId = &lineIdRequest
    tagsRequest := "<tags>"
    request.Tags = &tagsRequest
    statusRequest := "<status>"
    request.Status = &statusRequest
    typeRequest := "<type>"
    request.Type = &typeRequest
    nameRequest := "<name>"
    request.Name = &nameRequest
    idRequest := "<id>"
    request.Id = &idRequest
    recordsRequest := "<records>"
    request.Records = &recordsRequest
    sortKeyRequest := "<sort_key>"
    request.SortKey = &sortKeyRequest
    sortDirRequest := "<sort_dir>"
    request.SortDir = &sortDirRequest
    healthCheckIdRequest := "<health_check_id>"
    request.HealthCheckId = &healthCheckIdRequest
    searchModeRequest := "<search_mode>"
    request.SearchMode = &searchModeRequest
    response, err := client.ListRecordSetsWithLine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Record set list

## Error Codes

See [Error Codes](#).

## 4.5.6 Batch Creating Record Sets for Lines

### Function

This API is used to batch create record sets for lines. This is an atomic operation. If a parameter fails to pass the verification, the creation fails. Only public zones are supported.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2.1/zones/{zone\_id}/recordsets/batch/lines

**Table 4-207** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

### Request Parameters

**Table 4-208** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-209** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	FQDN suffixed with a zone name, which is a complete host name ended with a dot
description	No	String	(Optional) Domain name description. A maximum of 255 characters are allowed.
type	Yes	String	Record set type. The value can be A, AAAA, MX, CNAME, TXT, NS, SRV, or CAA.
lines	Yes	Array of <a href="#">batchCreateRecordSetWithLine</a> objects	Resolution line. You can create a maximum of 50 record sets.

**Table 4-210** batchCreateRecordSetWithLine

Parameter	Mandatory	Type	Description
line	Yes	String	Resolution line ID
ttl	No	Integer	Caching duration of the record set, in seconds. The value ranges from <b>300</b> to <b>2147483647</b> . The default value is <b>300</b> .
weight	No	Integer	Weight of the record set. The default value is <b>1</b> . If <b>weight</b> is set to <b>null</b> , no weight is set for the record set. If <b>weight</b> is set to <b>0</b> , the record set is a secondary one. If <b>weight</b> is larger than 0, the record set is a primary one. The value ranges from <b>0</b> to <b>100</b> . For record sets with the same domain name, type, and line, the rules are as follows: - Set weights for all record sets or do not set any weight.- If no weight is set, only one record set can be created. - When a weight is set, a maximum of 20 record sets can be created.

Parameter	Mandatory	Type	Description
records	Yes	Array of strings	Value of the record set. The value rules vary depending on the record set type.

## Response Parameters

Status code: 200

**Table 4-211** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
recordsets	Array of <a href="#">QueryRecordSetWithLineResp</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-212** QueryRecordSetWithLineResp

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created

Parameter	Type	Description
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias
bundle	String	Specification, which is the default specification. This field is reserved.

**Table 4-213** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-214** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

**Table 4-215** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

Creating an A record set for multiple lines, with the line type set to default\_view, record set value to 3.3.3.3, TTL to 300s, and weight to 1

```
POST https://{endpoint}/zones/{zone_id}/recordsets/batch/lines
```

```
{
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
  "type" : "A",
  "lines" : [ {
    "line" : "default_view",
    "records" : [ "3.3.3.3" ],
    "ttl" : 300,
    "weight" : 1
  } ]
}
```

## Example Responses

**Status code: 200**

Response to the request for batch creating record sets for lines

```
{
  "links" : {
    "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/batch/lines"
  },
  "recordsets" : [ {
    "id" : "2c9eb155587228570158722b6ac30007",
    "name" : "www.example.com.",
    "description" : "This is an example record set.",
    "type" : "A",
    "ttl" : 300,
    "records" : [ "192.168.10.2", "192.168.10.1" ],
    "status" : "PENDING_CREATE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
    },
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "created_at" : "2016-11-17T12:03:17.827",
    "updated_at" : null,
    "health_check_id" : "e55c6f3dc4e34c8e86353b664ae0e89f",
    "default" : false,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "default_view",
    "weight" : 0
  }, {
    "id" : "2c9eb155587228570158722b6ac30008",
    "name" : "www.example.com.",
    "description" : "This is an example record set.",
    "type" : "A",
```

```
"ttl" : 300,
"records" : [ "192.168.10.2", "192.168.10.1" ],
"status" : "PENDING_CREATE",
"links" : {
  "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30008"
},
"zone_id" : "2c9eb155587194ec01587224c9f90149",
"zone_name" : "example.com.",
"created_at" : "2016-11-17T12:03:17.827",
"updated_at" : null,
"health_check_id" : "e55c6f3dc4e34c8e86353b664ae0e89c",
"default" : false,
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
"line" : "Abroad",
"weight" : 0
}],
"metadata" : {
  "total_count" : 2
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating an A record set for multiple lines, with the line type set to `default_view`, record set value to 3.3.3.3, TTL to 300s, and weight to 1

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateRecordSetWithBatchLinesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateRecordSetWithBatchLinesRequest request = new CreateRecordSetWithBatchLinesRequest();
        CreateRSetBatchLinesReq body = new CreateRSetBatchLinesReq();
        List<String> listLinesRecords = new ArrayList<>();
```

```
listLinesRecords.add("3.3.3.3");
List<BatchCreateRecordSetWithLine> listbodyLines = new ArrayList<>();
listbodyLines.add(
    new BatchCreateRecordSetWithLine()
        .withLine("default_view")
        .withTtl(300)
        .withWeight(1)
        .withRecords(listLinesRecords)
);
body.withLines(listbodyLines);
body.withType("A");
body.withDescription("This is an example record set.");
body.withName("www.example.com.");
request.withBody(body);
try {
    CreateRecordSetWithBatchLinesResponse response = client.createRecordSetWithBatchLines(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Creating an A record set for multiple lines, with the line type set to `default_view`, record set value to `3.3.3.3`, TTL to `300s`, and weight to `1`

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateRecordSetWithBatchLinesRequest()
        listRecordsLines = [
            "3.3.3.3"
        ]
        listLinesbody = [
            BatchCreateRecordSetWithLine(
                line="default_view",
                ttl=300,
                weight=1,
            )
        ]
        request.with_body(listRecordsLines, listLinesbody)
        response = client.create_record_set_with_batch_lines(request)
        print(response)
```



```
        records=listRecordsLines
    )
]
request.body = CreateRSetBatchLinesReq(
    lines=listLinesbody,
    type="A",
    description="This is an example record set.",
    name="www.example.com."
)
response = client.create_record_set_with_batch_lines(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Creating an A record set for multiple lines, with the line type set to `default_view`, record set value to `3.3.3.3`, TTL to `300s`, and weight to `1`

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateRecordSetWithBatchLinesRequest{}
    var listRecordsLines = []string{
        "3.3.3.3",
    }
    ttlLines:= int32(300)
    weightLines:= int32(1)
    var listLinesbody = []model.BatchCreateRecordSetWithLine{
        {
            Line: "default_view",
            Ttl: &ttlLines,
            Weight: &weightLines,
            Records: listRecordsLines,
        },
    }
    descriptionCreateRSetBatchLinesReq:= "This is an example record set."
    request.Body = &model.CreateRSetBatchLinesReq{
        Lines: listLinesbody,
```

```

Type: "A",
Description: &descriptionCreateRSetBatchLinesReq,
Name: "www.example.com.",
}
response, err := client.CreateRecordSetWithBatchLines(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for batch creating record sets for lines

## Error Codes

See [Error Codes](#).

## 4.5.7 Querying Record Sets in a Zone

### Function

This API is used to query record sets in a zone.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2.1/zones/{zone\_id}/recordsets

**Table 4-216** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID

**Table 4-217** Query Parameters

Parameter	Mandatory	Type	Description
marker	No	String	Start resource ID of pagination query. If the parameter is left blank, only resources on the first page are queried. It is left blank by default.
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> . The default value is <b>500</b> .
offset	No	Integer	Start offset of pagination query. The query will start from the next resource of the offset value.  The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> .  If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
line_id	No	String	Resolution Line ID
tags	No	String	Resource tag. The format is as follows: key1,value1 key2,value2. Multiple tags are separated by vertical bar ( ). The key and value of each tag are separated by comma (,).
status	No	String	Status of the record sets to be queried. The value can be <b>ACTIVE</b> , <b>ERROR</b> , <b>DISABLE</b> , <b>FREEZE</b> , <b>PENDING_CREATE</b> , <b>PENDING_UPDATE</b> , or <b>PENDING_DELETE</b> .
type	No	String	Record set type. <ul style="list-style-type: none"> <li>Public zones: The type can be A, AAAA, MX, CNAME, TXT, NS, SRV or CAA.</li> <li>Private zones: The value can be A, AAAA, MX, CNAME, TXT or SRV.</li> </ul>

Parameter	Mandatory	Type	Description
name	No	String	Name of the record set to be queried. Fuzzy search will work. It is left blank by default.
id	No	String	ID of the record set to be queried. Fuzzy search will work. It is left blank by default.
sort_key	No	String	Sorting field of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>name</b>: domain name</li> <li>• <b>type</b>: record set type</li> </ul> The default value is left blank, indicating that the record sets are not sorted.
sort_dir	No	String	Sorting order of the record sets in the list. Value options: <ul style="list-style-type: none"> <li>• <b>desc</b>: descending order</li> <li>• <b>asc</b>: ascending order</li> </ul> The default value is left blank, indicating that the record sets are not sorted.
search_mode	No	String	Search mode. The options are as follows: <ul style="list-style-type: none"> <li>• <b>like</b>: fuzzy search</li> <li>• <b>equal</b>: exact search</li> </ul>

## Request Parameters

**Table 4-218** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-219** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
recordsets	Array of <a href="#">ShowRecordSetByZoneResponse</a> objects	Record set list
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-220** ShowRecordSetByZoneResp

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type. The value can be A, AAAA, MX, CNAME, TXT, NS, SRV, or CAA.
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
create_at	String	Time when the record set was created
update_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias

**Table 4-221** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-222** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

**Table 4-223** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

None

## Example Responses

### Status code: 200

This API is used to query record sets in a zone.

```
{
  "links" : {
    "self" : "https://Endpoint/v2.1/recordsets?
limit=10&marker=&name=&status=&zone_id=2c9eb155587194ec01587224c9f90149",
    "next" : "https://Endpoint/v2.1/recordsets?
limit=10&marker=2c9eb155587194ec01587224c9f9014a&name=&status=&zone_id=2c9eb155587194ec0158
7224c9f90149"
  },
  "recordsets" : [ {
    "id" : "2c9eb155587194ec01587224c9f9014a",
    "name" : "example.com.",
    "type" : "SOA",
    "ttl" : 300,
    "records" : [ "ns1.hotrot.de. xx.example.com. (1 7200 900 1209600 300)" ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/
2c9eb155587194ec01587224c9f9014a"
    },
    "alias_target" : null,
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "create_at" : "2016-11-17T11:56:03.439",
    "update_at" : "2016-11-17T11:56:06.439",
    "default" : true,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "default_view",
    "weight" : 1,
    "health_check_id" : null
  }, {
    "id" : "2c9eb155587194ec01587224c9f9014c",
    "name" : "example.com.",
    "type" : "NS",
    "ttl" : 172800,
    "records" : [ "ns2.hotrot.de.", "ns1.hotrot.de." ],
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/
2c9eb155587194ec01587224c9f9014c"
    },
    "alias_target" : null,
    "zone_id" : "2c9eb155587194ec01587224c9f90149",
    "zone_name" : "example.com.",
    "create_at" : "2016-11-17T11:56:03.439",
    "update_at" : "2016-11-17T11:56:06.439",
    "default" : true,
    "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
    "line" : "default_view",
    "weight" : 1,
    "health_check_id" : null
  }, {
    "id" : "2c9eb155587228570158722b6ac30007",
    "name" : "www.example.com.",
    "description" : "This is an example record set.",
    "type" : "A",
    "ttl" : 300,
    "records" : [ "192.168.10.2", "192.168.10.1" ],
    "status" : "PENDING_CREATE",
    "links" : {
      "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/
2c9eb155587228570158722b6ac30007"
    },
    "alias_target" : null,
  }
]
```

```
"zone_id" : "2c9eb155587194ec01587224c9f90149",
"zone_name" : "example.com.",
"create_at" : "2016-11-17T12:03:17.827",
"update_at" : "2016-11-17T12:56:06.439",
"default" : false,
"project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
"line" : "default_view",
"weight" : 1,
"health_check_id" : null
}],
"metadata" : {
  "total_count" : 3
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowRecordSetByZoneSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowRecordSetByZoneRequest request = new ShowRecordSetByZoneRequest();
        request.withMarker("<marker>");
        request.withLimit("<limit>");
        request.withOffset("<offset>");
        request.withLineId("<line_id>");
        request.withTags("<tags>");
        request.withStatus("<status>");
        request.withType("<type>");
        request.withName("<name>");
        request.withId("<id>");
        request.withSortKey("<sort_key>");
        request.withSortDir("<sort_dir>");
        request.withSearchMode("<search_mode>");
        try {
            ShowRecordSetByZoneResponse response = client.showRecordSetByZone(request);
            System.out.println(response.toString());
        }
    }
}
```



```
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowRecordSetByZoneRequest()
        request.marker = "<marker>"
        request.limit = <limit>
        request.offset = <offset>
        request.line_id = "<line_id>"
        request.tags = "<tags>"
        request.status = "<status>"
        request.type = "<type>"
        request.name = "<name>"
        request.id = "<id>"
        request.sort_key = "<sort_key>"
        request.sort_dir = "<sort_dir>"
        request.search_mode = "<search_mode>"
        response = client.show_record_set_by_zone(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowRecordSetByZoneRequest{}
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    lineIdRequest:= "<line_id>"
    request.LineId = &lineIdRequest
    tagsRequest:= "<tags>"
    request.Tags = &tagsRequest
    statusRequest:= "<status>"
    request.Status = &statusRequest
    typeRequest:= "<type>"
    request.Type = &typeRequest
    nameRequest:= "<name>"
    request.Name = &nameRequest
    idRequest:= "<id>"
    request.Id = &idRequest
    sortKeyRequest:= "<sort_key>"
    request.SortKey = &sortKeyRequest
    sortDirRequest:= "<sort_dir>"
    request.SortDir = &sortDirRequest
    searchModeRequest:= "<search_mode>"
    request.SearchMode = &searchModeRequest
    response, err := client.ShowRecordSetByZone(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	This API is used to query record sets in a zone.

## Error Codes

See [Error Codes](#).

## 4.5.8 Deleting a Record Set

### Function

This API is used to delete a record set.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2.1/zones/{zone\_id}/recordsets/{recordset\_id}

**Table 4-224** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	ID of the zone to which the record set belongs
recordset_id	Yes	String	Record set ID

### Request Parameters

**Table 4-225** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-226** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias

**Table 4-227** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-228** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for deleting a record set

```
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 300,
  "status": "PENDING_DELETE",
  "links": {
    "self": "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "alias_target": null,
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "created_at": "2016-11-17T12:03:17.827",
  "updated_at": "2016-11-17T12:56:06.439",
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line": "default_view",
  "weight": 1,
  "health_check_id": null
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeleteRecordSetsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteRecordSetsRequest request = new DeleteRecordSetsRequest();
        try {
            DeleteRecordSetsResponse response = client.deleteRecordSets(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = BasicCredentials(ak, sk) \

client = DnsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DnsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = DeleteRecordSetsRequest()
    response = client.delete_record_sets(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteRecordSetsRequest{}
    response, err := client.DeleteRecordSets(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for deleting a record set

## Error Codes

See [Error Codes](#).

## 4.5.9 Modifying a Record Set

### Function

This API is used to modify a record set.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2.1/zones/{zone\_id}/recordsets/{recordset\_id}

**Table 4-229** Path Parameters

Parameter	Mandatory	Type	Description
zone_id	Yes	String	Zone ID
recordset_id	Yes	String	ID of the record set to be queried

### Request Parameters

**Table 4-230** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.



**Table 4-231** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Fully qualified domain name (FQDN) suffixed with a zone name, which is a complete host name ended with a dot
description	No	String	(Optional) Domain name description. A maximum of 255 characters are allowed. If this parameter is left blank, the original value is retained. It is left blank by default.
type	Yes	String	Record set type. The value can be A, AAAA, MX, CNAME, TXT, NS, SRV, or CAA.
ttl	No	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	No	Array of strings	Value of the record set. The value rules vary depending on the record set type.
weight	No	Integer	Weight of the record set. If <b>weight</b> is not specified, no weight is set for the record set. If <b>weight</b> is set to <b>0</b> , the record set is a secondary one. If <b>weight</b> is larger than <b>0</b> , the record set is a primary one. The value ranges from <b>0</b> to <b>100</b> and is left blank by default.

## Response Parameters

Status code: 200

**Table 4-232** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name

Parameter	Type	Description
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type. <ul style="list-style-type: none"> <li>Public zones: The type can be A, AAAA, MX, CNAME, TXT, NS, SRV, or CAA.</li> <li>Private zones: The type can be A, AAAA, MX, CNAME, TXT, or SRV.</li> </ul>
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias

**Table 4-233** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-234** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

## Example Requests

Modifying a record set, with the type set to A, TTL to 3600 seconds, and value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
PUT https://{endpoint}/v2/zones/{zone_id}/recordsets/{recordset_id}
```

```
{
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
  "type" : "A",
  "ttl" : 3600,
  "records" : [ "192.168.10.1", "192.168.10.2" ],
  "weight" : 1
}
```

## Example Responses

**Status code: 200**

Response to the request for modifying a record set

```
{
  "id" : "2c9eb155587228570158722b6ac30007",
  "name" : "www.example.com.",
  "description" : "This is an example record set.",
  "type" : "A",
  "ttl" : 3600,
  "records" : [ "192.168.10.1", "192.168.10.2" ],
  "status" : "PENDING_UPDATE",
  "links" : {
    "self" : "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id" : "2c9eb155587194ec01587224c9f90149",
  "zone_name" : "example.com.",
  "created_at" : "2016-11-17T12:03:17.827",
  "updated_at" : "2016-11-17T12:56:06.439",
  "default" : false,
  "project_id" : "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line" : "default_view",
  "weight" : 1,
  "health_check_id" : null
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

Modifying a record set, with the type set to A, TTL to 3600 seconds, and value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateRecordSetsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateRecordSetsRequest request = new UpdateRecordSetsRequest();
        UpdateRecordSetsReq body = new UpdateRecordSetsReq();
        List<String> listbodyRecords = new ArrayList<>();
        listbodyRecords.add("192.168.10.1");
        listbodyRecords.add("192.168.10.2");
        body.withWeight(1);
        body.withRecords(listbodyRecords);
        body.withTtl(3600);
        body.withType("A");
        body.withDescription("This is an example record set.");
        body.withName("www.example.com.");
        request.withBody(body);
        try {
            UpdateRecordSetsResponse response = client.updateRecordSets(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Modifying a record set, with the type set to A, TTL to 3600 seconds, and value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateRecordSetsRequest()
        listRecordsbody = [
            "192.168.10.1",
            "192.168.10.2"
        ]
        request.body = UpdateRecordSetsReq(
            weight=1,
            records=listRecordsbody,
            ttl=3600,
            type="A",
            description="This is an example record set.",
            name="www.example.com."
        )
        response = client.update_record_sets(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Modifying a record set, with the type set to A, TTL to 3600 seconds, and value to 192.168.10.1 and 192.168.10.2, and weight to 1

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```

variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateRecordSetsRequest{
    var listRecordsbody = []string{
        "192.168.10.1",
        "192.168.10.2",
    }
    weightUpdateRecordSetsReq:= int32(1)
    ttlUpdateRecordSetsReq:= int32(3600)
    descriptionUpdateRecordSetsReq:= "This is an example record set."
    request.Body = &model.UpdateRecordSetsReq{
        Weight: &weightUpdateRecordSetsReq,
        Records: &listRecordsbody,
        Ttl: &ttlUpdateRecordSetsReq,
        Type: "A",
        Description: &descriptionUpdateRecordSetsReq,
        Name: "www.example.com.",
    }
}
response, err := client.UpdateRecordSets(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for modifying a record set

## Error Codes

See [Error Codes](#).

## 4.5.10 Setting Record Set Status

### Function

This API is used to set record set status.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2.1/recordsets/{recordset\_id}/statuses/set

Table 4-235 Path Parameters

Parameter	Mandatory	Type	Description
recordset_id	Yes	String	ID of the record set to be configured

### Request Parameters

Table 4-236 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

Table 4-237 Request body parameters

Parameter	Mandatory	Type	Description
status	Yes	String	Record set status. The value can be <b>ENABLE</b> or <b>DISABLE</b> .

### Response Parameters

Status code: 200

**Table 4-238** Response body parameters

Parameter	Type	Description
id	String	Record set ID
name	String	Record set name
description	String	Record set description
zone_id	String	Zone ID of the record set
zone_name	String	Zone name of the record set
type	String	Record set type
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
records	Array of strings	Record set value
created_at	String	Time when the record set was created
updated_at	String	Time when the record set was updated
status	String	Resource status
default	Boolean	Whether the record set is generated by the system. A system-generated record set cannot be deleted.
project_id	String	Project ID of the record set
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
line	String	Resolution line ID
weight	Integer	Weight of the record set
health_check_id	String	Health check ID
alias_target	<a href="#">alias_target</a> object	Domain name alias
bundle	String	Specification, which is the default specification. This field is reserved.



**Table 4-239** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-240** alias\_target

Parameter	Type	Description
resource_type	String	Service that supports domain name aliases. Value options: <ul style="list-style-type: none"> <li>● <b>cloudsite</b>: CloudSite</li> <li>● <b>waf</b>: Web Application Firewall</li> </ul>
resource_domain_name	String	Domain name of the target service

## Example Requests

Disabling a record set

```
PUT https://{endpoint}/v2.1/recordsets/{recordset_id}/statuses/set
{
  "status": "DISABLE"
}
```

## Example Responses

**Status code: 200**

Response to the request for batch setting record set status

```
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "www.example.com.",
  "description": "This is an example record set.",
  "type": "A",
  "ttl": 3600,
  "records": [ "192.168.10.1", "192.168.10.2" ],
  "status": "DISABLE",
  "links": {
    "self": "https://Endpoint/v2.1/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
  },
  "zone_id": "2c9eb155587194ec01587224c9f90149",
  "zone_name": "example.com.",
  "created_at": "2017-11-09T11:13:17.827",
  "updated_at": "2017-11-10T12:03:18.827",
  "default": false,
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "line": "default_view",
  "weight": 1,
  "health_check_id": null
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Disabling a record set

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class SetRecordSetsStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        SetRecordSetsStatusRequest request = new SetRecordSetsStatusRequest();
        SetRecordSetsStatusReq body = new SetRecordSetsStatusReq();
        body.withStatus("DISABLE");
        request.withBody(body);
        try {
            SetRecordSetsStatusResponse response = client.setRecordSetsStatus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

### Python

Disabling a record set

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
```

```
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SetRecordSetsStatusRequest()
        request.body = SetRecordSetsStatusReq(
            status="DISABLE"
        )
        response = client.set_record_sets_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Disabling a record set

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SetRecordSetsStatusRequest{}
    request.Body = &model.SetRecordSetsStatusReq{
```

```

        Status: "DISABLE",
    }
    response, err := client.SetRecordSetsStatus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for batch setting record set status

## Error Codes

See [Error Codes](#).

