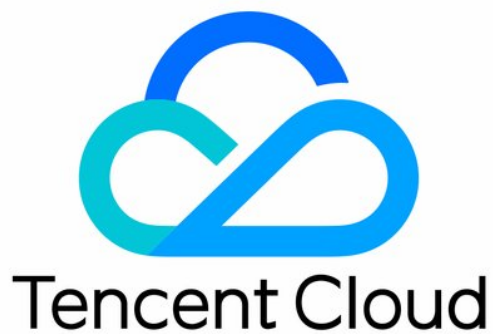


Private DNS

API Documentation

Product Documentation



Copyright Notice

©2013-2024 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice



All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

API Documentation

History

Introduction

API Category

Making API Requests

Request Structure

Common Params

Signature v3

Signature

Responses

Private DNS APIs

CreatePrivateDNSAccount

CreatePrivateZone

CreatePrivateZoneRecord

DeletePrivateZoneRecord

DescribeAccountVpcList

DescribeAuditLog

DescribeDashboard

DescribePrivateDNSAccountList

DescribePrivateZoneList

DescribePrivateZoneRecordList

DescribePrivateZoneService

DescribeQuotaUsage

DescribeRequestData

ModifyPrivateZone

ModifyPrivateZoneRecord

ModifyPrivateZoneVpc

ModifyRecordsStatus

SubscribePrivateZoneService

DescribePrivateZone

DeletePrivateDNSAccount

DeletePrivateZone

Data Types

Error Codes

API Documentation

History

Last updated : 2024-04-07 11:57:42

Release 8

Release time: 2024-04-07 11:57:24

Release updates:

Improvement to existing documentation.

New APIs:

- [DeletePrivateZoneRecord](#)
- [DescribePrivateZoneList](#)
- [DescribePrivateZoneRecordList](#)

New data structures:

- [PrivateZone](#)
- [PrivateZoneRecord](#)

Release 7

Release time: 2022-11-04 15:16:37

Release updates:

Improvement to existing documentation.

New APIs:

- [ModifyRecordsStatus](#)

Modified data structures:

- [MetricData](#)
 - New members:MetricCount

Release 6

Release time: 2022-08-16 16:38:31

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreatePrivateZone](#)
 - New input parameters:CnameSpeedupStatus
- [ModifyPrivateZone](#)
 - New input parameters:CnameSpeedupStatus

Release 5

Release time: 2022-04-02 17:23:08

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeQuotaUsage](#)

Deleted APIs:

- DeletePrivateDNSAccount
- DeletePrivateZone
- DeletePrivateZoneRecord
- DescribePrivateZone
- DescribePrivateZoneList
- DescribePrivateZoneRecordList

New data structures:

- [TldQuota](#)

Deleted data structures:

- PrivateZone
- PrivateZoneRecord

Release 4

Release time: 2021-12-27 11:42:28

Release updates:

Improvement to existing documentation.

New APIs:

- [CreatePrivateDNSAccount](#)
- [DeletePrivateDNSAccount](#)
- [DescribeAccountVpcList](#)

New data structures:

- [AccountVpcInfoOut](#)

Release 3

Release time: 2021-09-30 14:41:47

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribePrivateDNSAccountList](#)

New data structures:

- [PrivateDNSAccount](#)

Release 2

Release time: 2021-09-18 16:38:12

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreatePrivateZone](#)

- New input parameters:AccountVpcSet
- [ModifyPrivateZoneVpc](#)
 - New input parameters:AccountVpcSet
 - New output parameters:AccountVpcSet

New data structures:

- [AccountVpcInfo](#)
- [AccountVpcInfoOutput](#)

Modified data structures:

- [PrivateZone](#)
 - New members:AccountVpcSet

Release 1

Release time: 2021-08-30 17:56:25

Release updates:

Improvement to existing documentation.