# 4.6 PTR Record Management

## 4.6.1 Creating a PTR Record for an EIP

### Function

This API is to create a PTR record for an EIP.

### Calling Method

For details, see [Calling APIs](#).

### URI

PATCH /v2/reverse/floatingips/{region}:{floatingip\_id}

**Table 4-241** Path Parameters

Parameter	Mandatory	Type	Description
region	Yes	String	Region of the tenant
floatingip_id	Yes	String	EIP ID

## Request Parameters

**Table 4-242** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-243** Request body parameters

Parameter	Mandatory	Type	Description
ptrdname	Yes	String	Domain name of the PTR record
description	No	String	PTR record description
ttd	No	Integer	PTR record caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect. The value ranges from <b>1</b> to <b>2147483647</b> .
enterprise_project_id	No	String	ID of the enterprise project associated with the PTR record. The value contains a maximum of 36 characters.
tags	No	Array of <b>tag</b> objects	Resource tag

**Table 4-244** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

Parameter	Mandatory	Type	Description
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

Status code: 200

Table 4-245 Response body parameters

Parameter	Type	Description
id	String	PTR record ID, which is in {region}: {floatingip_id} format
ptrdname	String	Domain name of the PTR record
description	String	PTR record description
ttl	Integer	PTR record caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
address	String	EIP
status	String	Resource status
action	String	Requested operation on the resource. Value options: <b>CREATE, UPDATE, DELETE, NONE, CREATE, UPDATE</b> , and <b>DELETE****NONE</b> : No operation will be performed.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
enterprise_project_id	String	ID of the enterprise project associated with the PTR record. The value contains a maximum of 36 characters.

Table 4-246 pageLink

Parameter	Type	Description
self	String	Link to the current resource

Parameter	Type	Description
next	String	Link to the next page

## Example Requests

Creating a PTR record for an EIP and setting its TTL to 300 seconds

```
POST https://{endpoint}/v2/reverse/floatingips/{region}:{floatingip_id}
{
  "ptrdname": "www.example.com",
  "description": "Description for this PTR record",
  "ttl": 300,
  "tags": [ {
    "key": "key1",
    "value": "value1"
  } ]
}
```

## Example Responses

**Status code: 200**

Response to the request for configuring the PTR record of an EIP

```
{
  "id": "region_id:c5504932-bf23-4171-b655-b87a6bc59334",
  "ptrdname": "www.example.com.",
  "description": "Description for this PTR record",
  "address": "10.154.52.138",
  "action": "CREATE",
  "ttl": 300,
  "status": "PENDING_CREATE",
  "links": {
    "self": "https://Endpoint/v2/reverse/floatingips/region_id:c5504932-bf23-4171-b655-b87a6bc59334"
  },
  "enterprise_project_id": 0
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a PTR record for an EIP and setting its TTL to 300 seconds

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;
```

```
public class CreateEipRecordSetSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateEipRecordSetRequest request = new CreateEipRecordSetRequest();
        CreatePtrReq body = new CreatePtrReq();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new Tag()
                .withKey("key1")
                .withValue("value1")
        );
        body.withTags(listbodyTags);
        body.withTtl(300);
        body.withDescription("Description for this PTR record");
        body.withPtrdname("www.example.com");
        request.withBody(body);
        try {
            CreateEipRecordSetResponse response = client.createEipRecordSet(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Creating a PTR record for an EIP and setting its TTL to 300 seconds

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```



```
credentials = BasicCredentials(ak, sk) \

client = DnsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DnsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateEipRecordSetRequest()
    listTagsbody = [
        Tag(
            key="key1",
            value="value1"
        )
    ]
    request.body = CreatePtrReq(
        tags=listTagsbody,
        ttl=300,
        description="Description for this PTR record",
        ptrdname="www.example.com"
    )
    response = client.create_eip_record_set(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Creating a PTR record for an EIP and setting its TTL to 300 seconds

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateEipRecordSetRequest{}
    valueTags:= "value1"
    var listTagsbody = []model.Tag{
        {
            Key: "key1",
```

```

        Value: &valueTags,
    },
}
ttlCreatePtrReq:= int32(300)
descriptionCreatePtrReq:= "Description for this PTR record"
request.Body = &model.CreatePtrReq{
    Tags: &listTagsbody,
    Ttl: &ttlCreatePtrReq,
    Description: &descriptionCreatePtrReq,
    Ptrdname: "www.example.com",
}
response, err := client.CreateEipRecordSet(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the [Sample Code](#) tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for configuring the PTR record of an EIP

## Error Codes

See [Error Codes](#).

## 4.6.2 Querying PTR Records of an EIP

### Function

This API is used to query PTR records of an EIP.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/reverse/floatingips/{region}:{floatingip\_id}

**Table 4-247** Path Parameters

Parameter	Mandatory	Type	Description
region	Yes	String	Region

Parameter	Mandatory	Type	Description
floatingip_id	Yes	String	EIP ID

## Request Parameters

**Table 4-248** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-249** Response body parameters

Parameter	Type	Description
id	String	PTR record ID, which is in {region}: {floatingip_id} format
ptrdname	String	Domain name of the PTR record
description	String	PTR record description
ttl	Integer	PTR record caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
address	String	EIP
status	String	Resource status
action	String	Requested operation on the resource. Value options: <b>CREATE, UPDATE, DELETE, NONE, CREATE, UPDATE</b> , and <b>DELETE****NONE</b> : No operation will be performed.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

Parameter	Type	Description
enterprise_project_id	String	ID of the enterprise project associated with the PTR record. The value contains a maximum of 36 characters.

**Table 4-250** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying the PTR record of an EIP

```
{
  "id" : "region_id:c5504932-bf23-4171-b655-b87a6bc59334",
  "ptrdname" : "www.example.com.",
  "description" : "Description for this PTR record",
  "address" : "10.154.52.138",
  "action" : "CREATE",
  "ttl" : 300,
  "status" : "ACTIVE",
  "links" : {
    "self" : "https://Endpoint/v2/reverse/floatingips/region_id:c5504932-bf23-4171-b655-b87a6bc59334"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowPtrRecordSetSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");

    ICredential auth = new BasicCredentials()
        .withAk(ak)
        .withSk(sk);

    DnsClient client = DnsClient.newBuilder()
        .withCredential(auth)
        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
    ShowPtrRecordSetRequest request = new ShowPtrRecordSetRequest();
    try {
        ShowPtrRecordSetResponse response = client.showPtrRecordSet(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowPtrRecordSetRequest()
        response = client.show_ptr_record_set(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowPtrRecordSetRequest{}
    response, err := client.ShowPtrRecordSet(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the PTR record of an EIP

## Error Codes

See [Error Codes](#).

## 4.6.3 Querying PTR Records

### Function

This API is used to query all the PTR records.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/reverse/floatingips

**Table 4-251** Query Parameters

Parameter	Mandatory	Type	Description
marker	No	String	Start resource ID of pagination query. If the parameter is left blank, only resources on the first page are queried. It is left blank by default.
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> . The default value is <b>500</b> .
offset	No	Integer	Start offset of pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> . If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
enterprise_project_id	No	String	ID of the enterprise project associated with the PTR record. The value contains a maximum of 36 characters. Default value: <b>0</b>

Parameter	Mandatory	Type	Description
tags	No	String	Resource tag. The format is as follows: key1,value1 key2,value2. Multiple tags are separated by vertical bar ( ). The key and value of each tag are separated by comma (,).
status	No	String	Resource status

## Request Parameters

**Table 4-252** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-253** Response body parameters

Parameter	Type	Description
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition
floatingips	Array of <a href="#">ListPtrRecord</a> <a href="#">sFloatingRes</a> <a href="#">p</a> objects	PTR record ID list of an EIP



**Table 4-254** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

**Table 4-255** ListPtrRecordsFloatingResp

Parameter	Type	Description
id	String	PTR record ID, which is in {region}: {floatingip_id} format
ptrdname	String	Domain name of the PTR record
description	String	PTR record description
ttd	Integer	PTR record caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
address	String	EIP
status	String	Resource status
action	String	Requested operation on the resource. Value options: <b>CREATE, UPDATE, DELETE, NONE, CREATE, UPDATE, and DELETE****NONE</b> : No operation will be performed.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.
tags	Array of <a href="#">tag</a> objects	Resource tag
enterprise_project_id	String	ID of the enterprise project associated with the PTR record. The value contains a maximum of 36 characters.

**Table 4-256** pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 4-257** tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

**Status code: 400**

**Table 4-258** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-259** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

### Status code: 200

Response to the request for querying the PTR record list

```
{
  "links" : {
    "self" : "https://Endpoint/v2/reverse/floatingips",
    "next" : "https://Endpoint/v2/zones?id=&limit=10&marker=region_id:c5504932-bf23-4171-b655-b87a6bc59334"
  },
  "metadata" : {
    "total_count" : 1
  },
  "floatingips" : [ {
    "id" : "region_id:c5504932-bf23-4171-b655-b87a6bc59334",
    "ptrdname" : "www.example.com.",
    "description" : "Description for this PTR record",
    "address" : "10.154.52.138",
    "action" : "NONE",
    "ttl" : 300,
    "status" : "ACTIVE",
    "links" : {
      "self" : "https://Endpoint/v2/reverse/floatingips/region_id:c5504932-bf23-4171-b655-b87a6bc59334"
    }
  }
]
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListPtrRecordsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListPtrRecordsRequest request = new ListPtrRecordsRequest();
```

```
request.withMarker("<marker>");
request.withLimit(<limit>);
request.withOffset(<offset>);
request.withEnterpriseProjectId("<enterprise_project_id>");
request.withTags("<tags>");
request.withStatus("<status>");
try {
    ListPtrRecordsResponse response = client.listPtrRecords(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListPtrRecordsRequest()
        request.marker = "<marker>"
        request.limit = <limit>
        request.offset = <offset>
        request.enterprise_project_id = "<enterprise_project_id>"
        request.tags = "<tags>"
        request.status = "<status>"
        response = client.list_ptr_records(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
```

```

"fmt"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListPtrRecordsRequest{}
    markerRequest:= "<marker>"
    request.Marker = &markerRequest
    limitRequest:= int32(<limit>)
    request.Limit = &limitRequest
    offsetRequest:= int32(<offset>)
    request.Offset = &offsetRequest
    enterpriseProjectIdRequest:= "<enterprise_project_id>"
    request.EnterpriseProjectId = &enterpriseProjectIdRequest
    tagsRequest:= "<tags>"
    request.Tags = &tagsRequest
    statusRequest:= "<status>"
    request.Status = &statusRequest
    response, err := client.ListPtrRecords(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the PTR record list
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.6.4 Restoring the PTR Record of the EIP to the Default Value

### Function

This API is used to restore the PTR record of the EIP to the default value.

### Calling Method

For details, see [Calling APIs](#).

### URI

PATCH /v2/reverse/floatingips/{region}:{floatingip\_id}

**Table 4-260** Path Parameters

Parameter	Mandatory	Type	Description
region	Yes	String	Region of the zone
floatingip_id	Yes	String	ID of the PTR record to be deleted

### Request Parameters

**Table 4-261** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-262** Request body parameters

Parameter	Mandatory	Type	Description
ptrdname	Yes	Object	Domain name of the PTR record. Set it to <b>null</b> in the request.

## Response Parameters

None

## Example Requests

Restoring the PTR record of the EIP to the default value

```
PATCH https://{endpoint}/v2/reverse/floatingips/{region}:{floatingip_id}
{
  "ptrdname" : null
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Restoring the PTR record of the EIP to the default value

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class RestorePtrRecordSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        RestorePtrRecordRequest request = new RestorePtrRecordRequest();
        try {
            RestorePtrRecordResponse response = client.restorePtrRecord(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        }
    }
}
```

```
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Restoring the PTR record of the EIP to the default value

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RestorePtrRecordRequest()
        response = client.restore_ptr_record(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

### Restoring the PTR record of the EIP to the default value

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```



```

ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.RestorePtrRecordRequest{}
response, err := client.RestorePtrRecord(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for restoring the PTR record of an EIP to the default value

## Error Codes

See [Error Codes](#).

## 4.6.5 Modifying the PTR Record of an EIP

### Function

This API is used to modify the PTR record of an EIP.

### Calling Method

For details, see [Calling APIs](#).

### URI

PATCH /v2/reverse/floatingips/{region}:{floatingip\_id}

**Table 4-263** Path Parameters

Parameter	Mandatory	Type	Description
region	Yes	String	Region of the zone
floatingip_id	Yes	String	ID of the PTR record to be modified

## Request Parameters

**Table 4-264** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-265** Request body parameters

Parameter	Mandatory	Type	Description
ptrdname	Yes	String	Domain name of the PTR record
description	No	String	PTR record description
ttd	No	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
tags	No	Array of <b>tag</b> objects	Resource tag

**Table 4-266** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

Parameter	Mandatory	Type	Description
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

Status code: 200

Table 4-267 Response body parameters

Parameter	Type	Description
id	String	PTR record ID, which is in {region}: {floatingip_id} format
ptrdname	String	Domain name of the PTR record
description	String	PTR record description
ttl	Integer	Record set caching duration (in seconds) on a local DNS server. The longer the duration is, the slower the update takes effect.
address	String	EIP
status	String	Resource status
action	String	Requested operation on the resource. Value options: <b>CREATE</b> , <b>UPDATE</b> , <b>DELETE</b> , <b>NONE</b> , <b>CREATE</b> , <b>UPDATE</b> , and <b>DELETE</b> <b>NONE</b> : No operation will be performed.
links	<a href="#">pageLink</a> object	Link of the current resource or other related resources. When a response is broken into pages, a next link is provided to retrieve all results.

Table 4-268 pageLink

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

## Example Requests

Modifying the domain name and description of the PTR record and set the TTL to 300s

```
PATCH https://{endpoint}/v2/reverse/floatingips/{region}:{floatingip_id}

{
  "ptrdname" : "www.example.com",
  "description" : "Description for this PTR record",
  "ttl" : 300
}
```

## Example Responses

**Status code: 200**

Response to the request for modifying the PTR record of an EIP

```
{
  "id" : "region_id:c5504932-bf23-4171-b655-b87a6bc59334",
  "ptrdname" : "www.example.com.",
  "description" : "Description for this PTR record",
  "address" : "10.154.52.138",
  "action" : "CREATE",
  "ttl" : 300,
  "status" : "PENDING_CREATE",
  "links" : {
    "self" : "https://Endpoint/v2/reverse/floatingips/region_id:c5504932-bf23-4171-b655-b87a6bc59334"
  }
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying the domain name and description of the PTR record and set the TTL to 300s

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class UpdatePtrRecordSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
```

```
.withAk(ak)
.withSk(sk);

DnsClient client = DnsClient.newBuilder()
    .withCredential(auth)
    .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
    .build();
UpdatePtrRecordRequest request = new UpdatePtrRecordRequest();
UpdatePtrReq body = new UpdatePtrReq();
body.withTtl(300);
body.withDescription("Description for this PTR record");
body.withPtrdname("www.example.com");
request.withBody(body);
try {
    UpdatePtrRecordResponse response = client.updatePtrRecord(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Modifying the domain name and description of the PTR record and set the TTL to 300s

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdatePtrRecordRequest()
        request.body = UpdatePtrReq(
            ttl=300,
            description="Description for this PTR record",
            ptrdname="www.example.com"
        )
        response = client.update_ptr_record(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

```
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

## Go

Modifying the domain name and description of the PTR record and set the TTL to 300s

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePtrRecordRequest{}
    ttlUpdatePtrReq:= int32(300)
    descriptionUpdatePtrReq:= "Description for this PTR record"
    request.Body = &model.UpdatePtrReq{
        Ttl: &ttlUpdatePtrReq,
        Description: &descriptionUpdatePtrReq,
        Ptrdname: "www.example.com",
    }
    response, err := client.UpdatePtrRecord(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for modifying the PTR record of an EIP

## Error Codes

See [Error Codes](#).

# 4.7 Tag Management

## 4.7.1 Adding a Tag to a Specific Resource

### Function

This API is used to add a tag to a specific resource.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/{resource\_type}/{resource\_id}/tags

**Table 4-269** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. The value can be <b>DNS-public_zone</b> , <b>DNS-private_zone</b> , <b>DNS-public_recordset</b> , <b>DNS-private_recordset</b> , or <b>DNS-ptr_record</b> .
resource_id	Yes	String	Resource ID.

## Request Parameters

**Table 4-270** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-271** Request body parameters

Parameter	Mandatory	Type	Description
tag	Yes	<b>tag</b> object	Resource tag

**Table 4-272** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

None

## Example Requests

Adding a tag to a specified resource

```
POST https://{endpoint}/v2/{project_id}/{resource_type}/{resource_id}/tags
```

```
{
  "tag": {
    "key": "key1",
```



```
"value" : "value1"  
}  
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Adding a tag to a specified resource

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
public class CreateTagSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
  
        CreateTagRequest request = new CreateTagRequest();  
        CreateTagReq body = new CreateTagReq();  
        Tag tagbody = new Tag();  
        tagbody.withKey("key1")  
            .withValue("value1");  
        body.withTag(tagbody);  
        request.withBody(body);  
        try {  
            CreateTagResponse response = client.createTag(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
        }  
    }  
}
```

```

        System.out.println(e.getErrorMsg());
    }
}
}

```

## Python

### Adding a tag to a specified resource

```

# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateTagRequest()
        tagbody = Tag(
            key="key1",
            value="value1"
        )
        request.body = CreateTagReq(
            tag=tagbody
        )
        response = client.create_tag(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)

```

## Go

### Adding a tag to a specified resource

```

package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this

```

```

example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateTagRequest{
    valueTag:= "value1"
    tagbody := &model.Tag{
        Key: "key1",
        Value: &valueTag,
    }
    request.Body = &model.CreateTagReq{
        Tag: tagbody,
    }
    response, err := client.CreateTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
204	Response to the request for adding a tag to a resource

## Error Codes

See [Error Codes](#).

## 4.7.2 Deleting a Resource Tag

### Function

This API is used to delete a resource tag.

### Calling Method

For details, see [Calling APIs](#).

## URI

DELETE /v2/{project\_id}/{resource\_type}/{resource\_id}/tags/{key}

**Table 4-273** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. The value can be <b>DNS-public_zone</b> , <b>DNS-private_zone</b> , <b>DNS-public_recordset</b> , <b>DNS-private_recordset</b> , or <b>DNS-ptr_record</b> .
resource_id	Yes	String	Resource ID
key	Yes	String	Tag key. The key cannot be left blank or be an empty string.

## Request Parameters

**Table 4-274** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

None

## Example Requests

None

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

## Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeleteTagSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteTagRequest request = new DeleteTagRequest();
        try {
            DeleteTagResponse response = client.deleteTag(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = BasicCredentials(ak, sk) \

client = DnsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DnsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = DeleteTagRequest()
    response = client.delete_tag(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteTagRequest{}
    response, err := client.DeleteTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
204	Response to the request for deleting a resource tag

## Error Codes

See [Error Codes](#).

## 4.7.3 Batch Adding or Deleting Tags for a Specific Instance

### Function

This API is used to batch add or delete tags for a specific instance.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/{resource\_type}/{resource\_id}/tags/action

**Table 4-275** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. The value can be <b>DNS-public_zone</b> , <b>DNS-private_zone</b> , <b>DNS-public_recordset</b> , <b>DNS-private_recordset</b> , or <b>DNS-ptr_record</b> .
resource_id	Yes	String	Resource ID

## Request Parameters

**Table 4-276** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-277** Request body parameters

Parameter	Mandatory	Type	Description
tags	Yes	Array of <b>tag</b> objects	Tag list. The tags structure cannot be missing during deletion.
action	Yes	String	Operation. The value can be <b>create</b> or <b>delete</b> (case sensitive).

**Table 4-278** tag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	No	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Response Parameters

None



## Example Requests

Adding tags to a specified resource in batches

```
POST https://{endpoint}/v2/{project_id}/{resource_type}/{resource_id}/tags/action

{
  "action": "create",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Adding tags to a specified resource in batches

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchCreateTagSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchCreateTagRequest request = new BatchCreateTagRequest();
        BatchHandTags body = new BatchHandTags();
        List<Tag> listbodyTags = new ArrayList<>();
        listbodyTags.add(
```

```
        new Tag()
            .withKey("key1")
            .withValue("value1")
    );
    listbodyTags.add(
        new Tag()
            .withKey("key2")
            .withValue("value2")
    );
    body.withAction("create");
    body.withTags(listbodyTags);
    request.withBody(body);
    try {
        BatchCreateTagResponse response = client.batchCreateTag(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

### Adding tags to a specified resource in batches

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchCreateTagRequest()
        listTagsbody = [
            Tag(
                key="key1",
                value="value1"
            ),
            Tag(
                key="key2",
                value="value2"
            )
        ]
        request.body = BatchHandTags(
```

```
        action="create",
        tags=listTagsbody
    )
    response = client.batch_create_tag(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Adding tags to a specified resource in batches

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchCreateTagRequest{}
    valueTags := "value1"
    valueTags1 := "value2"
    var listTagsbody = []model.Tag{
        {
            Key: "key1",
            Value: &valueTags,
        },
        {
            Key: "key2",
            Value: &valueTags1,
        },
    }
    request.Body = &model.BatchHandTags{
        Action: "create",
        Tags: listTagsbody,
    }
    response, err := client.BatchCreateTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
204	Response to the request for batch adding or deleting tags for a specific resource

## Error Codes

See [Error Codes](#).

## 4.7.4 Querying Tags of a Specific Instance

### Function

This API is used to query tags of a specific instance.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/{resource\_type}/{resource\_id}/tags

**Table 4-279** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. The value can be <b>DNS-public_zone</b> , <b>DNS-private_zone</b> , <b>DNS-public_recordset</b> , <b>DNS-private_recordset</b> , or <b>DNS-ptr_record</b> .
resource_id	Yes	String	Resource ID

## Request Parameters

**Table 4-280** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-281** Response body parameters

Parameter	Type	Description
tags	Array of <b>tag</b> objects	Tag list
enterpriseProjectOrDefault	String	Enterprise Project or Default Project

**Table 4-282** tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Example Requests

None

## Example Responses

Status code: 200

Response to the request for querying resource tags

```
{
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ],
  "enterpriseProjectOrDefault" : 0
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowResourceTagSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowResourceTagRequest request = new ShowResourceTagRequest();
        try {
            ShowResourceTagResponse response = client.showResourceTag(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowResourceTagRequest()
        response = client.show_resource_tag(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowResourceTagRequest{}
    response, err := client.ShowResourceTag(request)
```

```

if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying resource tags

## Error Codes

See [Error Codes](#).

## 4.7.5 Querying All Tags of a Specific Resource

### Function

This API is used to query all tags of a specific resource.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/{project\_id}/{resource\_type}/tags

**Table 4-283** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. The value can be <b>DNS-public_zone</b> , <b>DNS-private_zone</b> , <b>DNS-public_recordset</b> , <b>DNS-private_recordset</b> , or <b>DNS-ptr_record</b> .



## Request Parameters

**Table 4-284** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-285** Response body parameters

Parameter	Type	Description
tags	Array of <b>tagValues</b> objects	Tag list

**Table 4-286** tagValues

Parameter	Type	Description
key	String	Tag key. A key can contain a maximum of 127 Unicode characters. <b>key</b> must be specified. (This parameter is not verified during search.)
values	Array of strings	Tag value. Each value can contain a maximum of 255 Unicode characters. The asterisk ( <i>) is a reserved character. If the value starts with an asterisk ( <i>)</i>, fuzzy search is performed based on the value following the asterisk (*). If <b>values</b> is missing, any value is matched. All values of a tag key are in the OR relationship.</i>

## Example Requests

None

## Example Responses

Status code: 200

Tag list

```
{
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value1", "value2" ]
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListTagsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListTagsRequest request = new ListTagsRequest();
        try {
            ListTagsResponse response = client.listTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListTagsRequest()
        response = client.list_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListTagsRequest{}
    response, err := client.ListTags(request)
```

```

if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Tag list

## Error Codes

See [Error Codes](#).

## 4.7.6 Querying Resources Using Tags

### Function

This API is used to query resources using tags.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2/{project\_id}/{resource\_type}/resource\_instances/action

**Table 4-287** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
resource_type	Yes	String	Resource type. The value can be <b>DNS-public_zone</b> , <b>DNS-private_zone</b> , <b>DNS-public_recordset</b> , <b>DNS-private_recordset</b> , or <b>DNS-ptr_record</b> .

## Request Parameters

**Table 4-288** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-289** Request body parameters

Parameter	Mandatory	Type	Description
tags	No	Array of <b>tagValues</b> objects	Tags that are included. The structure body is mandatory. A maximum of 10 tag keys are allowed in each query operation. The tag key cannot be left blank or set to the empty string. One tag key can have up to 10 tag values. Each tag key must be unique, and each tag value in a tag must be unique.
tags_any	No	Array of <b>tagValues</b> objects	Each tag contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or set to an empty string. Each tag key must be unique, and each tag value in a tag must be unique.
not_tags	No	Array of <b>tagValues</b> objects	The structure body is mandatory. A maximum of 10 tag keys are allowed in each query operation. The tag key cannot be left blank or set to the empty string. One tag key can have up to 10 tag values. Each tag key must be unique, and each tag value in a tag must be unique.

Parameter	Mandatory	Type	Description
not_tags_any	No	Array of <b>tagValues</b> objects	Each tag contains a maximum of 10 keys, and each key contains a maximum of 10 values. The structure body cannot be missing, and the key cannot be left blank or set to an empty string. Each tag key must be unique, and each tag value in a tag must be unique.
limit	No	Integer	Number of resources on each page. Value range: <b>1</b> to <b>1000</b> . If <b>action</b> is set to <b>filter</b> , the default value <b>1000</b> is used. If <b>action</b> is set to <b>count</b> , this parameter does not exist.
offset	No	Integer	Start offset of pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b> , and the default value is <b>0</b> . This parameter is not required when data on the first page is queried. When you query resources on subsequent pages, set the value of <b>offset</b> to the location returned in the response body for the previous query. If <b>action</b> is set to <b>filter</b> , the default value is <b>0</b> . The value must be a number and cannot be a negative number. If <b>action</b> is set to <b>count</b> , this parameter does not exist.
action	Yes	String	Operation to be performed. Value options: <ul style="list-style-type: none"> <li>● <b>filter</b>: Resources are queried in pages by filter condition.</li> <li>● <b>count</b>: The total number of resources is queried.</li> </ul>

Parameter	Mandatory	Type	Description
matches	No	Array of <b>match</b> objects	This parameter specifies the key-value pair to be matched in the query. If <b>value</b> is left blank, exact matching will work. Otherwise, Fuzzy search will work.

**Table 4-290** tagValues

Parameter	Mandatory	Type	Description
key	No	String	Tag key. A key can contain a maximum of 127 Unicode characters. <b>key</b> must be specified. (This parameter is not verified during search.)
values	No	Array of strings	Tag value. Each value can contain a maximum of 255 Unicode characters. The asterisk (*) is a reserved character. If the value starts with an asterisk (*), fuzzy search is performed based on the value following the asterisk (*). If <b>values</b> is missing, any value is matched. All values of a tag key are in the OR relationship.

**Table 4-291** match

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. The current value is <b>resource_name</b> .
value	No	String	Tag value. Each value can contain a maximum of 255 Unicode characters. The value cannot contain underscores (_) or percent signs (%).

## Response Parameters

Status code: 204

**Table 4-292** Response body parameters

Parameter	Type	Description
resources	Array of <b>resourceitem</b> objects	Resource tag list
total_count	Integer	List of tags added to a resource

**Table 4-293** resourceitem

Parameter	Type	Description
resource_id	String	Resource ID
resource_detail	Object	Resource details. This field is reserved, and its value defaults to an empty string.
tags	Array of <b>tag</b> objects	Tag list. If there is no tag in the list, an empty array is returned.
resource_name	String	Resource name. If no resource name is matched, the value is left blank.

**Table 4-294** tag

Parameter	Type	Description
key	String	Tag key. A key can contain up to 36 Unicode characters. It cannot be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.
value	String	Tag value. A tag value contains a maximum of 43 Unicode characters and can be left blank. A tag value cannot contain special characters (=*<>, /) or start or end with spaces.

## Example Requests

Querying resources by tag, with the start offset of pagination query set to 100, and the number of resources displayed on each page to 100

```
POST https://{endpoint}/v2/{project_id}/{resource_type}/resource_instances/action
{
  "offset" : "100",
  "limit" : "100",
  "action" : "filter",
  "matches" : [ {
    "key" : "resource_name",
    "value" : "resource1"
  } ]
}
```



```
    }],  
    "not_tags" : [ {  
      "key" : "key1",  
      "values" : [ "*"value1", "value2" ]  
    } ],  
    "tags" : [ {  
      "key" : "key1",  
      "values" : [ "*"value1", "value2" ]  
    } ],  
    "tags_any" : [ {  
      "key" : "key1",  
      "values" : [ "value1", "value2" ]  
    } ],  
    "not_tags_any" : [ {  
      "key" : "key1",  
      "values" : [ "value1", "value2" ]  
    } ]  
  } ]  
}
```

## Example Responses

### Status code: 204

Response to the request for querying resources by tag

```
{  
  "resources" : [ {  
    "resource_detail" : null,  
    "resource_id" : "cdfs_cefs_wesas_12_dsad",  
    "resource_name" : "resouece1",  
    "tags" : [ {  
      "key" : "key1",  
      "value" : "value1"  
    }, {  
      "key" : "key2",  
      "value" : "value1"  
    } ]  
  } ],  
  "total_count" : 1000  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Querying resources by tag, with the start offset of pagination query set to 100, and the number of resources displayed on each page to 100

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class ListTagSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");

    ICredential auth = new BasicCredentials()
        .withAk(ak)
        .withSk(sk);

    DnsClient client = DnsClient.newBuilder()
        .withCredential(auth)
        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
    ListTagRequest request = new ListTagRequest();
    ListTagReq body = new ListTagReq();
    List<Match> listbodyMatches = new ArrayList<>();
    listbodyMatches.add(
        new Match()
            .withKey("resource_name")
            .withValue("resource1")
    );
    List<String> listNotTagsAnyValues = new ArrayList<>();
    listNotTagsAnyValues.add("value1");
    listNotTagsAnyValues.add("value2");
    List<TagValues> listbodyNotTagsAny = new ArrayList<>();
    listbodyNotTagsAny.add(
        new TagValues()
            .withKey("key1")
            .withValues(listNotTagsAnyValues)
    );
    List<String> listNotTagsValues = new ArrayList<>();
    listNotTagsValues.add("*value1");
    listNotTagsValues.add("value2");
    List<TagValues> listbodyNotTags = new ArrayList<>();
    listbodyNotTags.add(
        new TagValues()
            .withKey("key1")
            .withValues(listNotTagsValues)
    );
    List<String> listTagsAnyValues = new ArrayList<>();
    listTagsAnyValues.add("value1");
    listTagsAnyValues.add("value2");
    List<TagValues> listbodyTagsAny = new ArrayList<>();
    listbodyTagsAny.add(
        new TagValues()
            .withKey("key1")
            .withValues(listTagsAnyValues)
    );
    List<String> listTagsValues = new ArrayList<>();
    listTagsValues.add("*value1");
    listTagsValues.add("value2");
    List<TagValues> listbodyTags = new ArrayList<>();
    listbodyTags.add(
        new TagValues()
            .withKey("key1")
            .withValues(listTagsValues)
    );
    body.withMatches(listbodyMatches);
    body.withAction("filter");
    body.withOffset(100);
    body.withLimit(100);
    body.withNotTagsAny(listbodyNotTagsAny);
    body.withNotTags(listbodyNotTags);
    body.withTagsAny(listbodyTagsAny);
    body.withTags(listbodyTags);
}
```

```
request.withBody(body);
try {
    ListTagResponse response = client.listTag(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

Querying resources by tag, with the start offset of pagination query set to 100, and the number of resources displayed on each page to 100

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListTagRequest()
        listMatchesbody = [
            Match(
                key="resource_name",
                value="resource1"
            )
        ]
        listValuesNotTagsAny = [
            "value1",
            "value2"
        ]
        listNotTagsAnybody = [
            TagValues(
                key="key1",
                values=listValuesNotTagsAny
            )
        ]
        listValuesNotTags = [
            "*value1",
            "value2"
        ]
        listNotTagsbody = [
```

```
        TagValues(
            key="key1",
            values=listValuesNotTags
        )
    ]
    listValuesTagsAny = [
        "value1",
        "value2"
    ]
    listTagsAnybody = [
        TagValues(
            key="key1",
            values=listValuesTagsAny
        )
    ]
    listValuesTags = [
        "*value1",
        "value2"
    ]
    listTagsbody = [
        TagValues(
            key="key1",
            values=listValuesTags
        )
    ]
    request.body = ListTagReq(
        matches=listMatchesbody,
        action="filter",
        offset=100,
        limit=100,
        not_tags_any=listNotTagsAnybody,
        not_tags=listNotTagsbody,
        tags_any=listTagsAnybody,
        tags=listTagsbody
    )
    response = client.list_tag(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

Querying resources by tag, with the start offset of pagination query set to 100, and the number of resources displayed on each page to 100

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
```

```
WithSk(sk).
Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListTagRequest{}
valueMatches:= "resource1"
var listMatchesbody = []model.Match{
    {
        Key: "resource_name",
        Value: &valueMatches,
    },
}
var listValuesNotTagsAny = []string{
    "value1",
    "value2",
}
keyNotTagsAny:= "key1"
var listNotTagsAnybody = []model.TagValues{
    {
        Key: &keyNotTagsAny,
        Values: &listValuesNotTagsAny,
    },
}
var listValuesNotTags = []string{
    "*value1",
    "value2",
}
keyNotTags:= "key1"
var listNotTagsbody = []model.TagValues{
    {
        Key: &keyNotTags,
        Values: &listValuesNotTags,
    },
}
var listValuesTagsAny = []string{
    "value1",
    "value2",
}
keyTagsAny:= "key1"
var listTagsAnybody = []model.TagValues{
    {
        Key: &keyTagsAny,
        Values: &listValuesTagsAny,
    },
}
var listValuesTags = []string{
    "*value1",
    "value2",
}
keyTags:= "key1"
var listTagsbody = []model.TagValues{
    {
        Key: &keyTags,
        Values: &listValuesTags,
    },
}
offsetListTagReq:= int32(100)
limitListTagReq:= int32(100)
request.Body = &model.ListTagReq{
    Matches: &listMatchesbody,
    Action: "filter",
    Offset: &offsetListTagReq,
    Limit: &limitListTagReq,
    NotTagsAny: &listNotTagsAnybody,
```

```
NotTags: &listNotTagsbody,  
TagsAny: &listTagsAnybody,  
Tags: &listTagsbody,  
}  
response, err := client.ListTag(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
204	Response to the request for querying resources by tag

## Error Codes

See [Error Codes](#).

# 4.8 Line Group Management

## 4.8.1 Creating a Line Group

### Function

This API is used to create a line group. This API is not available in some regions. To use this API, submit a service ticket.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2.1/linegroups

## Request Parameters

**Table 4-295** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-296** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Line group name. The name cannot be the same as the custom line name or preconfigured line name. The value can contain 1 to 64 characters, including digits, letters, underscores (_), hyphens (-), and periods (.).
description	No	String	Line group description. A maximum of 255 characters are allowed. It is left blank by default.
lines	Yes	Array of strings	List of lines contained in a line group. At least two lines are required. Resolution line IDs are used here.

## Response Parameters

Status code: 202

**Table 4-297** Response body parameters

Parameter	Type	Description
name	String	Line group name
lines	Array of strings	List of lines contained in a line group (Resolution line IDs are used here.)

Parameter	Type	Description
status	String	Resource status. Value options: <b>PENDING_CREATE</b> , <b>ACTIVE</b> , <b>PENDING_DELETE</b> , <b>PENDING_UPDATE</b> , <b>ERROR</b> , <b>FREEZE</b> , and <b>DISABLE</b>
description	String	Line group description
line_id	String	Line group ID
created_at	String	Time when the line group was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.
updated_at	String	Time when the line group was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.

**Status code: 400**

**Table 4-298** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-299** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>



## Example Requests

Creating a line group that contains the lines ST and LA

```
POST https://{endpoint}/v2.1/linegroups
{
  "name" : "linegroup",
  "description" : "123",
  "lines" : [ "ST", "LA" ]
}
```

## Example Responses

**Status code: 202**

Response to the request for creating a line group

```
{
  "name" : "linegroup",
  "lines" : [ "ST", "LA" ],
  "status" : "PENDING_CREATE",
  "description" : "123",
  "line_id" : "lgroup_ff8080826c33046a016c3ce46a3322cf",
  "created_at" : "2019-07-29T08:41:38.096",
  "updated_at" : null
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a line group that contains the lines ST and LA

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateLineGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
        .build();
CreateLineGroupRequest request = new CreateLineGroupRequest();
CreateLineGroupsReq body = new CreateLineGroupsReq();
List<String> listbodyLines = new ArrayList<>();
listbodyLines.add("ST");
listbodyLines.add("LA");
body.withLines(listbodyLines);
body.withDescription("123");
body.withName("linegroup");
request.withBody(body);
try {
    CreateLineGroupResponse response = client.createLineGroup(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

## Python

### Creating a line group that contains the lines ST and LA

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLineGroupRequest()
        listLinesbody = [
            "ST",
            "LA"
        ]
        request.body = CreateLineGroupsReq(
            lines=listLinesbody,
            description="123",
            name="linegroup"
        )
        response = client.create_line_group(request)
        print(response)
```

```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

### Creating a line group that contains the lines ST and LA

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateLineGroupRequest{}
    var listLinesbody = []string{
        "ST",
        "LA",
    }
    descriptionCreateLineGroupsReq:= "123"
    request.Body = &model.CreateLineGroupsReq{
        Lines: listLinesbody,
        Description: &descriptionCreateLineGroupsReq,
        Name: "linegroup",
    }
    response, err := client.CreateLineGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for creating a line group
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.8.2 Querying Line Groups

### Function

This API is used to query the line groups. This API is not available in some regions. To use this API, submit a service ticket.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2.1/linegroups

**Table 4-300** Query Parameters

Parameter	Mandatory	Type	Description
line_id	No	String	Line group ID. Fuzzy search will work.
name	No	String	Line group name. Fuzzy search will work.

Parameter	Mandatory	Type	Description
limit	No	Integer	<p>Number of resources on each page.</p> <p>When you query detailed information, the value ranges from <b>0</b> to <b>100</b>. Commonly used values are <b>10</b>, <b>20</b>, and <b>50</b>, and the default value is <b>100</b>.</p> <p>When you query the brief information, the value ranges from <b>0</b> to <b>3000</b>, and the default value is <b>3000</b>.</p>
offset	No	Integer	<p>Start offset of the pagination query. The query will start from the next resource of the offset value.</p> <p>The value ranges from <b>0</b> to <b>2147483647</b>.</p> <p>The default value is <b>0</b>.</p> <p>If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b>.</p>

## Request Parameters

Table 4-301 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-302** Response body parameters

Parameter	Type	Description
linegroups	Array of <a href="#">CreateLineGroupsResp</a> objects	List object
metadata	<a href="#">metadata</a> object	Number of resources that meet the query condition

**Table 4-303** CreateLineGroupsResp

Parameter	Type	Description
name	String	Line group name
lines	Array of strings	List of lines contained in a line group (Resolution line IDs are used here.)
status	String	Resource status. Value options: <b>PENDING_CREATE</b> , <b>ACTIVE</b> , <b>PENDING_DELETE</b> , <b>PENDING_UPDATE</b> , <b>ERROR</b> , <b>FREEZE</b> , and <b>DISABLE</b>
description	String	Line group description
line_id	String	Line group ID
created_at	String	Time when the line group was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.
updated_at	String	Time when the line group was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.