New APIs:

- [CreatePrivateZone](#)
- [CreatePrivateZoneRecord](#)
- [DeletePrivateZone](#)
- [DeletePrivateZoneRecord](#)
- [DescribeAuditLog](#)
- [DescribeDashboard](#)
- [DescribePrivateZone](#)
- [DescribePrivateZoneList](#)
- [DescribePrivateZoneRecordList](#)
- [DescribePrivateZoneService](#)
- [DescribeRequestData](#)
- [ModifyPrivateZone](#)
- [ModifyPrivateZoneRecord](#)
- [ModifyPrivateZoneVpc](#)
- [SubscribePrivateZoneService](#)

New data structures:

- [AuditLog](#)
- [AuditLogInfo](#)
- [DatePoint](#)
- [Filter](#)
- [FlowUsage](#)
- [MetricData](#)
- [PrivateZone](#)
- [PrivateZoneRecord](#)
- [TagInfo](#)
- [VpcInfo](#)

Introduction

Last updated : 2024-04-07 11:57:37

Private DNS is a private domain resolution and management service based on Tencent Cloud's Virtual Private Cloud (VPC), providing you with safe, stable, and efficient private network resolution service. It supports quick building of a DNS system in VPCs to fulfill your needs.

API Category

Last updated : 2024-04-07 11:57:37

Private DNS APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreatePrivateDNSAccount	Creates Private DNS account	20
CreatePrivateZone	Creates private domain	20
CreatePrivateZoneRecord	Adds DNS record for private domain	20
DeletePrivateZoneRecord	Deletes DNS record for private domain	20
DescribeAccountVpcList	Gets the VPC list of a Private DNS account	20
DescribeAuditLog	Gets the list of operation logs	20
DescribeDashboard	Gets the overview of private DNS records	20
DescribePrivateDNSAccountList	Gets the list of Private DNS accounts	20
DescribePrivateZoneList	Gets the list of private domains	20
DescribePrivateZoneRecordList	Gets the list of records for private domain	20
DescribePrivateZoneService	Queries Private DNS activation status	20
DescribeQuotaUsage	Queries quota usage	20
DescribeRequestData	Gets the DNS request volume of private domain	20
ModifyPrivateZone	Modifies private domain	20
ModifyPrivateZoneRecord	Modifies DNS record for private	20

	domain	
ModifyPrivateZoneVpc	Modifies VPC associated with private domain	2
ModifyRecordsStatus	Modifies the DNS record status	20
SubscribePrivateZoneService	Activates Private DNS service	1

Making API Requests

Request Structure

Last updated : 2024-04-07 11:57:37

1. Service Address

The API supports access from either a nearby region (at `privatedns.tencentcloudapi.com`) or a specified region (at `privatedns.ap-guangzhou.tencentcloudapi.com` for Guangzhou, for example).

We recommend using the domain name to access the nearest server. When you call an API, the request is automatically resolved to a server in the region **nearest** to the location where the API is initiated. For example, when you initiate an API request in Guangzhou, this domain name is automatically resolved to a Guangzhou server, the result is the same as that of specifying the region in the domain like "`privatedns.ap-guangzhou.tencentcloudapi.com`".

Note: For latency-sensitive businesses, we recommend that you specify the region in the domain name.

Tencent Cloud currently supports the following regions:

Hosted region	Domain name
Local access region (recommended, only for non-financial availability zones)	<code>privatedns.tencentcloudapi.com</code>
South China (Guangzhou)	<code>privatedns.ap-guangzhou.tencentcloudapi.com</code>
East China (Shanghai)	<code>privatedns.ap-shanghai.tencentcloudapi.com</code>
North China (Beijing)	<code>privatedns.ap-beijing.tencentcloudapi.com</code>
Southwest China (Chengdu)	<code>privatedns.ap-chengdu.tencentcloudapi.com</code>
Southwest China (Chongqing)	<code>privatedns.ap-chongqing.tencentcloudapi.com</code>
Hong Kong, Macao, Taiwan (Hong Kong, China)	<code>privatedns.ap-hongkong.tencentcloudapi.com</code>
Southeast Asia (Singapore)	<code>privatedns.ap-singapore.tencentcloudapi.com</code>