**Table 4-304** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

**Status code: 400**

**Table 4-305** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-306** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying the line groups

```
{
  "linegroups": [ {
    "name": "linegroup",
    "lines": [ "ST", "LA" ],
    "status": "ACTIVE",
    "description": "123",
    "line_id": "lgroup_ff8080826c33046a016c3ce46a3322cf",
    "created_at": "2019-07-29T08:41:38.096",
    "updated_at": "2019-07-29T08:41:38.610"
  }, {
    "name": "20190729034848812group",
    "lines": [ "Liantong", "Dianxin_Guangdong" ],
    "status": "ACTIVE",
    "description": "auto create",
    "line_id": "lgroup_4011afa26c33050b016c3cbeaf650f84",
    "created_at": "2019-07-29T08:00:25.443",
    "updated_at": "2019-07-29T08:00:26.040"
  }
]
```

```
    }],  
    "metadata" : {  
      "total_count" : 2  
    }  
  }  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
public class ListLineGroupsSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListLineGroupsRequest request = new ListLineGroupsRequest();  
        request.withLineId("<line_id>");  
        request.withName("<name>");  
        request.withLimit("<limit>");  
        request.withOffset("<offset>");  
        try {  
            ListLineGroupsResponse response = client.listLineGroups(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```



## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLineGroupsRequest()
        request.line_id = "<line_id>"
        request.name = "<name>"
        request.limit = <limit>
        request.offset = <offset>
        response = client.list_line_groups(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

```

Build()

request := &model.ListLineGroupsRequest{}
lineIdRequest:= "<line_id>"
request.LineId = &lineIdRequest
nameRequest:= "<name>"
request.Name = &nameRequest
limitRequest:= int32(<limit>)
request.Limit = &limitRequest
offsetRequest:= int32(<offset>)
request.Offset = &offsetRequest
response, err := client.ListLineGroups(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the line groups
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

### 4.8.3 Querying a Line Group

#### Function

This API is used query a line group. This API is not available in some regions. To use this API, submit a service ticket.

#### Calling Method

For details, see [Calling APIs](#).

#### URI

GET /v2.1/linegroups/{linegroup\_id}

**Table 4-307** Path Parameters

Parameter	Mandatory	Type	Description
linegroup_id	Yes	String	ID of the line group to be queried

## Request Parameters

**Table 4-308** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 4-309** Response body parameters

Parameter	Type	Description
name	String	Line group name
lines	Array of strings	List of lines contained in a line group (Resolution line IDs are used here.)
status	String	Resource status. Value options: <b>PENDING_CREATE</b> , <b>ACTIVE</b> , <b>PENDING_DELETE</b> , <b>PENDING_UPDATE</b> , <b>ERROR</b> , <b>FREEZE</b> , and <b>DISABLE</b>
description	String	Line group description
line_id	String	Line group ID
created_at	String	Time when the line group was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.
updated_at	String	Time when the line group was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.

**Status code: 400**

**Table 4-310** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-311** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying a line group

```
{
  "name" : "linegroup",
  "lines" : [ "LA", "ST" ],
  "status" : "ACTIVE",
  "description" : "123",
  "line_id" : "lgroup_ff8080826c33046a016c3ce46a3322cf",
  "created_at" : "2019-07-29T08:41:38.096",
  "updated_at" : "2019-07-29T08:41:38.610"
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ShowLineGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowLineGroupRequest request = new ShowLineGroupRequest();
        try {
            ShowLineGroupResponse response = client.showLineGroup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")
```

```
credentials = BasicCredentials(ak, sk) \

client = DnsClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(DnsRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowLineGroupRequest()
    response = client.show_line_group(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowLineGroupRequest{}
    response, err := client.ShowLineGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying a line group
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.8.4 Updating a Line Group

### Function

This API is used to update a line group. This API is not available in some regions. To use this API, submit a service ticket.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2.1/linegroups/{linegroup\_id}

**Table 4-312** Path Parameters

Parameter	Mandatory	Type	Description
linegroup_id	Yes	String	ID of the line group to be updated

### Request Parameters

**Table 4-313** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-314** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Line group name. The name cannot be the same as that of the custom line or the preconfigured line name. The value can contain 1 to 64 characters, including letters, digits, underscores (_), hyphens (-), and periods (.).
description	No	String	Line group description. The value can contain a maximum of 255 characters. This parameter is left empty by default.
lines	Yes	Array of strings	Line list

## Response Parameters

Status code: 202

**Table 4-315** Response body parameters

Parameter	Type	Description
name	String	Line group name
lines	Array of strings	List of lines contained in a line group (Resolution line IDs are used here.)
status	String	Resource status. Value options: <b>PENDING_CREATE</b> , <b>ACTIVE</b> , <b>PENDING_DELETE</b> , <b>PENDING_UPDATE</b> , <b>ERROR</b> , <b>FREEZE</b> , and <b>DISABLE</b>
description	String	Line group description
line_id	String	Line group ID
created_at	String	Time when the line group was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.
updated_at	String	Time when the line group was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.

Status code: 400



**Table 4-316** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-317** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

Modifying the name and description of the line group that contains the lines ST and LA

```
PUT https://{endpoint}/v2.1/linegroups/{linegroup_id}
{
  "name" : "linegroup",
  "description" : "456",
  "lines" : [ "ST", "LA" ]
}
```

## Example Responses

**Status code: 202**

Response to the request for updating a line group

```
{
  "name" : "linegroup",
  "lines" : [ "ST", "LA" ],
  "status" : "PENDING_UPDATE",
  "description" : "456",
  "line_id" : "lgroup_ff8080826c33046a016c3ce46a3322cf",
  "created_at" : "2019-07-29T08:41:38.096",
}
```

```
"updated_at" : "2019-07-29T09:19:40.364"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying the name and description of the line group that contains the lines ST and LA

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class UpdateLineGroupsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateLineGroupsRequest request = new UpdateLineGroupsRequest();  
        UpdateLineGroupsBody body = new UpdateLineGroupsBody();  
        List<String> listbodyLines = new ArrayList<>();  
        listbodyLines.add("ST");  
        listbodyLines.add("LA");  
        body.withLines(listbodyLines);  
        body.withDescription("456");  
        body.withName("linegroup");  
        request.withBody(body);  
        try {  
            UpdateLineGroupsResponse response = client.updateLineGroups(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

```
}  
}  
}
```

## Python

Modifying the name and description of the line group that contains the lines ST and LA

```
# coding: utf-8  
  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkdns.v2 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = __import__('os').getenv("CLOUD_SDK_AK")  
    sk = __import__('os').getenv("CLOUD_SDK_SK")  
  
    credentials = BasicCredentials(ak, sk) \  
  
    client = DnsClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = UpdateLineGroupsRequest()  
        listLinesbody = [  
            "ST",  
            "LA"  
        ]  
        request.body = UpdateLineGroupsBody(  
            lines=listLinesbody,  
            description="456",  
            name="linegroup"  
        )  
        response = client.update_line_groups(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

## Go

Modifying the name and description of the line group that contains the lines ST and LA

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"  
)  
  
func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    Build()

client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateLineGroupsRequest{}
var listLinesbody = []string{
    "ST",
    "LA",
}
descriptionUpdateLineGroupsBody:= "456"
request.Body = &model.UpdateLineGroupsBody{
    Lines: listLinesbody,
    Description: &descriptionUpdateLineGroupsBody,
    Name: "linegroup",
}
response, err := client.UpdateLineGroups(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for updating a line group
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

## 4.8.5 Deleting a Line Group

### Function

This API is used to delete a line group. This API is not available in some regions. To use this API, submit a service ticket.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2.1/linegroups/{linegroup\_id}

**Table 4-318** Path Parameters

Parameter	Mandatory	Type	Description
linegroup_id	Yes	String	Line group ID

### Request Parameters

**Table 4-319** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

### Response Parameters

Status code: 202

**Table 4-320** Response body parameters

Parameter	Type	Description
name	String	Line group name
lines	Array of strings	List of lines contained in a line group (Resolution line IDs are used here.)

Parameter	Type	Description
status	String	Resource status. Value options: <b>PENDING_CREATE</b> , <b>ACTIVE</b> , <b>PENDING_DELETE</b> , <b>PENDING_UPDATE</b> , <b>ERROR</b> , <b>FREEZE</b> , and <b>DISABLE</b>
description	String	Line group description
line_id	String	Line group ID
created_at	String	Time when the line group was created. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.
updated_at	String	Time when the line group was updated. Format: yyyy-MM-dd'T'HH:mm:ss.SSS.

**Status code: 400**

**Table 4-321** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

**Status code: 500**

**Table 4-322** Response body parameters

Parameter	Type	Description
code	String	Error code Minimum: <b>8</b> Maximum: <b>36</b>
message	String	Description Minimum: <b>2</b> Maximum: <b>512</b>

## Example Requests

None

## Example Responses

**Status code: 202**

Response to the request for deleting a line group

```
{
  "name" : "linegroup",
  "lines" : [ "LA", "ST" ],
  "status" : "PENDING_DELETE",
  "description" : "456",
  "line_id" : "lgroup_ff8080826c33046a016c3ce46a3322cf",
  "created_at" : "2019-07-29T08:41:38.096",
  "updated_at" : "2019-07-29T09:23:16.610"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeleteLineGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteLineGroupRequest request = new DeleteLineGroupRequest();
        try {
            DeleteLineGroupResponse response = client.deleteLineGroup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
e.printStackTrace();
System.out.println(e.getStatusCode());
System.out.println(e.getRequestId());
System.out.println(e.getErrorCode());
System.out.println(e.getErrorMsg());
    }
}
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteLineGroupRequest()
        response = client.delete_line_group(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()
```



```
client := dns.NewDnsClient(
    dns.DnsClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.DeleteLineGroupRequest{}
response, err := client.DeleteLineGroup(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
202	Response to the request for deleting a line group
400	Error response
500	Error response

## Error Codes

See [Error Codes](#).

# 4.9 Custom Line Management

## 4.9.1 Creating a Custom Line

### Function

This API is used to create a custom line.

### Calling Method

For details, see [Calling APIs](#).

### URI

POST /v2.1/customlines

## Request Parameters

**Table 4-323** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-324** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Resolution line name. The value consists of 1 to 80 characters including letters, digits, hyphens (-), underscores (_), and periods (.). The name of each resolution line set by one account must be unique.
ip_segments	Yes	Array of strings	IP address range. The start IP address is separated from the end IP address with a hyphen (-). The IP address ranges cannot overlap. If the start and end IP addresses are the same, there is only one IP address in the range. Set the value to <b>IP1-IP1</b> . Currently, only IPv4 addresses are supported. You can specify a maximum of 50 IP address ranges.
description	No	String	Custom line description. A maximum of 255 characters are allowed. It is left blank by default.

## Response Parameters

**Status code: 200**

**Table 4-325** Response body parameters

Parameter	Type	Description
line_id	String	Resolution line ID
name	String	Custom line name
ip_segments	Array of strings	IP address range
created_at	String	Time when the custom line was created
updated_at	String	Time when the custom line was updated
status	String	Resource status
description	String	Custom line description

## Example Requests

Creating a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
POST https://{endpoint}/v2.1/customlines
{
  "name" : "customline",
  "ip_segments" : [ "1.1.1.1-1.1.1.1", "1.1.1.2-1.1.1.3" ],
  "description" : "123"
}
```

## Example Responses

**Status code: 200**

Request for creating a custom line

```
{
  "line_id" : "custom_2ce45ef669fc87870169fcbada7a0007",
  "name" : "customline",
  "ip_segments" : [ "1.1.1.1-1.1.1.1", "1.1.1.2-1.1.1.3" ],
  "status" : "PENDING_CREATE",
  "created_at" : "2019-04-10T12:03:17.827",
  "updated_at" : null,
  "description" : "123"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateCustomLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();

        CreateCustomLineRequest request = new CreateCustomLineRequest();
        CreateCustomLines body = new CreateCustomLines();
        List<String> listbodyIpSegments = new ArrayList<>();
        listbodyIpSegments.add("1.1.1.1-1.1.1.1");
        listbodyIpSegments.add("1.1.1.2-1.1.1.3");
        body.withDescription("123");
        body.withIpSegments(listbodyIpSegments);
        body.withName("customline");
        request.withBody(body);
        try {
            CreateCustomLineResponse response = client.createCustomLine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrMsg());
        }
    }
}
```

## Python

Creating a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *
```

```
if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateCustomLineRequest()
        listIpSegmentsbody = [
            "1.1.1.1-1.1.1.1",
            "1.1.1.2-1.1.1.3"
        ]
        request.body = CreateCustomLines(
            description="123",
            ip_segments=listIpSegmentsbody,
            name="customline"
        )
        response = client.create_custom_line(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

Creating a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

```

request := &model.CreateCustomLineRequest{}
var listIpSegmentsbody = []string{
    "1.1.1.1-1.1.1.1",
    "1.1.1.2-1.1.1.3",
}
descriptionCreateCustomLines:= "123"
request.Body = &model.CreateCustomLines{
    Description: &descriptionCreateCustomLines,
    IpSegments: listIpSegmentsbody,
    Name: "customline",
}
response, err := client.CreateCustomLine(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Request for creating a custom line

## Error Codes

See [Error Codes](#).

## 4.9.2 Querying a Custom Line

### Function

This API is used to query a custom line.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2.1/customlines

**Table 4-326** Query Parameters

Parameter	Mandatory	Type	Description
line_id	No	String	Resolution line ID

Parameter	Mandatory	Type	Description
name	No	String	Resolution line name
limit	No	Integer	Number of resources on each page. The value ranges from <b>0</b> to <b>500</b> . Commonly used values are <b>10</b> , <b>20</b> , and <b>50</b> , and the default value is <b>500</b> .
offset	No	Integer	Start offset of the pagination query. The query will start from the next resource of the offset value. The value ranges from <b>0</b> to <b>2147483647</b> . The default value is <b>0</b> . If <b>marker</b> is not left blank, the query starts from the resource specified by <b>marker</b> .
show_detail	No	Boolean	Whether to query detailed information. Value options: <ul style="list-style-type: none"> <li>• <b>true</b> (default): Detailed information is queried.</li> <li>• <b>false</b>: Detailed information is not queried.</li> </ul>

## Request Parameters

Table 4-327 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

Status code: 200

**Table 4-328** Response body parameters

Parameter	Type	Description
lines	Array of <b>line</b> objects	Line list
metadata	<b>metadata</b> object	Number of resources that meet the query condition

**Table 4-329** line

Parameter	Type	Description
line_id	String	Resolution line ID
name	String	Custom line name
ip_segments	Array of strings	IP address range
created_at	String	Time when the line was created
updated_at	String	Time when the line was updated
status	String	Resource status
description	String	Custom line description

**Table 4-330** metadata

Parameter	Type	Description
total_count	Integer	Number of resources that meet the filter criteria. The number is irrelevant to <b>limit</b> or <b>offset</b> .

## Example Requests

None

## Example Responses

**Status code: 200**

Querying a custom line

```
{
  "lines": [ {
    "line_id": "custom_2ce45ef669fc87870169fcbada7a0007",
    "name": "customline",
    "ip_segments": [ "1.1.1.1-1.1.1.1", "1.1.1.2-1.1.1.3" ],
    "status": "ACTIVE",
```



```
"created_at" : "2019-04-10T10:03:17.827",
"updated_at" : "2019-04-10T10:03:57.207",
"description" : "1234"
}],
"metadata" : {
  "total_count" : 1
}
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class ListCustomLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        ListCustomLineRequest request = new ListCustomLineRequest();
        request.withLineId("<line_id>");
        request.withName("<name>");
        request.withLimit("<limit>");
        request.withOffset("<offset>");
        request.withShowDetail("<show_detail>");
        try {
            ListCustomLineResponse response = client.listCustomLine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListCustomLineRequest()
        request.line_id = "<line_id>"
        request.name = "<name>"
        request.limit = <limit>
        request.offset = <offset>
        request.show_detail = <ShowDetail>
        response = client.list_custom_line(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

```

        WithCredential(auth).
        Build()

        request := &model.ListCustomLineRequest{
        lineIdRequest:= "<line_id>"
        request.LineId = &lineIdRequest
        nameRequest:= "<name>"
        request.Name = &nameRequest
        limitRequest:= int32(<limit>)
        request.Limit = &limitRequest
        offsetRequest:= int32(<offset>)
        request.Offset = &offsetRequest
        showDetailRequest:= <show_detail>
        request.ShowDetail = &showDetailRequest
        response, err := client.ListCustomLine(request)
        if err == nil {
            fmt.Printf("%+v\n", response)
        } else {
            fmt.Println(err)
        }
    }
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Querying a custom line

## Error Codes

See [Error Codes](#).

## 4.9.3 Deleting a Custom Line

### Function

This API is used to delete a custom line.

### Calling Method

For details, see [Calling APIs](#).

### URI

DELETE /v2.1/customlines/{line\_id}

**Table 4-331** Path Parameters

Parameter	Mandatory	Type	Description
line_id	Yes	String	Resolution line ID

## Request Parameters

**Table 4-332** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 4-333** Response body parameters

Parameter	Type	Description
line_id	String	Resolution line ID
name	String	Custom line name
ip_segments	Array of strings	IP address range
created_at	String	Time when the custom line was created
updated_at	String	Time when the custom line was updated
status	String	Resource status
description	String	Custom line description

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for deleting a custom line

```
{
  "line_id" : "custom_2ce45ef669fc87870169fcbada7a0007",
  "name" : "customline",
  "ip_segments" : [ "1.1.1.1-1.1.1.1", "1.1.1.2-1.1.1.3" ],
  "status" : "PENDING_DELETE",
  "created_at" : "2019-04-10T12:03:17.827",
  "updated_at" : "2019-04-10T12:03:17.827",
  "description" : "123"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

public class DeleteCustomLineSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteCustomLineRequest request = new DeleteCustomLineRequest();
        try {
            DeleteCustomLineResponse response = client.deleteCustomLine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteCustomLineRequest()
        response = client.delete_custom_line(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteCustomLineRequest{}
    response, err := client.DeleteCustomLine(request)
```

```

if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for deleting a custom line

## Error Codes

See [Error Codes](#).

## 4.9.4 Updating a Custom Line

### Function

This API is used to update a custom line.

### Calling Method

For details, see [Calling APIs](#).

### URI

PUT /v2.1/customlines/{line\_id}

**Table 4-334** Path Parameters

Parameter	Mandatory	Type	Description
line_id	Yes	String	Resolution line ID

## Request Parameters

**Table 4-335** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

**Table 4-336** Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Custom line name
ip_segments	No	Array of strings	IP address range. The start IP address is separated from the end IP address with a hyphen (-). The IP address ranges cannot overlap. If the start and end IP addresses are the same, there is only one IP address in the range. Set the value to <b>IP1-IP1</b> . Currently, only IPv4 addresses are supported.
description	No	String	Custom line description. A maximum of 255 characters are allowed.

## Response Parameters

**Status code: 200**

**Table 4-337** Response body parameters

Parameter	Type	Description
line_id	String	Resolution line ID
name	String	Custom line name
ip_segments	Array of strings	IP address range
created_at	String	Time when the custom line was created



Parameter	Type	Description
updated_at	String	Time when the custom line was updated
status	String	Resource status
description	String	Custom line

## Example Requests

Modifying the name and description of a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
PUT https://{endpoint}/v2.1/customlines/{line_id}
```

```
{
  "name" : "customline",
  "ip_segments" : [ "1.1.1.1-1.1.1.1", "1.1.1.2-1.1.1.3" ],
  "description" : "1234"
}
```

## Example Responses

**Status code: 200**

Response to the request for updating a custom line

```
{
  "line_id" : "custom_2ce45ef669fc87870169fcbada7a0007",
  "name" : "customline",
  "ip_segments" : [ "1.1.1.1-1.1.1.1", "1.1.1.2-1.1.1.3" ],
  "status" : "PENDING_UPDATE",
  "created_at" : "2019-04-10T12:03:17.827",
  "updated_at" : "2019-04-10T12:03:17.827",
  "description" : "1234"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying the name and description of a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;
import com.huaweicloud.sdk.dns.v2.*;
import com.huaweicloud.sdk.dns.v2.model.*;

import java.util.List;
import java.util.ArrayList;
```

```
public class UpdateCustomLineSolution {
    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");

        ICredential auth = new BasicCredentials()
            .withAk(ak)
            .withSk(sk);

        DnsClient client = DnsClient.newBuilder()
            .withCredential(auth)
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateCustomLineRequest request = new UpdateCustomLineRequest();
        UpdateCustomsLineReq body = new UpdateCustomsLineReq();
        List<String> listbodyIpSegments = new ArrayList<>();
        listbodyIpSegments.add("1.1.1.1-1.1.1.1");
        listbodyIpSegments.add("1.1.1.2-1.1.1.3");
        body.withDescription("1234");
        body.withIpSegments(listbodyIpSegments);
        body.withName("customline");
        request.withBody(body);
        try {
            UpdateCustomLineResponse response = client.updateCustomLine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

## Python

Modifying the name and description of a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \
    client = DnsClient.new_builder() \
```

```
.with_credentials(credentials) \  
.with_region(DnsRegion.value_of("<YOUR REGION>")) \  
.build()  
  
try:  
    request = UpdateCustomLineRequest()  
    listIpSegmentsbody = [  
        "1.1.1.1-1.1.1.1",  
        "1.1.1.2-1.1.1.3"  
    ]  
    request.body = UpdateCustomsLineReq(  
        description="1234",  
        ip_segments=listIpSegmentsbody,  
        name="customline"  
    )  
    response = client.update_custom_line(request)  
    print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

## Go

Modifying the name and description of a custom line and setting the IP address range to 1.1.1.1-1.1.1.1 and 1.1.1.2-1.1.1.3

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        Build()  
  
    client := dns.NewDnsClient(  
        dns.DnsClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.UpdateCustomLineRequest{}  
    var listIpSegmentsbody = []string{  
        "1.1.1.1-1.1.1.1",  
        "1.1.1.2-1.1.1.3",  
    }  
    descriptionUpdateCustomsLineReq := "1234"  
    nameUpdateCustomsLineReq := "customline"  
    request.Body = &model.UpdateCustomsLineReq{  
        Description: &descriptionUpdateCustomsLineReq,  
        IpSegments: &listIpSegmentsbody,  
        Name: &nameUpdateCustomsLineReq,  
    }
```

```
}
response, err := client.UpdateCustomLine(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for updating a custom line

## Error Codes

See [Error Codes](#).

# 4.10 Name Server Management

## 4.10.1 Querying Name Servers

### Function

This API is used to query name servers.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/nameservers

**Table 4-338** Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	Type of the name server. Value options: <ul style="list-style-type: none"> <li>• <b>public</b> indicates a public name server.</li> <li>• <b>private</b> indicates a private name server.</li> </ul> Exact matching will work. It is left blank by default.
region	No	String	Region ID. When you query a public name server, leave this parameter blank. Exact matching will work. It is left blank by default.

## Request Parameters

**Table 4-339** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 4-340** Response body parameters

Parameter	Type	Description
nameservers	Array of <a href="#">NameServersResp</a> objects	Name server list

**Table 4-341** NameServersResp

Parameter	Type	Description
type	String	Type of the name server.Value options: - <b>public</b> indicates a public name server.- <b>private</b> indicates a private name server.
region	String	Region ID. When you query a public name server, leave this parameter blank.
ns_records	Array of <a href="#">ns_records</a> objects	Name server list

**Table 4-342** ns\_records

Parameter	Type	Description
hostname	String	Host name. This parameter is left blank when a private name server is used.
address	String	Address of the name server. When the server is a public name server, this parameter is left blank.
priority	Integer	Priority. If the value of <b>priority</b> is <b>1</b> , the DNS server is the first one to resolve domain names.

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying the name server list

```
{
  "nameservers": [ {
    "region": null,
    "type": "public",
    "ns_records": [ {
      "hostname": "ns1.huawei.com.",
      "priority": 1
    }, {
      "hostname": "ns2.huawei.com.",
      "priority": 2
    } ]
  }, {
    "region": "xxx",
    "type": "private",
    "ns_records": [ {
      "priority": 1,
      "address": "100.125.1.0"
    } ]
  } ]
}
```

```
    }, {  
      "priority" : 2,  
      "address" : "100.125.1.1"  
    }]  
  }]  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
public class ListNameServersSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListNameServersRequest request = new ListNameServersRequest();  
        request.withType("<type>");  
        request.withRegion("<region>");  
        try {  
            ListNameServersResponse response = client.listNameServers(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

### Python

```
# coding: utf-8
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListNameServersRequest()
        request.type = "<type>"
        request.region = "<region>"
        response = client.list_name_servers(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListNameServersRequest{}
    typeRequest := "<type>"
    request.Type = &typeRequest
    regionRequest := "<region>"
```



```
request.Region = &regionRequest
response, err := client.ListNameServers(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying the name server list

## Error Codes

See [Error Codes](#).

# 4.11 Quota Management

## 4.11.1 Querying Resource Quotas

### Function

Query the quotas of DNS resources, including public zones, private zones, record sets, PTR records, inbound endpoints, outbound endpoints, custom lines, and line groups.

### Calling Method

For details, see [Calling APIs](#).

### URI

GET /v2/quotamg/dns/quotas

**Table 4-343** Query Parameters

Parameter	Mandatory	Type	Description
domain_id	Yes	String	Tenant ID

## Request Parameters

**Table 4-344** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It can be obtained by calling an IAM API. The value of <b>X-Subject-Token</b> in the response header is the user token.

## Response Parameters

**Status code: 200**

**Table 4-345** Response body parameters

Parameter	Type	Description
quotas	Array of <b>quotas</b> objects	Quotas

**Table 4-346** quotas

Parameter	Type	Description
quota_key	String	Resource type
quota_limit	Integer	Maximum resource quota
used	Integer	Used resource quota
unit	String	Quota measurement unit. The value is fixed at <b>count</b> .

## Example Requests

None

## Example Responses

**Status code: 200**

Response to the request for querying tenant quotas

```
{
  "quotas": [ {
    "quota_key": "zone",
    "quota_limit": 50,
```

```
"used" : 30,  
"unit" : "count"  
}, {  
"quota_key" : "record_set",  
"quota_limit" : 500,  
"used" : 300,  
"unit" : "count"  
} ]  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.dns.v2.region.DnsRegion;  
import com.huaweicloud.sdk.dns.v2.*;  
import com.huaweicloud.sdk.dns.v2.model.*;  
  
public class ShowDomainQuotaSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
  
        ICredential auth = new BasicCredentials()  
            .withAk(ak)  
            .withSk(sk);  
  
        DnsClient client = DnsClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(DnsRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowDomainQuotaRequest request = new ShowDomainQuotaRequest();  
        request.withDomainId("<domain_id>");  
        try {  
            ShowDomainQuotaResponse response = client.showDomainQuota(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

## Python

```
# coding: utf-8

from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkdns.v2.region.dns_region import DnsRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkdns.v2 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = __import__('os').getenv("CLOUD_SDK_AK")
    sk = __import__('os').getenv("CLOUD_SDK_SK")

    credentials = BasicCredentials(ak, sk) \

    client = DnsClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(DnsRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowDomainQuotaRequest()
        request.domain_id = "<domain_id>"
        response = client.show_domain_quota(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

## Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    dns "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/dns/v2/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        Build()

    client := dns.NewDnsClient(
        dns.DnsClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowDomainQuotaRequest{}
```

```
request.DomainId = "<domain_id>"
response, err := client.ShowDomainQuota(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

## More

For SDK sample code of more programming languages, see the Sample Code tab in [API Explorer](#). SDK sample code can be automatically generated.

## Status Codes

Status Code	Description
200	Response to the request for querying tenant quotas

## Error Codes

See [Error Codes](#).

# 5 Examples

---

## 5.1 Example 1: Creating a Public Zone

### Scenarios

After you register a domain name and set up a website, create a public zone and configure records to point the domain name to the IP address of the web server where the website is deployed so that visitors can use the domain name to access your website over the Internet.

This topic describes how to create a public zone by calling the API in [Creating a Public Zone](#) and create a record set by calling the API in [Creating a Record Set](#). For details about how to call APIs, see [Calling APIs](#).

#### NOTE

The token obtained from IAM is valid for only 24 hours. If you want to use one token for authentication, you can cache it to avoid frequently calling the IAM API.

### Prerequisites

- You have registered domain name example.com with a third-party registrar.
- You have deployed a web server and obtained its IP address.

### Involved APIs

You need to obtain a token and add **X-Auth-Token** to the request header of API calls.

- IAM API for obtaining a token
- DNS API for creating a public zone
- DNS API for creating a record set

### Procedure

1. Obtain the token by referring to [Authentication](#).

2. Add **Content-Type** and **X-Auth-Token** in the request header.
3. Specify the following parameters in the request body:

```
{
  "name": "example.com.", // Zone name (mandatory, string)
  "description": "This is an example zone.", // Description of the zone (optional, string)
  "zone_type": "public", // Zone type (optional)
  "email": "xx@example.org" // Email address of the domain name administrator (optional, string)
  "ttl": 300, // Default caching duration of the SOA record (optional, string)
}
```

4. Send a request **POST https://DNS endpoint/v2/zones**.
5. Check the response.

#### NOTE

- The request result may be successful or failed in the response.
- If the request fails, an error code and error information are returned. For details, see [Error Codes](#).
- For details about parameters in the response, see [Creating a Public Zone](#).
- For details about general return codes in the response, see [Status Code](#).

The following is an example response of a successful request:

```
STATUS CODE 200
{
  "id": "2c9eb155587194ec01587224c9f90149",
  "name": "example.com.",
  "description": "This is an example zone.",
  "email": "xx@example.com",
  "ttl": 300,
  "serial": 1,
  "masters": [],
  "status": "PENDING_CREATE",
  "links": {
    "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149"
  },
  "pool_id": "00000000570e54ee01570e9939b20019",
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type": "public",
  "created_at": "2016-11-17T11:56:03.439",
  "updated_at": null,
  "record_num": 0
}
```

6. Add **Content-Type** and **X-Auth-Token** in the request header.
7. Specify the following parameters in the request body:

```
{
  "name": "example.com.", // Zone name (mandatory, string)
  "description": "This is an example record set.", // Description of the record set (optional, string)
  "type": "A", // Record set type (mandatory, string)
  "ttl": 3600, // Caching duration of the record set (optional, integer)
  "records": [
    "192.168.10.1",
    "192.168.10.2"
  ] // Values of the record set (mandatory, list<string>)
}
```

8. Send a request **POST https://DNS endpoint/v2/zones/{zone\_id}/recordsets**, where **zone\_id** is the ID of the zone to which the record set is to be added.
9. Check the response.

```
STATUS CODE 200
{
  "id": "2c9eb155587228570158722b6ac30007",
  "name": "example.com.",
  "description": "This is an example record set.",
  "type": "A",
}
```

```
"ttl": 300,
"records": [
  "192.168.10.1",
  "192.168.10.2"
],
"status": "PENDING_CREATE",
"links": {
  "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
},
"zone_id": "ff8080825b8fc86c015b94bc6f8712c3",
"zone_name": "example.com.",
"create_at": "2017-04-22T08:17:08.997",
"update_at": null,
"default": false,
"project_id": "e55c6f3dc4e34c9f86353b664ae0e70c"
}
```

## 5.2 Example 2: Creating a Private Zone

### Scenarios

If you want users to access your ECSs using private domain names so that the ECSs are not exposed to the Internet, you can create private zones in the DNS service and add A record sets for the zone.

This topic describes how to create a private zone by calling the API in [Creating a Private Zone](#) and create a record set by calling the API in [Creating a Record Set](#). For details about how to call APIs, see [Calling APIs](#).

#### NOTE

The token obtained from IAM is valid for only 24 hours. If you want to use one token for authentication, you can cache it to avoid frequently calling the IAM API.

### Prerequisites

You have planned the region where you want to use private domain names and determined the endpoint for calling an API based on the region. For details, see [Endpoints](#).

### Involved APIs

You need to obtain a token and add **X-Auth-Token** to the request header of API calls.

- IAM API for obtaining a token
- DNS API for creating a private zone
- DNS API for creating a record set

### Procedure

1. Obtain the token by referring to [Authentication](#).
2. Add **Content-Type** and **X-Auth-Token** in the request header.
3. Specify the following parameters in the request body:

```
{
  "name": "example.com.", // Zone name (mandatory, string)
```



```
"description": "This is an example zone.", // Description of the zone (optional, string)
"zone_type": "private", // Zone type (optional, string)
"email": "xx@example.com" // Email address of the domain name administrator (optional, string)
"router": {
  "router_id": "19664294-0bf6-4271-ad3a-94b8c79c6558", // VPC ID (mandatory, string)
  "router_region": "xx" // Region of the VPC (optional, string)
}
}
```

4. Send a request **POST https://DNS endpoint/v2/zones**.
5. Check the response.

 **NOTE**

- The request result may be successful or failed in the response.
- If the request fails, an error code and error information are returned. For details, see [Error Codes](#).
- For details about parameters in the response, see [Creating a Private Zone](#).
- For details about general return codes in the response, see [Status Code](#).

The following is an example response of a successful request:

```
STATUS CODE 200
{
  "id": "ff8080825b8fc86c015b94bc6f8712c3",
  "name": "example.com.",
  "description": "This is an example zone.",
  "email": "xx@example.com",
  "ttl": 300,
  "serial": 1,
  "masters": [],
  "status": "PENDING_CREATE",
  "links": {
    "self": "https://Endpoint/v2/zones/ff8080825b8fc86c015b94bc6f8712c3"
  },
  "pool_id": "ff8080825ab738f4015ab7513298010e",
  "project_id": "e55c6f3dc4e34c9f86353b664ae0e70c",
  "zone_type": "private",
  "created_at": "2017-04-22T08:17:08.997",
  "updated_at": null,
  "record_num": 0,
  "router": {
    "status": "PENDING_CREATE",
    "router_id": "19664294-0bf6-4271-ad3a-94b8c79c6558",
    "router_region": "xx"
  }
}
```

6. Add **Content-Type** and **X-Auth-Token** in the request header.
7. Specify the following parameters in the request body:

```
{
  "name": "example.com.", // Record set name (mandatory, string)
  "description": "This is an example record set.", // Description of the record set (optional, string)
  "type": "A", // Record set type (mandatory, string)
  "ttl": 3600, // Caching duration of the record set (optional, integer)
  "records": [
    "192.168.10.1",
    "192.168.10.2"
  ] // Values of the record set (mandatory, list<string>)
}
```

8. Send a request **POST https://DNS endpoint/v2/zones/{zone\_id}/recordsets**, where **zone\_id** is the ID of the zone to which the record set is to be added.
9. Check the response.

```
STATUS CODE 200
{
  "id": "2c9eb155587228570158722b6ac30007",
```

```
"name": "example.com.",
"description": "This is an example record set.",
"type": "A",
"ttl": 300,
"records": [
  "192.168.10.1",
  "192.168.10.2"
],
"status": "PENDING_CREATE",
"links": {
  "self": "https://Endpoint/v2/zones/2c9eb155587194ec01587224c9f90149/recordsets/2c9eb155587228570158722b6ac30007"
},
"zone_id": "ff8080825b8fc86c015b94bc6f8712c3",
"zone_name": "example.com.",
"create_at": "2017-04-22T08:17:08.997",
"update_at": null,
"default": false,
"project_id": "e55c6f3dc4e34c9f86353b664ae0e70c"
}
```

# 6 Permissions Policies and Supported Actions

---

## 6.1 Introduction

This topic describes fine-grained permissions management for your DNS resources. Skip this topic if your Huawei Cloud account does not need individual IAM users.

By default, new IAM users do not have any permissions granted. You need to add a user to one or more groups, and assign policies or roles to these groups. The user then inherits permissions from the groups it is a member of. This process is called authorization. After authorization, the user can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using **roles** and **policies**. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

### NOTE

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has permissions to call all APIs, but IAM users must have the required permissions specifically assigned. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user queries the public zone list using an API, the user must have been granted permissions that allow the **dns:zone:list** action.

## Supported Actions

DNS provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Actions supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permission:** A statement in a policy that allows or denies certain operations.
- **APIs:** REST APIs that can be called in a custom policy.
- **Actions:** added to a custom policy to control permissions for specific operations.
- **Related actions:** Actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the dependent actions.
- **IAM projects or enterprise projects:** Type of projects in which policies can be used to grant permissions. A policy can be applied to IAM projects, enterprise projects, or both. Policies that contain actions supporting both IAM projects and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect in IAM. Such policies will not take effect if they are assigned to user groups in Enterprise Management. For details about the differences between IAM and enterprise management, see [What Are the Differences Between IAM and Enterprise Management?](#)

 **NOTE**

The check mark (√) indicates that an action takes effect. The cross mark (x) indicates that an action does not take effect.

DNS supports the following actions that can be defined in custom policies:

- **Zone Management:** contains actions supported by all zone management APIs, such as the API for creating a zone.
- **Record Set Management:** contains actions supported by all record set management APIs, such as the API for creating a record set.
- **PTR Record Management:** contains actions supported by all PTR record management APIs, such as the API for creating a PTR record.
- **Tag Management:** contains actions supported by all tag management APIs, such as the API for adding a resource tag.
- **Record Set Importing:** contains actions supported by all record set importing management APIs, such as the API for creating a task for importing public zone record sets.
- **Custom Line:** contains actions supported by all custom line management APIs, such as the API for creating a custom line.
- **Public Resource Management:** contains actions supported by APIs for querying the DNS server list and DNS resource quotas.

## 6.2 Zone Management

**Table 6-1** Actions for zone management

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Create a zone.	POST /v2/zones	dns:zone:create	vpc:*.get* vpc:*.list*	√	√

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Query a zone.	GET /v2/zones/{zone_id}	dns:zone:get	-	√	√
List the zones.	GET /v2/zones	dns:zone:list	-	√	The following filter criteria are supported: <ul style="list-style-type: none"> <li>Enterprise project</li> <li>Resource ID</li> </ul>
Modify a zone.	PATCH /v2/zones/{zone_id}	dns:zone:update	-	√	√
Set the zone status.	PUT /v2/zones/{zone_id}/statuses	dns:zone:setStatus	-	√	√
Delete a zone.	DELETE /v2/zones/{zone_id}	dns:zone:delete	ces:remoteChecks:list ces:siteMonitorHealthCheck:get ces:siteMonitorHealthCheck:create ces:siteMonitorRule:delete ces:siteMonitorRule:put	√	√
Delete zones in batches.	DELETE /v2.1/zones	dns:zone:delete	ces:remoteChecks:list ces:siteMonitorHealthCheck:get ces:siteMonitorHealthCheck:create ces:siteMonitorRule:delete ces:siteMonitorRule:put	√	√

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Associate a private zone with a VPC.	POST /v2/zones/{zone_id}/associaterouter	dns:zone:associaterouter	vpc*:get* vpc*:list*	√	√ <b>NOTE</b> Shared private zones are not included.
Disassociate a VPC from a private zone.	POST /v2/zones/{zone_id}/disassociaterouter	dns:zone:disassociaterouter	vpc*:get* vpc*:list*	√	√ <b>NOTE</b> Shared private zones are not included.
Regain a domain name.	POST /v2/retrieval	dns:zone:createRetrieval	-	√	×
Verify domain name regaining request immediately.	POST /v2/retrieval/verification/{id}				
Query domain name regaining requests.	GET /v2/retrieval	dns:zone:getRetrieval	-	√	×
Query the retrieval result of a public domain name.	GET /v2/retrieval/verification/{id}				
Export a zone.	GET /v2/zones/{zone_id}/export	dns:zone:getExport	-	√	√

## 6.3 Record Set Management

**Table 6-2** Actions for record set management

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Create a record set.	POST /v2/zones/{zone_id}/recordsets	dns:recordset:create	-	√	√
Create a record set.	POST /v2.1/zones/{zone_id}/recordsets	dns:recordset:create	-	√	√
Query a record set.	GET /v2/zones/{zone_id}/recordsets/{recordset_id}	dns:recordset:get	-	√	√
Query a record set.	GET /v2.1/zones/{zone_id}/recordsets/{recordset_id}	dns:recordset:get	-	√	√
Query record sets in a specified zone.	GET /v2/zones/{zone_id}/recordsets	dns:recordset:list	-	√	√
Query all record sets.	GET /v2/recordsets	dns:recordset:list	-	√	This API is used to list record sets. Only the zone ID can be used as a filter criterion.
Query record sets.	GET /v2.1/zones/{zone_id}/recordsets	dns:recordset:list	-	√	√

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
	GET /v2.1/recordsets	dns:recordset:list	-	√	This API is used to list record sets. Only the zone ID can be used as a filter criterion.
Modify a record set.	PUT /v2/zones/{zone_id}/recordsets/{recordset_id}	dns:recordset:update	-	√	√
Modify a record set.	PUT /v2.1/zones/{zone_id}/recordsets/{recordset_id}	dns:recordset:update	-	√	√
Delete a record set.	DELETE /v2/zones/{zone_id}/recordsets/{recordset_id}	dns:recordset:delete	ces:remoteChecks:list ces:siteMonitorHealthCheck:get ces:siteMonitorHealthCheck:create ces:siteMonitorRule:delete ces:siteMonitorRule:put	√	√
Delete a record set.	DELETE /v2.1/zones/{zone_id}/recordsets/{recordset_id}	dns:recordset:delete	ces:remoteChecks:list ces:siteMonitorHealthCheck:get ces:siteMonitorHealthCheck:create ces:siteMonitorRule:delete ces:siteMonitorRule:put	√	√



Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Delete record sets in batches.	DELETE /v2.1/zones/{zone_id}/recordsets	dns:recordset:delete	ces:remoteChecks:list ces:siteMonitorHealthCheck:get ces:siteMonitorHealthCheck:create ces:siteMonitorRule:delete ces:siteMonitorRule:put	√	√
Set record set status.	PUT /v2.1/recordsets/{recordset_id}/statuses/set	dns:recordset:setStatus	-	√	√

## 6.4 PTR Record Management

Table 6-3 Actions for PTR record management

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Create a PTR record.	PATCH /v2/reverse/floatingips/{region}:{floatingip_id}	dns:ptr:set	vpc*:get* vpc*:list*	√	√
Modify a PTR record.	PATCH /v2/reverse/floatingips/{region}:{floatingip_id}	dns:ptr:set	vpc*:get* vpc*:list*	√	√
Unset a PTR record.	PATCH /v2/reverse/floatingips/{region}:{floatingip_id}	dns:ptr:set	vpc*:get* vpc*:list*	√	√

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Unset PTR records in batches.	DELETE /v2.1/reverse/floatingips	dns:ptr:set	vpc*:get* vpc*:list*	√	√
Query a PTR record.	GET /v2/reverse/floatingips/{region}:{floatingip_id}	dns:ptr:get	-	√	√
Query PTR records.	GET /v2/reverse/floatingips	dns:ptr:list	-	√	This API is used to list PTR records. The following filter criteria are supported: <ul style="list-style-type: none"> <li>Enterprise project</li> <li>Resource ID in the <i>{region}:{floatingip_id}</i> format</li> </ul> Other cases are not supported.

## 6.5 Tag Management

Table 6-4 Actions for tag management

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise Project
Add a resource tag.	POST /v2/{project_id}/{resource_type}/{resource_id}/tags	dns:tag:set	-	√	√

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise Project
Add or delete resource tags in batches.	POST /v2/{project_id}/{resource_type}/{resource_id}/tags/action	dns:tag:set	-	√	√
Delete a resource tag.	DELETE /v2/{project_id}/{resource_type}/{resource_id}/tags/{key}	dns:tag:set	-	√	√
Query tags of a resource.	GET /v2/{project_id}/{resource_type}/{resource_id}/tags	dns:tag:get	-	√	√
Query project tags.	GET /v2/{project_id}/{resource_type}/tags	dns:tag:get	-	√	×
Query resources by tag.	POST /v2/{project_id}/{resource_type}/resource_instances/action	dns:tag:get	-	√	×

## 6.6 Record Set Importing

**Table 6-5** Actions for record set importing

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Download the template for importing public zone record sets in batches.	GET /v2/templates/import/recordset	dns:recordset:getPublicRecordSetImportTemplate	-	√	x Only authentication is required.
Create a task to import public zone record sets.	POST /v2/zones/{zone_id}/import/recordsets	dns:publicRecordset:createImport	-	√	√
Query a task to import public zone record sets.	GET /v2/zones/{zone_id}/import/recordsets	dns:publicRecordset:getImport	-	√	√
Delete a task to import public zone record sets.	DELETE /v2/zones/{zone_id}/import/tasks/{task_id}	dns:publicRecordset:deleteImport	-	√	√
Download the template for importing private zone record sets in batches.	GET /v2/templates/import/private/recordset	dns:recordset:getPrivateRecordSetImportTemplate	-	√	x Only authentication is required.
Create a task to import private zone record sets.	POST /v2/zones/{zone_id}/import/private/recordsets	dns:privateRecordset:createImport	-	√	√

Permission	API	Action	Dependent Permission	IAM Project	Enterprise Project
Query a task to import private zone record sets.	GET /v2/zones/{zone_id}/import/private/recordsets	dns:privateRecordset:getImport	-	√	√
Delete a task to import private zone record sets.	DELETE /v2/zones/{zone_id}/import/private/tasks/{task_id}	dns:privateRecordset:deleteImport	-	√	√

## 6.7 Custom Line

Table 6-6 Custom line management

Permission	API	Action	Dependent Permission	IAM Project (Project)	Enterprise project (Enterprise Project)
Create a custom line.	POST /v2.1/customlines	dns:customline:create	-	√	×
Query custom lines.	GET /v2.1/customlines	dns:customline:list	-	√	×
Delete a custom line.	DELETE /v2.1/customlines/{line_id}	dns:customline:delete	-	√	×
Modify a custom line.	PUT /v2.1/customlines/{line_id}	dns:customline:update	-	√	×

## 6.8 Public Resource Management

**Table 6-7** Actions for public resource management

Permission	API	Action	Related Action	IAM Project (Project)	Enterprise Project
List DNS name servers.	GET /v2/nameservers	dns:nameserver:list	-	√	× Only authentication is required.
Query resource quotas.	GET /v2/{domain_id}/quotas	dns:quota:list	-	√	×

# 7 Appendix

## 7.1 Status Code

- Normal

**Table 7-1** Return code for successful requests

Returned Value	Description
200	Request succeeded.
202	Request accepted.
204	No content.

- Abnormal

**Table 7-2** Return code for failed requests

Returned Value	Description
400 Bad Request	The server fails to process the request.
401 Unauthorized	You must enter the username and password to access the requested page.
403 Forbidden	You are forbidden to access the requested page.
404 Not Found	The server cannot find the requested page.
405 Method Not Allowed	You are not allowed to use the method specified in the request.
406 Not Acceptable	The response generated by the server is not acceptable to the client.

Returned Value	Description
407 Proxy Authentication Required	You must use the proxy server for authentication.
408 Request Timeout	The request is timed out.
409 Conflict	The request cannot be processed due to a conflict.
413 Payload Too Large	The request is too large.
500 internal Server Error	The request fails because the server is abnormal.
501 Not Implemented	The request fails because the server does not support the requested function.
502 Bad Gateway	The request fails because the returned response is invalid.
503 Service Unavailable	The request fails because the system is abnormal.
504 Gateway Timeout	Gateway times out.

## 7.2 Error Codes

### Introduction

When an API call encounters an error, an error structure is returned. The following table describes DNS error codes.

### Error Code Structure Format