Southeast Asia (Bangkok)	privatedns.ap-bangkok.tencentcloudapi.com
South Asia (Mumbai)	privatedns.ap-mumbai.tencentcloudapi.com
Northeast Asia (Seoul)	privatedns.ap-seoul.tencentcloudapi.com
Northeast Asia (Tokyo)	privatedns.ap-tokyo.tencentcloudapi.com
U.S. East Coast (Virginia)	privatedns.na-ashburn.tencentcloudapi.com
U.S. West Coast (Silicon Valley)	privatedns.na-siliconvalley.tencentcloudapi.com
North America (Toronto)	privatedns.na-toronto.tencentcloudapi.com
Europe (Frankfurt)	privatedns.eu-frankfurt.tencentcloudapi.com

2. Communications Protocol

All the Tencent Cloud APIs communicate via HTTPS, providing highly secure communication tunnels.

3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

- application/json (recommended). The TC3-HMAC-SHA256 signature algorithm must be used.
- application/x-www-form-urlencoded. The HmacSHA1 or HmacSHA256 signature algorithm must be used.
- multipart/form-data (only supported by certain APIs). You must use TC3-HMAC-SHA256 to calculate the signature.

The size of a GET request packet is up to 32 KB. The size of a POST request is up to 1 MB when the HmacSHA1 or HmacSHA256 signature algorithm is used, and up to 10 MB when TC3-HMAC-SHA256 is used.

4. Character Encoding

Only UTF-8 encoding is used.

Common Params

Last updated : 2024-04-07 11:57:38

Common parameters are used for all APIs authenticating requestors. Common parameters must be included in all API requests, and they will not be described in individual API documents.

The exact contents of the common parameters will vary depending on the version of the signature method you use.

Common parameters for Signature Algorithm v3

When the TC3-HMAC-SHA256 algorithm is used, the common parameters should be uniformly placed in the HTTP request header, as shown below:

Parameter Name	Type	Required	Description
X-TC-Action	String	Yes	The name of the API for the desired operation. For the specific value, see description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to which the data you work with belongs. For values supported for an API, see the description of parameter <code>Region</code> in the input parameters in related API documentation. This parameter is not required for some APIs (which will be indicated in related documentation), and will not take effect even it is passed.
X-TC-Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request is sent, for example, 1529223702. Note: If the difference between the UNIX timestamp and server time is greater than 5 minutes, a signature expiration error may occur.
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the common parameter <code>Version</code> in the API documentation. For example, the version is 2017-03-12.
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_request/Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as this value; - Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is the UTC time, and this value must match the value of X-TC-Timestamp (a co

			parameter) in UTC time format; service is the name of the product/service generally a domain name prefix. For example, a domain name cvm.tencentcloud.com refers to the CVM product and the value would be cvm; - SignedHeaders: The headers that contains the authentication information type and host are the required headers; - Signature: Signature digest.
X-TC-Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Limit=10&Offset=0

Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
Content-Type: application/x-www-form-urlencoded
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1539084154
X-TC-Region: ap-guangzhou
```

The following example shows you how to structure an HTTP POST (application/json) request:

```
https://cvm.tencentcloudapi.com/

Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
Content-Type: application/json
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1527672334
X-TC-Region: ap-guangzhou

{"Offset":0,"Limit":10}
```

Example of an HTTP POST (multipart/form-data) request structure (only supported by specific APIs):


```
https://cvm.tencentcloudapi.com/
```

```
Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
```

```
Content-Type: multipart/form-data; boundary=58731222010402
```

```
Host: cvm.tencentcloudapi.com
```

```
X-TC-Action: DescribeInstances
```

```
X-TC-Version: 2017-03-12
```

```
X-TC-Timestamp: 1527672334
```

```
X-TC-Region: ap-guangzhou
```

```
--58731222010402
```

```
Content-Disposition: form-data; name="Offset"
```

```
0
```

```
--58731222010402
```

```
Content-Disposition: form-data; name="Limit"
```

```
10
```

```
--58731222010402--
```

Common parameters for Signature Algorithm v1

To adopt the HmacSHA1 and HmacSHA256 signature methods, common parameters must be put into the request string, as shown below:

Parameter Name	Type	Required	Description
Action	String	Yes	The name of the API for the desired operation. For the specific value, see the description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
Region	String	Yes	Region parameter, which is used to identify the region to which the data you want to work with belongs. For values supported for an API, see the description of common parameter <code>Region</code> in the input parameters in related API documentation. Note: This parameter is not required for some APIs (which will be indicated in related API documentation), and will not take effect even if it is passed.

Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request was initiated, for example, 1529223702. If the difference between the value and the current system time is too large, a signature expiration error may occur.
Nonce	Integer	Yes	A random positive integer used along with <code>Timestamp</code> to prevent replay attacks.
SecretId	String	Yes	The identifying SecretId obtained on the Cloud API Key page. A SecretId corresponds to a unique SecretKey which is used to generate the request signature (Signature).
Signature	String	Yes	Request signature used to verify the validity of this request. This is calculated based on the actual input parameters. For more information about how this is calculated, see the API authentication documentation.
Version	String	Yes	API version of the action. For the valid values, see the description of the common input parameter <code>Version</code> in the API documentation. For example, the version of CVM is 2017-03-12.
SignatureMethod	String	No	Signature method. Currently, only HmacSHA256 and HmacSHA1 are supported. The HmacSHA256 algorithm is used to verify the signature only when this parameter is specified as HmacSHA256. In other cases, the signature is verified with HmacSHA1.
Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bb224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

```
Host: cvm.tencentcloudapi.com
Content-Type: application/x-www-form-urlencoded
```

Example of an HTTP POST request structure:

```
https://cvm.tencentcloudapi.com/
```

```
Host: cvm.tencentcloudapi.com
```

```
Content-Type: application/x-www-form-urlencoded
```

```
Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbec224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

Signature v3

Last updated : 2024-04-07 11:57:40

TencentCloud API authenticates every single request, i.e., the request must be signed using the security credentials in the designated steps. Each request has to contain the signature information (Signature) in the common request parameters and be sent in the specified way and format.

Applying for Security Credentials

The security credential used in this document is a key, which includes a SecretId and a SecretKey. Each user can have up to two pairs of keys.

- SecretId: Used to identify the API caller, which is just like a username.
- SecretKey: Used to authenticate the API caller, which is just like a password.
- **You must keep your security credentials private and avoid disclosure; otherwise, your assets may be compromised. If they are disclosed, please disable them as soon as possible.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) console page.
3. On the [TencentCloud API Key](#) page, click **Create** to create a SecretId/SecretKey pair.

Using the Resources for Developers

TencentCloud API comes with SDKs for seven commonly used programming languages, including [Python](#), [Java](#), [PHP](#), [Go](#), [NodeJS](#) and [.NET](#). In addition, it provides [API Explorer](#) which enables online call, signature verification, and SDK code generation. If you have any troubles calculating a signature, consult these resources.

TC3-HMAC-SHA256 Signature Algorithm

Compatible with the previous HmacSHA1 and HmacSHA256 signature algorithms, the TC3-HMAC-SHA256 signature algorithm is more secure and supports larger requests and JSON format with better performance. We recommend using TC3-HMAC-SHA256 to calculate the signature.

TencentCloud API supports both GET and POST requests. For the GET method, only the Content-Type: application/x-www-form-urlencoded protocol format is supported. For the POST method, two protocol formats,

Content-Type: application/json and Content-Type: multipart/form-data, are supported. The JSON format is supported by default for all business APIs, and the multipart format is supported only for specific business APIs. In this case, the API cannot be called in JSON format. See the specific business API documentation for more information. The POST method is recommended, as there is no difference in the results of both the methods, but the GET method only supports request packets up to 32 KB.

The following uses querying the list of CVM instances in the Guangzhou region as an example to describe the steps of signature splicing. We chose this API because:

1. CVM is activated by default, and this API is often used;
2. It is read-only and does not change the status of existing resources;
3. It covers many types of parameters, which allows it to be used to demonstrate how to use arrays containing data structures.

In the example, we try to choose common parameters and API parameters that are prone to mistakes. When you actually call an API, please use parameters based on the actual conditions. The parameters vary by API. Do not copy the parameters and values in this example.