```
{  
  "code": "DNS.0001",  
  "message": "Internal error."  
}
```

### Error Code Description

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).



**Table 7-3** Error codes

Status Code	Error Code	Message	Description	Handling Measure
500	DNS.0000	The system is busy. Try again later.	Unknown error.	Retry the operation. If the error persists, contact customer service.
500	DNS.0001	Internal error.	Internal error.	Retry the operation. If the error persists, contact customer service.
400	DNS.0002	Invalid request.	Invalid request.	Check empty or invalid request parameters.
500	DNS.0003	The system is busy. Try again later.	DB exception.	Retry the operation. If the error persists, contact customer service.
404	DNS.0004	No record sets found.	No record sets found.	Check whether the resource is available.
401	DNS.0005	Authentication required.	Authentication required.	<ol style="list-style-type: none"> <li>1. When you call an API, check whether the token is valid.</li> <li>2. Check whether you have operation permission on the requested resources.</li> </ol>

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0006	The limit parameter is invalid.	The <b>limit</b> parameter is invalid.	Check the value of <b>limit</b> in the request.
400	DNS.0007	The marker parameter is invalid.	The <b>marker</b> parameter is invalid.	Check the value of <b>marker</b> in the request.
400	DNS.0008	The zone of this type is not supported now.	The zone of this type is not supported now.	Check the zone type and try again.
400	DNS.0009	The startTime parameter is invalid.	The <b>startTime</b> parameter is invalid.	Check the value of <b>startTime</b> in the request.
400	DNS.0010	The endTime parameter is invalid.	The <b>endTime</b> parameter is invalid.	Check the value of <b>endTime</b> in the request.
400	DNS.0011	The Start parameter is invalid.	The <b>start</b> parameter is invalid.	Check the value of <b>start</b> in the request.
500	DNS.0012	An error occurred when the VPC service is called.	An error occurred when the VPC service is called.	Retry the operation. If the error persists, contact customer service.
403	DNS.0013	You do not have the permission to perform this operation using the API.	You do not have the permission to perform this operation using the API.	The project of the requested resource may be frozen. Log in to the IAM console with the account and check whether the project status is normal.
403	DNS.0014	Request forbidden by flow control.	Request forbidden by flow control.	Try again later.

Status Code	Error Code	Message	Description	Handling Measure
500	DNS.0015	An error occurred when the IAM service is called.	An error occurred when the IAM service is called.	Retry the operation. If the error persists, contact customer service.
400	DNS.0016	This record already exists or conflicts with another record.	This record set already exists.	Check the record set.
400	DNS.0017	The offset parameter is invalid.	The <b>offset</b> parameter is invalid.	Check the value of <b>offset</b> in the request.
409	DNS.0021	Could not acquire the lock, please try again later.	Failed to obtain the lock.	Failed to obtain the lock. Try again later.
400/500	DNS.0022	An error occurred when the Cloud Eye service is called.	An error occurred when Cloud Eye is called.	Retry the operation. If the error persists, contact customer service.
500	DNS.0023	An error occurred when the Cloud Eye service is called. Cloud Eye service response: Read timed out.	An error occurred when the Cloud Eye service is called (Read timed out).	Retry the operation. If the error persists, contact customer service.
500	DNS.0024	An error occurred when the Cloud Eye service is called. Connect to Cloud Eye service failed: Connection refused.	An error occurred when the Cloud Eye service is called (Connection refused).	Retry the operation. If the error persists, contact customer service.
500	DNS.0025	An error occurred when the Cloud Eye service is called. Connect to Cloud Eye service failed: connect timed out.	An error occurred when the Cloud Eye service is called (Read timed out).	Retry the operation. If the error persists, contact customer service.

Status Code	Error Code	Message	Description	Handling Measure
500	DNS.0026	Invalid CES endpoint configuration.	Invalid Cloud Eye endpoint configuration.	Retry the operation. If the error persists, contact customer service.
413	DNS.0027	Warning: upload file too large.	The file to be uploaded is oversized.	The request body is too large.
400	DNS.0028	Invalid version.	Invalid version number.	Retry the operation. If the error persists, contact customer service.
400	DNS.0029	Invalid record.	The <b>record</b> parameter is invalid.	Check the value of <b>offset</b> in the request.
403	DNS.0030	Operation not allowed for this resource.	This operation is not allowed for the requested resource.	Check whether you have operation permission on the requested resources.
403	DNS.0031	User not allowed.	You do not have permission to perform this operation.	<ol style="list-style-type: none"> <li>1. When you call an API, check whether the token is valid.</li> <li>2. Check whether you have operation permission on the requested resources.</li> </ol>
400	DNS.0032	Invalid sort key.	The <b>sort key</b> parameter is invalid.	Check the value of <b>sort key</b> in the request.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0033	Invalid sort dir.	The <b>sort dir</b> parameter is invalid.	Check the value of <b>sort dir</b> in the request.
400/404/500	DNS.0034	An error occurred when the bss service is called.	The system fails to call the BSS service.	Retry the operation. If the error persists, contact customer service.
400/404/500	DNS.0035	An error occurred when the Cloudsite service is called.	The system fails to call CloudSite.	Retry the operation. If the error persists, contact customer service.
400	DNS.0036	An error occurred when the neutron service is called.	The system fails to call the Neutron service.	Retry the operation. If the error persists, contact customer service.
403	DNS.0037	Feature not supported now.	This function is unavailable.	This function is unavailable.
400	DNS.0038	The show detail parameter is invalid.	The <b>show detail</b> parameter is invalid.	Check the value of <b>show detail</b> in the request.
400	DNS.0101	Invalid pool name.	Invalid pool name.	Check the pool name in the request.
400	DNS.0102	Invalid pool description.	Invalid pool description.	Check the pool description in the request.
400	DNS.0103	Invalid pool type.	Invalid pool type.	Check whether the pool type you specify is supported or valid.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0104	Invalid server configuration in the pool.	Invalid server configuration in the pool.	Check the host configuration in the pool.
400	DNS.0105	Invalid name server configuration in the pool.	Invalid name server configuration in the pool.	Check the name server configuration.
400	DNS.0106	Invalid pool region.	Invalid region for parameter <b>pool</b> .	Check the region configuration.
400	DNS.0107	Invalid pool ID.	Invalid pool ID.	Check the pool ID in the request.
404	DNS.0108	This pool does not exist.	This pool does not exist.	Check whether the pool is available.
400	DNS.0109	This pool is in use.	This pool is in use.	A pool in use cannot be deleted. Contact customer service.
400	DNS.0201	The email address of the zone is invalid.	The email address of the zone is invalid.	Check the email address in the request.
400	DNS.0202	Invalid zone name.	Invalid zone name.	<ol style="list-style-type: none"> <li>1. Check whether the zone name format is correct.</li> <li>2. Ensure that the zone name is a top-level or public second-level domain name.</li> </ol>

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0203	Invalid zone TTL value. The value ranges from %s to %s.	Invalid TTL value.	Check the TTL value in the request. If the limit does not meet your requirements, contact customer service.
400	DNS.0204	Invalid zone type.	Invalid zone type.	Check whether the zone type you specify is supported.
404/500	DNS.0205	No pools available.	No pools available.	Contact customer service.
400	DNS.0206	Invalid zone description. The description can contain a maximum of 255 characters.	Invalid zone description. The description can contain up to 255 characters.	Check the zone description in the request.
500	DNS.0207	No views available in the pool.	No views available.	Contact customer service.
400	DNS.0208	This zone already exists.	This zone already exists.	Check whether the requested zone already exists.
400/409/500	DNS.0209	The zone is not in the Normal state.	The zone is not in the normal state.	The zone status is not stable. Try again later.
400	DNS.0210	The zone name is used by the system.	The zone name is used by the system.	Check the zone name in the request.
400	DNS.0211	The zone name is used by another tenant.	The zone name is used by another tenant.	Check the zone name in the request.

Status Code	Error Code	Message	Description	Handling Measure
400/409	DNS.0212	This VPC has already been associated with the zone.	This VPC has already been associated with the zone.	Check whether the VPC has been associated with the private zone.
400	DNS.0213	The zone is disabled.	The domain name has been suspended.	Check the zone status.
400	DNS.0301	Invalid zone ID.	Invalid zone ID.	Check the zone ID in the request.
400/404	DNS.0302	This zone does not exist.	This zone does not exist.	Check the zone of the requested record set.
400	DNS.0303	Invalid record set TTL value.	Invalid record set TTL value.	Check the TTL value in the request.
400	DNS.0304	Invalid record set name.	Invalid record set name.	Check whether the record set name is a valid domain name ended with the zone name.
400	DNS.0305	Invalid record set description. The description can contain a maximum of 255 characters.	Invalid record set description. The description can contain up to 255 characters.	Check the record set description in the request.
400	DNS.0307	Invalid record set type.	Invalid record set type.	Check whether the record set type you specify is supported.
400	DNS.0308	Invalid record set value.	Invalid record set value.	Check whether the record set value you specify is well-formatted.
400	DNS.0309	Invalid record set ID.	Invalid record set ID.	Check the record set ID in the request.



Status Code	Error Code	Message	Description	Handling Measure
400/403	DNS.0310	Invalid tenant ID.	Invalid tenant ID.	Check whether the tenant ID is empty or in incorrect format.
400/403	DNS.0311	Invalid domain ID.	Invalid domain ID.	Check whether the domain ID is empty or in incorrect format.
400	DNS.0312	This record set name already exists.	This record set already exists.	Check whether the record set name already exists.
404	DNS.0313	This record set does not exist.	This record set does not exist.	Check the requested record set.
400/409	DNS.0314	The record set is not in a steady state.	The record set is not in a steady state.	Check the record set status. If it is not stable, you cannot perform operations.
400	DNS.0315	Invalid status.	Invalid status.	Check the status in the request.
400/409	DNS.0317	This record set is a default one and cannot be deleted.	This record set is a default one and cannot be deleted.	Check whether the record set to be deleted is created by default.
400/409	DNS.0318	This record set is a default one and cannot be updated.	This record set is a default one and cannot be updated.	Check whether the record set to be updated is created by default.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0319	The TTL parameter has been out of range.	The TTL value is out of range. The value ranges from <b>{minTTL}</b> to <b>{maxTTL}</b> .	Check the TTL value in the request. If the limit does not meet your requirements, contact customer service.
400	DNS.0320	The Zone name levels have been out of MAX count. The maximum is %s.	The domain name levels have reached the maximum allowed.	Check the domain name level in the request.
400	DNS.0321	The sub domain levels have been out of MAX count.	The subdomain levels have been out of MAX count. The maximum is <b>{maxLevel}</b> .	Check the subdomain in the request.
400	DNS.0322	The number of weighted record sets with the same name, type, and resolution line has reached the limit %s.	Too many record sets of the same name, type, and resolution line.	Too many record sets of the same name, type, and resolution line. If the limit does not meet your requirements, contact customer service.
400	DNS.0323	The weight must range from %s to %s.	The weight must range from 0 to 100.	Change the weight value.
400	DNS.0324	This record set is a default one and cannot be operated.	You cannot perform this operation on a default record set.	You cannot perform this operation on a default record set.
400	DNS.0325	The resolution line for record sets in this type of zones must be 'default_view'.	The resolution line for record sets in this type of zones must be <b>default_view</b> .	Change the resolution line in the request.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0326	The batch number has been out of MAX count. The maximum is %s.	The number of batch creation requests has reached the limit.	Modify the request parameter.
400	DNS.0327	The batch number has been out of MAX count. The maximum is %s.	The number of batch deletion requests has reached the limit.	Modify the request parameter.
400	DNS.0328	Cannot create this record set because the same one already exists but is not weighted. Specify a weight for the previous record set first.	There are record sets that have no weights configured.	There are record sets that have no weights configured.
400	DNS.0329	The batch number has been out of MAX count. The maximum is %s.	The number of requested resources has reached the limit.	Modify the request parameter.
400	DNS.0330	Invalid alias resource type.	The resource type of parameter <b>alias</b> is invalid.	Check the resource type of the alias.
400	DNS.0331	Invalid alias resource domain name.	The domain name of parameter <b>alias</b> is invalid.	Check the value of <b>alias</b> in the request.
400	DNS.0332	The alias must be a domain name of a cloud resource.	The alias domain name must be hosted on the DNS server.	Check the value of <b>alias</b> in the request.
400	DNS.0333	The alias is not supported now.	Alias records are not supported.	Contact customer service.
400	DNS.0401	Invalid quota type.	Invalid quota type.	Check the quota type in the request.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.040 2	Invalid quota value.	Invalid quota value.	Invalid quota value. Contact customer service.
403	DNS.040 3	Insufficient record set quota.	Insufficient record set quota.	Check whether the number of record sets has reached the limit. If the limit does not meet your requirements, contact customer service.
403	DNS.040 4	Insufficient zone quota.	Insufficient zone quota.	Check whether the number of zones has reached the limit. If the limit does not meet your requirements, contact customer service.
403	DNS.040 5	Insufficient PTR record quota.	Insufficient PTR record quota.	The number of PTR records has reached the limit. If the limit does not meet your requirements, contact customer service.

Status Code	Error Code	Message	Description	Handling Measure
403	DNS.0406	Insufficient inbound endpoint quota.	Insufficient inbound endpoint quota.	Check whether the number of inbound endpoints has reached the limit. If the limit does not meet your requirements, contact customer service.
403	DNS.0407	Insufficient outbound endpoint quota.	Insufficient outbound endpoint quota.	The number of outbound endpoints has reached the upper limit. If the limit does not meet your requirements, contact customer service.
403	DNS.0408	Insufficient custom line quota.	Insufficient custom line quota.	The number of custom lines has reached the limit. If the limit does not meet your requirements, contact customer service.
403	DNS.0409	Insufficient line group quota.	Insufficient line group quota.	The number of line groups has reached the limit. If the limit does not meet your requirements, contact customer service.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0501	Invalid PTR ID.	Invalid PTR record ID.	Check whether the PTR record ID is empty or in incorrect format.
404	DNS.0502	This EIP address does not exist.	The EIP does not exist.	Check whether the EIP is available.
409	DNS.0503	The PTR record is not in a steady state.	The PTR record is not in a steady state.	Check the PTR record status. If it is not stable, you cannot perform operations.
400/500	DNS.0504	Invalid EIP address ID.	Invalid EIP ID.	Check whether the EIP ID is empty or in incorrect format.
400	DNS.0505	Invalid domain name in the PTR record.	Invalid domain name in the PTR record.	Check the domain name in the PTR record.
400	DNS.0506	Invalid PTR TTL value. The value must range from %s to %s.	Invalid PTR record TTL value. The value ranges from <b>1</b> to <b>2147483647</b> .	Check whether the PTR record TTL value has reached the limit.
404	DNS.0507	This PTR record does not exist.	This PTR record does not exist.	Check the requested PTR record.
400	DNS.0508	Invalid PTR description. The description can contain a maximum of 255 characters.	Invalid PTR record description. The description can contain up to 255 characters.	Check whether the PTR record description in the request exceeds 255 characters.
400	DNS.0601	Invalid region.	Invalid region.	Check the value of <b>region</b> in the request.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0602	Invalid floating IP address.	Invalid floating IP address.	Check the floating IP address in the request.
400	DNS.0603	Invalid request.	Invalid input.	Check whether the request parameter is empty.
400	DNS.0604	The interval parameter is invalid.	The <b>interval</b> parameter is invalid.	Check the value of <b>interval</b> in the request.
400	DNS.0608	This resource is in use.	This resource is in use.	Check whether the resource is in use.
400	DNS.0701	Invalid VPC.	Invalid VPC.	Check the VPC ID and region in the request.
400	DNS.0704	The VPC is not in a steady state.	The zone is not associated with the VPC.	Check whether the zone and VPC are normally associated.
400	DNS.0705	No VPCs are associated with this zone.	No VPCs are associated with this zone.	Associate a VPC with the zone.
403	DNS.0706	You are not allowed to disassociate this VPC because this is the last VPC associated with this zone.	You are not allowed to disassociate this VPC because this is the last VPC associated with this zone.	Associate another VPC with the zone and then disassociate the previous one.
400	DNS.0707	The VPC is not associated with the zone.	The VPC is not associated with the zone.	Check whether the VPC is associated with the zone.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.0708	This VPC cannot be disassociated because it is being associated with the zone.	This VPC cannot be disassociated because it is being associated with the zone.	Check the association between the zone and VPC. Disassociate them when the status is stable.
403	DNS.0709	This VPC cannot be disassociated because this is the only normal VPC associated with this zone.	This VPC cannot be disassociated because this is the only normal VPC associated with this zone.	Check whether other VPCs are normally associated with the zone. If no, perform the following operations: <ol style="list-style-type: none"> <li>1. Disassociate VPCs in abnormal association state.</li> <li>2. Associate another VPC.</li> <li>3. Disassociate the required VPC.</li> </ol>
500	DNS.0710	Invalid VPC URL configuration.	Invalid VPC endpoint configuration.	Check the region in the request. If the region is correct, contact customer service.
404	DNS.0711	This VPC could not be found.	This VPC could not be found.	Log in to the VPC console and check whether the VPC exists.
400	DNS.0712	This port parameter is invalid.	The port ID is invalid.	Check whether the port ID in the request is empty.



Status Code	Error Code	Message	Description	Handling Measure
400/500	DNS.0805	Failed to check the VPC validity.	Failed to check the VPC validity.	Retry the operation. If the error persists, contact customer service.
404	DNS.0901	The name server does not exist.	The name server does not exist.	Contact customer service.
400	DNS.1001	Insufficient tag quota.	Insufficient tag quota.	The number of tags has reached the limit. If the limit does not meet your requirements, contact customer service.
400	DNS.1002	Invalid resource type.	Invalid resource type.	Check the resource type in the request.
400	DNS.1003	Invalid tag.	Invalid tag.	Check the tag in the request.
400	DNS.1101	Health check is currently not supported.	Health check is currently not supported.	Health check is currently not supported.
400	DNS.1102	Invalid health check ID.	Invalid health check ID.	Change the health check ID in the request.
400	DNS.1103	This health check is disabled.	This health check is disabled.	<ol style="list-style-type: none"> <li>1. Check whether the health check is disabled.</li> <li>2. Enable the health check.</li> </ol>

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.1104	This record set has already been associated with a health check.	This record set has already been associated with a health check.	One record set can be associated with only one health check.
404	DNS.1105	No health check is associated with this record set.	Check whether there is health check associated with this record set.	Check whether there is health check associated with this record set.
404	DNS.1106	Cannot find the health check.	The health check cannot be found.	Change the health check ID in the request.
400	DNS.1107	Insufficient health check quota. Contact customer service to increase quotas.	Insufficient health check quota.	Contact customer service.
400	DNS.1108	Cannot associate the health check with the record set because its network plane does not match the zone type of the record set.	The health check cannot be associated the record set because its network plane does not match the zone type of the record set.	Change the ID of the health check to be associated.
400	DNS.1109	This health check is in detecting status and not available currently.	This health check is in detecting status and not available currently.	This health check is in detecting status and not available currently. Try again later.
500	DNS.1110	Invalid CES health check region configuration.	Invalid health check region configuration.	Contact customer service.
400	DNS.1301	Failed to parse this upload file.	Failed to obtain data from the uploaded file.	Check the uploaded file.
400	DNS.1302	Empty upload file.	The uploaded file is empty.	Check the uploaded file.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.1303	Only .xlsx files are supported.	Only .xlsx files are supported.	Check the uploaded file.
400	DNS.1304	Invalid task ID.	Invalid task ID.	Check the task ID.
400	DNS.1305	Invalid record set type.	Invalid record set type.	Check the task ID.
400	DNS.1306	Stop export: too many row exceed max limit.	The number of exported record sets has reached the limit.	Contact customer service.
400	DNS.1401	Invalid package name.	Invalid package name.	Check the package name.
400	DNS.1402	Failed to purchase the DNS package.	Failed to purchase the package.	Check the package name.
404	DNS.1403	The package does not exist.	The package does not exist.	Check the package ID.
400	DNS.1501	Invalid endpoint name.	Invalid endpoint name.	Check the endpoint name.
400	DNS.1502	Invalid subnet id.	Invalid subnet ID.	Check the subnet ID.
400	DNS.1503	Invalid endpoint direction.	Invalid endpoint direction.	Check the endpoint direction.
400	DNS.1504	Endpoint name exists.	The endpoint name already exists.	Change the endpoint name.
400	DNS.1505	Ip is not in this subnet.	The IP address is not in the subnet.	Enter an IP address in the subnet.
400	DNS.1506	Ip is repeated.	The IP address already exists.	Change the IP address.
400	DNS.1507	Ip has been used.	The IP address is in use.	Change the IP address.
400	DNS.1508	Subnets are in the different vpc.	The subnets do not belong to the same VPC.	Check the subnet information.

Status Code	Error Code	Message	Description	Handling Measure
400	DNS.1509	Invalid endpoint id.	Invalid endpoint ID.	Enter a correct endpoint ID.
404	DNS.1510	Endpoint not exist.	The endpoint does not exist.	Check the endpoint ID.
404	DNS.1511	Ipaddress not exist.	The IP address does not exist.	Change the IP address.
400	DNS.1514	Invalid number of ipaddress.	Invalid IP address quantity.	Check whether the number of IP addresses is in the range of 2 to 6.
400	DNS.1515	Ip address is invalid.	Invalid IP address.	Check the IP address you entered.
400	DNS.1516	Ip address is broadcast ipaddress or network ipaddress.	The IP address is a network address or broadcast address.	Check whether the IP address you entered is a broadcast address or network address.
400	DNS.0806	This line is not be supported in this DNS version.	This line is not supported in the current version.	Check the resolution line name in the request.
409	DNS.0807	This line is a default one and cannot be operated.	This line is a default one and cannot be operated.	Check the resolution line name in the request.
400	DNS.1601	Invalid line ID.	Invalid resolution line ID.	Check the resolution line ID in the request.
400	DNS.1602	Invalid line name.	Invalid resolution line name.	Check the resolution line name in the request.
400	DNS.1603	The line name already exists.	The resolution line name has been used.	Change the resolution line name in the request.

Status Code	Error Code	Message	Description	Handling Measure
404	DNS.1604	The line does not exist.	The resolution line does not exist.	Check the resolution line in the request.
400	DNS.1605	Invalid IP address range.	Invalid IP address range.	Check the IP address range in the request.
400	DNS.1606	The IP address range overlaps with that in another line.	The IP address ranges overlap.	<ol style="list-style-type: none"> <li>1. Check whether the IP address ranges in the request overlap each other.</li> <li>2. Check whether the IP address ranges overlap those in other lines.</li> </ol>
409	DNS.1607	This line is not in a steady state.	The resolution line is in the unstable state.	Retry the operation. If the error persists, contact customer service.
400	DNS.1608	The IP segments has been out of MAX count.	The number of IP address ranges has reached the limit.	Check the number of IP address ranges in the request.
500	DNS.1801	An error occurred when the IAM PDP service is called.	The IAM PDP service cannot be properly called.	Retry the operation. If the error persists, contact customer service.
403	DNS.1802	Policy doesn't allow {action} to be performed.	Insufficient permissions.	Check the permissions of the user group.
403	DNS.1900	Enterprise project is not supported.	Enterprise projects are not supported.	Contact customer service.

Status Code	Error Code	Message	Description	Handling Measure
500	DNS.1901	Invalid EPS endpoint configuration.	Invalid EPS endpoint configuration.	Contact customer service.
500	DNS.1902	An error occurred when the EPS service is called.	An error occurred when the EPS service is called.	Retry the operation. If the error persists, contact customer service.
400	DNS.1903	Cannot associate the enterprise project.	The selected enterprise project cannot be associated.	<ol style="list-style-type: none"> <li>1. Check whether the enterprise project is in normal status.</li> <li>2. Check whether you have permission of the enterprise project.</li> </ol>
400	DNS.1904	This enterprise project is disabled.	The enterprise project is disabled.	Check the enterprise project.
400	DNS.1905	Invalid enterprise project ID.	Invalid enterprise project ID.	Check the enterprise project ID.
404	DNS.1906	The enterprise project does not exist.	The enterprise project does not exist.	Check the enterprise project.
500	DNS.2000	Invalid Quota Manage service endpoint configuration.	Invalid endpoint configuration for the quota management service.	Contact customer service.
500	DNS.2001	An error occurred when the Quota Manage service is called.	An exception occurred when the quota management service is called.	Contact customer service.

Status Code	Error Code	Message	Description	Handling Measure
403	DNS.2002	Insufficient domain quota.	Insufficient tenant resource quota.	The number of resources has reached the limit. If the limit does not meet your requirements, contact customer service.

## 7.3 Resolution Lines

### Basic Lines

Line ID	Description
default_view	Default
Dianxin	China Telecom
Liantong	China Unicom
Yidong	China Mobile
Jiaoyuwang	Jiaoyuwang
Tietong	Tietong
Pengboshi	Pengboshi
CN	Chinese mainland
Abroad	Global

### ISP Lines

Carrier	Line ID	Description
China Telecom	Dianxin_Huabei	China Telecom_North China
	Dianxin_Dongbei	China Telecom_Northeast China
	Dianxin_Huadong	China Telecom_East China

Carrier	Line ID	Description
	Dianxin_Huazhong	China Telecom_Central China
	Dianxin_Huanan	China Telecom_South China
	Dianxin_Xinan	China Telecom_Southwest China
	Dianxin_Xibei	China Telecom_Northwest China
	Dianxin_Beijing	China Telecom_Beijing
	Dianxin_Hebei	China Telecom_Hebei
	Dianxin_Tianjin	China Telecom_Tianjin
	Dianxin_Shanxi	China Telecom_Shanxi
	Dianxin_Neimenggu	China Telecom_Inner Mongolia
	Dianxin_Heilongjiang	China Telecom_Heilongjiang
	Dianxin_Jilin	China Telecom_Jilin
	Dianxin_Liaoning	China Telecom_Liaoning
	Dianxin_Jiangsu	China Telecom_Jiangsu
	Dianxin_Shanghai	China Telecom_Shanghai
	Dianxin_Zhejiang	China Telecom_Zhejiang
	Dianxin_Anhui	China Telecom_Anhui
	Dianxin_Fujian	China Telecom_Fujian
	Dianxin_Jiangxi	China Telecom_Jiangsu
	Dianxin_Shandong	China Telecom_Shandong
	Dianxin_Hubei	China Telecom_Hubei
	Dianxin_Hunan	China Telecom_Hunan
	Dianxin_Henan	China Telecom_Henan
	Dianxin_Guangdong	China Telecom_Guangdong
	Dianxin_Guangxi	China Telecom_Guangxi
	Dianxin_Hainan	China Telecom_Hainan
	Dianxin_Sichuan	China Telecom_Sichuan



Carrier	Line ID	Description
	Dianxin_Xizang	China Telecom_Tibet
	Dianxin_Chongqing	China Telecom_Chongqing
	Dianxin_Yunnan	China Telecom_Yunnan
	Dianxin_Guizhou	China Telecom_Guizhou
	Dianxin_Gansu	China Telecom_Gansu
	Dianxin_Xinjiang	China Telecom_Xinjiang
	Dianxin_Shaanxi	China Telecom_Shaanxi
	Dianxin_Qinghai	China Telecom_Qinghai
	Dianxin_Ningxia	China Telecom_Ningxia
China Mobile	Yidong_Huabei	China Mobile_North China
	Yidong_Dongbei	China Mobile_Northeast China
	Yidong_Huadong	China Mobile_East China
	Yidong_Huazhong	China Mobile_Central China
	Yidong_Huanan	China Mobile_South China
	Yidong_Xinan	China Mobile_Southwest China
	Yidong_Xibei	China Mobile_Northwest China
	Yidong_Beijing	China Mobile_Beijing
	Yidong_Hebei	China Mobile_Hebei
	Yidong_Tianjin	China Mobile_Tianjin
	Yidong_Shanxi	China Mobile_Shanxi
	Yidong_Neimenggu	China Mobile_Inner Mongolia
	Yidong_Heilongjiang	China Mobile_Heilongjiang
	Yidong_Jilin	China Mobile_Jilin
	Yidong_Liaoning	China Mobile_Liaoning
	Yidong_Jiangsu	China Mobile_Jiangsu
Yidong_Shanghai	China Mobile_Shanghai	

Carrier	Line ID	Description
	Yidong_Zhejiang	China Mobile_Zhejiang
	Yidong_Anhui	China Mobile_Anhui
	Yidong_Fujian	China Mobile_Fujian
	Yidong_Jiangxi	China Mobile_Jiangxi
	Yidong_Shandong	China Mobile_Shandong
	Yidong_Hubei	China Mobile_Hubei
	Yidong_Hunan	China Mobile_Hunan
	Yidong_Henan	China Mobile_Henan
	Yidong_Guangdong	China Mobile_Guangdong
	Yidong_Guangxi	China Mobile_Guangxi
	Yidong_Hainan	China Mobile_Hainan
	Yidong_Sichuan	China Mobile_Sichuan
	Yidong_Xizang	China Mobile_Tibet
	Yidong_Chongqing	China Mobile_Chongqing
	Yidong_Yunnan	China Mobile_Yunnan
	Yidong_Guizhou	China Mobile_Guizhou
	Yidong_Gansu	China Mobile_Gansu
	Yidong_Xinjiang	China Mobile_Xinjiang
	Yidong-Shaanxi	China Mobile-Shaanxi
	Yidong_Qinghai	China Mobile_Qinghai
Yidong_Ningxia	China Mobile_Ningxia	
China Unicom	Liantong_Huabei	China Unicom_North China
	Liantong_Dongbei	China Unicom_Northeast China
	Liantong_Huadong	China Unicom_East China
	Liantong_Huazhong	China Unicom_Central China
	Liantong_Huanan	China Unicom_South China
	Liantong_Xinan	China Unicom_Southwest China

Carrier	Line ID	Description
	Liantong_Xibei	China Unicom_Northwest China
	Liantong_Beijing	China Unicom_Beijing
	Liantong_Hebei	China Unicom_Hebei
	Liantong_Tianjin	China Unicom_Tianjin
	Liantong_Shanxi	China Unicom_Shanxi
	Liantong_Neimenggu	China Unicom_Inner Mongolia
	Liantong_Heilongjiang	China Unicom_Heilongjiang
	Liantong_Jilin	China Unicom_Jilin
	Liantong_Liaoning	China Unicom_Liaoning
	Liantong_Jiangsu	China Unicom_Jiangsu
	Liantong_Shanghai	China Unicom_Shanghai
	Liantong_Zhejiang	China Unicom_Zhejiang
	Liantong_Anhui	China Unicom_Anhui
	Liantong_Fujian	China Unicom_Fujian
	Liantong_Jiangxi	China Unicom_Jiangxi
	Liantong_Shandong	China Unicom_Shandong
	Liantong_Hubei	China Unicom_Hebei
	Liantong_Hunan	China Unicom_Hunan
	Liantong_Henan	China Unicom_Henan
	Liantong_Guangdong	China Unicom_Guangdong
	Liantong_Guangxi	China Unicom_Guangxi
	Liantong_Hainan	China Unicom_Hainan
	Liantong_Sichuan	China Unicom_Sichuan
	Liantong_Xizang	China Unicom_Tibet
	Liantong_Chongqing	China Unicom_Chongqing
	Liantong_Yunnan	China Unicom_Yunnan
	Liantong_Guizhou	China Unicom_Guizhou
	Liantong_Gansu	China Unicom_Gansu

Carrier	Line ID	Description
	Liantong_Xinjiang	China Unicom_Xinjiang
	Liantong_Shaanxi	China Unicom_Shaanxi
	Liantong_Qinghai	China Unicom_Qinghai
	Liantong_Ningxia	China Unicom_Ningxia
Jiaoyuwang	Jiaoyuwang	Jiaoyuwang (default)
	Jiaoyuwang_Huabei	Jiaoyuwang_North China
	Jiaoyuwang_Dongbei	Jiaoyuwang_Northeast China
	Jiaoyuwang_Huadong	Jiaoyuwang_East China
	Jiaoyuwang_Huazhong	Jiaoyuwang_Central China
	Jiaoyuwang_Huanan	Jiaoyuwang_South China
	Jiaoyuwang_Xinan	Jiaoyuwang_Southwest China
	Jiaoyuwang_Xibei	Jiaoyuwang_Northwest China
	Jiaoyuwang_Beijing	Jiaoyuwang_Beijing
	Jiaoyuwang_Hebei	Jiaoyuwang_Hebei
	Jiaoyuwang_Tianjin	Jiaoyuwang_Tianjin
	Jiaoyuwang_Shanxi	Jiaoyuwang_Shanxi
	Jiaoyuwang_Neimenggu	Jiaoyuwang_Inner Mongolia
	Jiaoyuwang_Heilongjiang	Jiaoyuwang_Heilongjiang
	Jiaoyuwang_Jilin	Jiaoyuwang_Jilin
	Jiaoyuwang_Liaoning	Jiaoyuwang_Liaoning
	Jiaoyuwang_Jiangsu	Jiaoyuwang_Jiangsu
	Jiaoyuwang_Shanghai	Jiaoyuwang_Shanghai
	Jiaoyuwang_Zhejiang	Jiaoyuwang_Zhejiang
	Jiaoyuwang_Anhui	Jiaoyuwang_Anhui
Jiaoyuwang_Fujian	Jiaoyuwang_Fujian	
Jiaoyuwang_Jiangxi	Jiaoyuwang_Jiangxi	
Jiaoyuwang_Shandong	Jiaoyuwang_Shandong	
Jiaoyuwang_Hubei	Jiaoyuwang_Hubei	

Carrier	Line ID	Description
	Jiaoyuwang_Hunan	Jiaoyuwang_Hunan
	Jiaoyuwang_Henan	Jiaoyuwang_Henan
	Jiaoyuwang_Guangdong	Jiaoyuwang_Guangdong
	Jiaoyuwang_Guangxi	Jiaoyuwang_Guangxi
	Jiaoyuwang_Hainan	Jiaoyuwang_Hainan
	Jiaoyuwang_Sichuan	Jiaoyuwang_Sichuan
	Jiaoyuwang_Xizang	Jiaoyuwang_Tibet
	Jiaoyuwang_Chongqing	Jiaoyuwang_Chongqing
	Jiaoyuwang_Yunnan	Jiaoyuwang_Yunnan
	Jiaoyuwang_Guizhou	Jiaoyuwang_Guizhou
	Jiaoyuwang_Gansu	Jiaoyuwang_Gansu
	Jiaoyuwang_Xinjiang	Jiaoyuwang_Xinjiang
	Jiaoyuwang_Shaanxi	Jiaoyuwang_Shaanxi
	Jiaoyuwang_Qinghai	Jiaoyuwang_Qinghai
	Jiaoyuwang_Ningxia	Jiaoyuwang_Ningxia
Pengboshi	Pengboshi	Pengboshi (default)
	Pengboshi_Huabei	Pengboshi_North China
	Pengboshi_Dongbei	Pengboshi_Northeast China
	Pengboshi_Huadong	Pengboshi_East China
	Pengboshi_Huazhong	Pengboshi_Central China
	Pengboshi_Huanan	Pengboshi_South China
	Pengboshi_Xinan	Pengboshi_Southwest China
	Pengboshi_Xibei	Pengboshi_Northwest China
	Pengboshi_Beijing	Pengboshi_Beijing
	Pengboshi_Hebei	Pengboshi_Hebei
	Pengboshi_Tianjin	Pengboshi_Tianjin
	Pengboshi_Shanxi	Pengboshi_Shanxi
	Pengboshi_Neimenggu	Pengboshi_Inner Mongolia

Carrier	Line ID	Description
	Pengboshi_Heilongjiang	Pengboshi_Heilongjiang
	Pengboshi_Jilin	Pengboshi_Jilin
	Pengboshi_Liaoning	Pengboshi_Liaoning
	Pengboshi_Jiangsu	Pengboshi_Jiangsu
	Pengboshi_Shanghai	Pengboshi_Shanghai
	Pengboshi_Zhejiang	Pengboshi_Zhejiang
	Pengboshi_Anhui	Pengboshi_Anhui
	Pengboshi_Fujian	Pengboshi_Fujian
	Pengboshi_Jiangxi	Pengboshi_Jiangxi
	Pengboshi_Shandong	Pengboshi_Shandong
	Pengboshi_Hubei	Pengboshi_Hubei
	Pengboshi_Hunan	Pengboshi_Hunan
	Pengboshi_Henan	Pengboshi_Henan
	Pengboshi_Guangdong	Pengboshi_Guangdong
	Pengboshi_Guangxi	Pengboshi_Guangxi
	Pengboshi_Hainan	Pengboshi_Hainan
	Pengboshi_Sichuan	Pengboshi_Sichuan
	Pengboshi_Xizang	Pengboshi_Tibet
	Pengboshi_Chongqing	Pengboshi_Chongqing
	Pengboshi_Yunnan	Pengboshi_Yunnan
	Pengboshi_Guizhou	Pengboshi_Guizhou
	Pengboshi_Gansu	Pengboshi_Gansu
	Pengboshi_Xinjiang	Pengboshi_Xinjiang
	Pengboshi_Shaanxi	Pengboshi_Shaanxi
	Pengboshi_Qinghai	Pengboshi_Qinghai
	Pengboshi_Ningxia	Pengboshi_Ningxia
Tietong	Tietong	Tietong (default)
	Tietong_Huabei	Tietong_North China
	Tietong_Dongbei	Tietong_Northeast China
	Tietong_Huadong	Tietong_East China

Carrier	Line ID	Description
	Tietong_Huazhong	Tietong_Central China
	Tietong_Huanan	Tietong_South China
	Tietong_Xinan	Tietong_Southwest China
	Tietong_Xibei	Tietong_Northwest China
	Tietong_Beijing	Tietong_Beijing
	Tietong_Hebei	Tietong_Hebei
	Tietong_Tianjin	Tietong_Tianjin
	Tietong_Shanxi	Tietong_Shanxi
	Tietong_Neimenggu	Tietong_Inner Mongolia
	Tietong_Heilongjiang	Tietong_Heilongjiang
	Tietong_Jilin	Tietong_Jilin
	Tietong_Liaoning	Tietong_Liaoning
	Tietong_Jiangsu	Tietong_Jiangsu
	Tietong_Shanghai	Tietong_Shanghai
	Tietong_Zhejiang	Tietong_Zhejiang
	Tietong_Anhui	Tietong_Anhui
	Tietong_Fujian	Tietong_Fujian
	Tietong_Jiangxi	Tietong_Jiangxi
	Tietong_Shandong	Tietong_Shandong
	Tietong_Hubei	Tietong_Hubei
	Tietong_Hunan	Tietong_Hunan
	Tietong_Henan	Tietong_Henan
	Tietong_Guangdong	Tietong_Guangdong
	Tietong_Guangxi	Tietong_Guangxi
	Tietong_Hainan	Tietong_Hunan
	Tietong_Sichuan	Tietong_Sichuan
	Tietong_Xizang	Tietong_Tibet
	Tietong_Chongqing	Tietong_Chongqing
	Tietong_Yunnan	Tietong_Yunnan
	Tietong_Guizhou	Tietong_Guizhou

Carrier	Line ID	Description
	Tietong_Gansu	Tietong_Gansu
	Tietong_Xinjiang	Tietong_Xinjiang
	Tietong_Shaanxi	Tietong_Shaanxi
	Tietong_Qinghai	Tietong_Qinghai
	Tietong_Ningxia	Tietong_Ningxia

## Region Lines (Global)

Area	Line ID	Description
Asia Pacific	AP	Global_Asia Pacific
	AE	Global_United Arab Emirates
	AM	Global_Armenia
	AZ	Global_Azerbaijan
	BD	Global_Bangladesh
	BH	Global_Bahrain
	BN	Global_Brunei
	BT	Global_Bhutan
	CX	Global_Christmas Island
	GE	Global_Georgia
	HK	Global_Hong Kong (China)
	ID	Global_Indonesia
	IN	Global_India
	IQ	Global_Iraq
	JO	Global_Jordan
	KG	Global_Kyrgyzstan
	KH	Global_Cambodia
KW	Global_Kuwait	
KZ	Global_Kazakhstan	
LB	Global_Lebanon	



Area	Line ID	Description
	LK	Global_Sri Lanka
	MM	Global_Myanmar
	MN	Global_Mongolia
	MO	Global_Macao (China)
	MV	Global_Maldives
	MY	Global_Malaysia
	NP	Global_Nepal
	OM	Global_Oman
	PH	Global_Philippines
	PK	Global_Pakistan
	PS	Global_Palestine
	QA	Global_Qatar
	SA	Global_Saudi Arabia
	SG	Global_Singapore
	TH	Global_Thailand
	TJ	Global_Tajikistan
	TL	Global_Timor-Leste
	TM	Global_Turkmenistan
	TW	Global_Taiwan (China)
	UZ	Global_Uzbekistan
	VN	Global_Vietnam
	YE	Global_Yemen
	AS	Global_America Samoa
	CK	Global_Cook Islands
	FM	Global_Micronesia
	GU	Global_Guam
	KI	Global_Kiribati
	MH	Global_Marshall Islands
	MP	Global_Northern Mariana Islands

Area	Line ID	Description
	NC	Global_New Caledonia
	NF	Global_Norfolk Island
	NR	Global_Nauru
	PF	Global_French Polynesia
	PG	Global_Papua New Guinea
	PW	Global_Palau
	SB	Global_Solomon Islands
	TK	Global_Tokelau Islands
	TO	Global_Tonga
	TV	Global_Tuvalu
	VU	Global_Vanuatu
	WS	Global_Samoa
	CY	Global_Cyprus
	IL	Global_Israel
	JP	Global_Japan
	KR	Global_South Korea
	TR	Global_Türkiye
	IR	Global_Iran
	SY	Global_Syria
	CN	Global_Chinese mainland
	AFG	Global_Afghanistan
	LAO	Global_Laos
Oceania	OA	Global_Oceania
	AU	Global_Australia
	NZ	Global_New Zealand
	FJ	Global_Fiji Islands
	WF	Global_Wallis and Futuna
	NU	Global_Niue

Area	Line ID	Description
Europe	EU	Global_Europe
	IO	Global_British Indian Ocean Territory
	BY	Global_Belarus
	UA	Global_Ukraine
	AD	Global_Andorra
	AL	Global_Albania
	AT	Global_Austria
	AX	Global_Aland Islands
	BE	Global_Belgium
	BG	Global_Bulgaria
	CH	Global_Switzerland
	CZ	Global_Czech
	DE	Global_Germany
	DK	Global_Denmark
	EE	Global_Estonia
	ES	Global_Spain
	FI	Global_Finland
	FO	Global_Faroe Islands
	FR	Global_France
	GB	Global_United Kingdom
	GG	Global_Guernsey
	GI	Global_Gibraltar
	GR	Global_Greece
	HR	Global_Croatia
	HU	Global_Hungary
	IE	Global_Ireland
IM	Global_Isle of Man	
IS	Global_Iceland	
IT	Global_Italy	

Area	Line ID	Description
	JE	Global_Jersey
	LI	Global_Liechtenstein
	LT	Global_Lithuania
	LU	Global_Luxembourg
	LV	Global_Latvia
	MC	Global_Monaco
	MD	Global_Moldova
	ME	Global_Montenegro
	MK	Global_North Macedonia
	MT	Global_Malta
	NL	Global_Netherlands
	NO	Global_Norway
	PL	Global_Poland
	PT	Global_Portugal
	RO	Global_Romania
	RS	Global_Serbia
	SE	Global_Sweden
	SI	Global_Slovenia
	SK	Global_Slovakia
	SM	Global_San Marino
	VA	Global_Vatican
	XK	Global_Kosovo
	BQ	Global_Netherlands Caribbean
North America	NA	Global_North America
	AG	Global_Antigua and Barbuda
	BB	Global_Barbados
	BS	Global_Bahamas
	BZ	Global_Belize

Area	Line ID	Description
	CR	Global_Costa Rica
	DM	Global_Dominica
	DO	Global_Dominican Republic
	GD	Global_Grenada
	GT	Global_Guatemala
	HN	Global_Honduras
	HT	Global_Haiti
	JM	Global_Jamaica
	KN	Global_Saint Kitts and Nevis
	KY	Global_Cayman Islands
	LC	Global_Saint Lucia
	MX	Global_Mexico
	NI	Global_Nicaragua
	PA	Global_Panama
	PR	Global_Puerto Rico
	SV	Global_El Salvador
	TC	Global_Turks and Caicos Islands
	TT	Global_Trinidad and Tobago
	VG	Global_Virgin Islands, British
	VI	Global_Virgin Islands, US
	CA	Global_Canada
	US	Global_United States
	VC	Global_Saint Vincent and The Grenadines
	PM	Global_Saint Pierre and Miquelon
	AN	Global_Netherlands Antilles

Area	Line ID	Description
	CU	Global_Cuba
	GL	Global_Greenland
	MQ	Global_French Martinique Islands- Martinique
	MF	Global_Saint Martin
	SX	Global_Sint Maarten
South America	LA	Global_South America
	AI	Global_Anguilla
	AW	Global_Aruba
	BL	Global_Saint Barthelemy
	BM	Global_Bermuda
	GP	Global_Guadeloupe
	MS	Global_Montserrat
	AR	Global_Argentina
	BO	Global_Bolivia
	BR	Global_Brazil
	CL	Global_Chile
	CO	Global_Colombia
	CW	Global_Curaçao
	EC	Global_Ecuador
	GF	Global_Guyane
	GY	Global_Guyana
	PE	Global_Peru
	PY	Global_Paraguay
	SR	Global_Suriname
UY	Global_Uruguay	
VE	Global_Venezuela	
Africa	AF	Global_Africa
	AO	Global_Angola

Area	Line ID	Description
	BF	Global_Burkina Faso
	BI	Global_Burundi
	BJ	Global_Benin
	BW	Global_Botswana
	CD	Global_Democratic Republic of the Congo
	CF	Global_Central Africa
	CG	Global_Republic of Congo
	CI	Global_Côte d'Ivoire
	CM	Global_Cameroon
	CV	Global_Cape Verde
	DJ	Global_Djibouti
	DZ	Global_Albania
	EG	Global_Egypt
	EH	Global_Western Sahara
	ER	Global_Eritrea
	ET	Global_Ethiopia
	GA	Global_Gabon
	GH	Global_Ghana
	GM	Global_Gambia
	GN	Global_Guinea
	GQ	Global_Equatorial Guinea
	GW	Global_Guinea-Bissau
	KE	Global_Kenya
	KM	Global_Comoros
	LR	Global_Liberia
	LS	Global_Lesotho
	LY	Global_Libya
	MA	Global_Morocco

Area	Line ID	Description
	MG	Global_Madagascar
	ML	Global_Mali
	MR	Global_Mauritania
	MU	Global_Mauritius
	MW	Global_Malawi
	MZ	Global_Mozambique
	NE	Global_Niger
	NG	Global_Nigeria
	RE	Global_Reunion Island
	RW	Global_Rwanda
	SC	Global_Seychelles
	SL	Global_Sierra Leone
	SN	Global_Senegal
	SO	Global_Somalia
	SS	Global_South Sudan
	ST	Global_Sao Tome and Principe
	SZ	Global_Eswatini
	TD	Global_Chad
	TG	Global_Togo
	TN	Global_Tunisia
	TZ	Global_Tanzania
	UG	Global_Uganda
	YT	Global_Mayotte
	ZA	Global_South Africa
	ZM	Global_Zambia
	ZW	Global_Zimbabwe
	SD	Global_Sudan
	NAM	Global_Namibia



## Region Lines (Chinese mainland)

Area	Line ID	Description
Chinese mainland	Beijing	Chinese mainland_Beijing
	Hebei	Chinese mainland_Hebei
	Tianjin	Chinese mainland_Tianjin
	Shanxi	Chinese mainland_Shanxi
	Neimenggu	Chinese mainland_Inner Mongolia
	Heilongjiang	Chinese mainland_Heilongjiang
	Jilin	Chinese mainland_Jilin
	Liaoning	Chinese mainland_Liaoning
	Jiangsu	Chinese mainland_Jiangsu
	Shanghai	Chinese mainland_Shanghai
	Zhejiang	Chinese mainland_Zhejiang
	Anhui	Chinese mainland_Anhui
	Fujian	Chinese mainland_Fujian
	Jiangxi	Chinese mainland_Jiangxi
	Shandong	Chinese mainland_Shandong
	Hubei	Chinese mainland_Hubei
Hunan	Chinese mainland_Hunan	
Henan	Chinese mainland_Henan	

Area	Line ID	Description
	Guangdong	Chinese mainland_Guangdong
	Guangxi	Chinese mainland_Guangxi
	Hainan	Chinese mainland_Hainan
	Sichuan	Chinese mainland_Sichuan
	Xizang	Chinese mainland_Tibet
	Chongqing	Chinese mainland_Chongqing
	Yunnan	Chinese mainland_Yunnan
	Guizhou	Chinese mainland_Guizhou
	Gansu	Chinese mainland_Gansu
	Xinjiang	Chinese mainland_Xinjiang
	Shaanxi	Chinese mainland_Shaanxi
	Qinghai	Chinese mainland_Qinghai
	Ningxia	Chinese mainland_Ningxia
	Huabei	Chinese mainland_North China
	Dongbei	Chinese mainland_Northeast China
	Huadong	Chinese mainland_East China
	Huazhong	Chinese mainland_Central China
	Huanan	Chinese mainland_South China

Area	Line ID	Description
	Xinan	Chinese mainland_Southwest China
	Xibei	Chinese mainland_Northwest China

## 7.4 Enumeration Values

### Resource Status

Parameter	Description
ACTIVE	Normal
PENDING_CREATE	Creating
PENDING_DELETE	Deleting
PENDING_UPDATE	Updating
FREEZE	Frozen
PENDING_DISABLE	Disabling
DISABLE	Disabled
ERROR	Failed

### Record Set Type

Type	Description
A	Map domains to IPv4 addresses.
CNAME	Map one domain to another. CNAME record sets are usually used to map multiple domain names to the same host.
MX	Map domains to email servers.
AAAA	Map domains to IPv6 addresses.
TXT	Specify text records.
SRV	Record servers providing specific services.

Type	Description
NS	Delegates subdomains to other name servers.
SOA	Specify the master authoritative DNS server for a domain name. The SOA record set is created by the system and cannot be manually added.
CAA	Grant certificate issuing permissions to CAs. CAA record sets can be used to prevent unauthorized HTTPS certificate issuing.
PTR	Map IP addresses to domains.

## 7.5 Data Structure

**Table 7-4** Description of the **links** field

Parameter	Type	Description
self	String	Link to the current resource
next	String	Link to the next page

**Table 7-5** Description of the **tag** field

Parameter	Type	Description
key	String	Tag key A key can contain up to 36 Unicode characters. <b>key</b> must be specified. Equal signs (=), asterisks (*), left angle brackets (<), right angle brackets (>), backslashes (\), commas (,), vertical bars ( ), and slashes (/) are not allowed. The first and last characters cannot be spaces.
value	String	Tag value Each value can contain up to 43 Unicode characters and can be an empty string. Equal signs (=), asterisks (*), left angle brackets (<), right angle brackets (>), backslashes (\), commas (,), vertical bars ( ), and slashes (/) are not allowed. The first and last characters cannot be spaces.

**Table 7-6** Description of the **routers** field

Parameter	Type	Description
router_id	String	ID of the associated VPC You can obtain the VPC ID using the following methods: <ul style="list-style-type: none"> <li>On the VPC console, obtain the VPC ID on the VPC details page.</li> <li>Call the API to <a href="#">query the VPC ID</a>.</li> </ul>
router_region	String	Region of the VPC If it is left blank, the region of the project in the token takes effect by default.

**Table 7-7** Description of the **alias\_target** field

Parameter	Type	Description
resource_type	String	Service that support domain name aliases The value can be <b>cloudsite</b> or <b>waf</b> (Web Application Firewall).
resource_domain_name	String	Domain name of the target service

## 7.6 Obtaining a Project ID

### Scenarios

A project ID is required for some URLs when an API is called. Therefore, you need to obtain a project ID in advance. Two methods are available:

- [Obtain the Project ID by Calling an API](#)
- [Obtain the Project ID from the Console](#)

### Obtain the Project ID by Calling an API

You can obtain a project ID by calling the API used to [query project information based on the specified criteria](#).

The API used to obtain a project ID is GET `https://{Endpoint}/v3/projects`. {Endpoint} is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of **id** is the project ID.

```
{
  "projects": [
    {
```

```

"domain_id": "65ewtrgaggshhk1223245sghjlse684b",
"is_domain": false,
"parent_id": "65ewtrgaggshhk1223245sghjlse684b",
"name": "project_name",
"description": "",
"links": {
  "next": null,
  "previous": null,
  "self": "https://www.example.com/v3/projects/a4adasfjljaaakla12334jklga9sasfg"
},
"id": "a4adasfjljaaakla12334jklga9sasfg",
"enabled": true
}
],
"links": {
  "next": null,
  "previous": null,
  "self": "https://www.example.com/v3/projects"
}
}

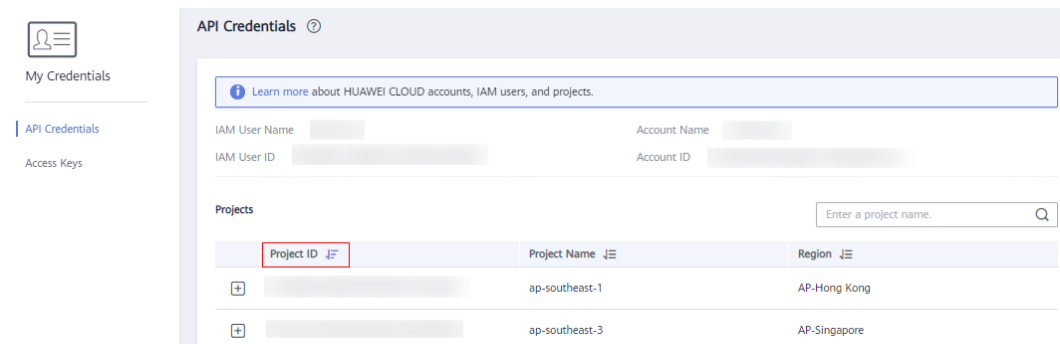
```

## Obtain a Project ID from the Console

To obtain a project ID from the console, perform the following operations:

1. Log in to the management console.
2. Click the username and select **My Credentials** from the drop-down list.  
On the **API Credentials** page, view the project ID in the project list.

**Figure 7-1** Viewing the project ID



# A Change History

Date	Description
2020-07-21	This issue is the eleventh official release, which incorporates the following change: Added carrier lines and region lines in <a href="#">Resolution Lines</a> .
2020-06-05	This issue is the tenth official release, which incorporates the following changes: Added the <b>status</b> parameter to the URI and the parameter description in the following topics: <ul style="list-style-type: none"> <li>• <a href="#">Querying Public Zones</a></li> <li>• <a href="#">Querying Private Zones</a></li> <li>• <a href="#">Querying PTR Records</a></li> </ul>
2019-12-24	This issue is the eighth official release, which incorporates the following change: Added <a href="#">Querying Name Servers</a> .
2019-11-28	This issue is the seventh official release, which incorporates the following changes: <ul style="list-style-type: none"> <li>• Added <a href="#">Setting the Status of a Public Zone</a>.</li> <li>• Added new APIs in <a href="#">API Overview</a>.</li> <li>• Added error code DNS.0213 in <a href="#">Error Codes</a>.</li> </ul>
2019-10-11	This issue is the sixth official release, which incorporates the following change: Changed the value range of <b>ttl</b> to <b>1</b> to <b>2147483647</b> .
2019-09-12	This issue is the fifth official release, which incorporates the following changes: <ul style="list-style-type: none"> <li>• Added restrictions on <b>weight</b> in <a href="#">Creating a Record Set</a>.</li> <li>• Added restrictions on <b>weight</b> in <a href="#">Creating a Record Set</a>.</li> <li>• Optimized parameter descriptions in the whole document.</li> </ul>

Date	Description
2019-07-30	<p>This issue is the fourth official release, which incorporates the following change:</p> <ul style="list-style-type: none"> <li>Added "API Usage Guidelines" and "REST APIs".</li> </ul>
2018-10-30	<p>This issue is the third official release, which incorporates the following changes:</p> <ul style="list-style-type: none"> <li>Added <a href="#">Querying the Specific API Version for DNS</a>.</li> <li>Added URL parameters in <a href="#">Querying Record Sets</a> and <a href="#">Querying Record Sets</a>.</li> </ul>
2018-06-25	<p>This issue is the second official release, which incorporates the following changes:</p> <ul style="list-style-type: none"> <li>Added the private zone function in <a href="#">Private Zone Management</a>.</li> <li>Added <b>offset</b> in the request URL in <a href="#">Querying Public Zones</a>, <a href="#">Querying Private Zones</a>, <a href="#">Querying Record Sets</a>, <a href="#">Querying Record Sets</a>, and <a href="#">Querying PTR Records</a>.</li> </ul>
2018-04-25	<p>This issue is the first official release.</p>