Assuming that your SecretId and SecretKey are `AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****` and `Gu5t9xGARNpq86cd98joQYCN3*****`, respectively, if you want to view the status of the instance in the Guangzhou region whose CVM instance name is "unnamed" and have only one data entry returned, then the request may be:

```
curl -X POST https://cvm.tencentcloudapi.com \
-H "Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****
*/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e4
1437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff" \
-H "Content-Type: application/json; charset=utf-8" \
-H "Host: cvm.tencentcloudapi.com" \
-H "X-TC-Action: DescribeInstances" \
-H "X-TC-Timestamp: 1551113065" \
-H "X-TC-Version: 2017-03-12" \
-H "X-TC-Region: ap-guangzhou" \
-d '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
```

The signature calculation process is explained in detail below.

1. Concatenating the CanonicalRequest String

Concatenate the canonical request string (CanonicalRequest) in the following pseudocode format:

```
CanonicalRequest =
HTTPRequestMethod + '\n' +
CanonicalURI + '\n' +
```

```
CanonicalQueryString + '\n' +
CanonicalHeaders + '\n' +
SignedHeaders + '\n' +
HashedRequestPayload
```

Field Name	Explanation
HTTPRequestMethod	HTTP request method (GET or POST). This example uses <code>POST</code> .
CanonicalURI	URI parameter. Slash ("/") is used for API 3.0.
CanonicalQueryString	The query string in the URL of the originating HTTP request. This is always an empty string for POST requests, and is the string after the question mark (?) for GET requests. For example: <code>Limit=10&Offset=0</code>. Note: <code>CanonicalQueryString</code> must be URL-encoded, referencing RFC3986, the UTF8 character set. We recommend using the programming language library. All special characters must be encoded and capitalized.
CanonicalHeaders	Header information for signature calculation, including at least two headers of <code>host</code> and <code>content-type</code>. Custom headers can be added to participate in the signature process to improve the uniqueness and security of the request. Concatenation rules: - Both the key and value of the header should be converted to lowercase with the leading and trailing spaces removed, so they are concatenated in the format of <code>key:value\n</code> format; - If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase). The calculation result in this example is <code>content-type:application/json; charset=utf-8\nhost:cvm.tencentcloudapi.com\n</code>. Note: <code>content-type</code> must match the actually sent content. In some programming languages, a charset value would be added even if it is not specified. In this case, the request sent is different from the one signed, and the server will return an error indicating signature verification failed.
SignedHeaders	Header information for signature calculation, indicating which headers of the request participate in the signature process (they must each individually correspond to the headers in CanonicalHeaders). <code>Content-type</code> and <code>host</code> are required headers. Concatenation rules: - Both the key and value of the header should be converted to lowercase; - If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase) and separated by semicolons (;). The value in this example is <code>content-type;host</code>
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filter</code>

`[{"Values": ["unnamed"], "Name": "instance-name"}]` in this example
 The pseudocode for calculation is
 Lowercase(HexEncode(Hash.SHA256(RequestPayload))) by SHA256 hashing the payload of the HTTP request, performing hexadecimal encoding, and finally converting the encoded string to lowercase letters. For GET requests, `RequestPayload` is always an empty string. The calculation result in this example is
`99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907`

According to the rules above, the `CanonicalRequest` string obtained in the example is as follows:

POST

/

content-type:application/json; charset=utf-8

host:cvm.tencentcloudapi.com

content-type;host

`99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907`

2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

```
StringToSign =
Algorithm + \n +
RequestTimestamp + \n +
CredentialScope + \n +
HashedCanonicalRequest
```

Field Name	Explanation
Algorithm	Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .
RequestTimestamp	Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.
CredentialScope	Scope of the credential in the format of <code>Date/service/tc3_request</code> , including date, requested service and termination string (tc3_request). Date is a date in UTC time, whose value should match the UTC date converted by the common parameter X-TC-Timestamp ; <code>service</code> is the product name, which should be the domain name of the product called. The calculation result in this example is <code>2018-05-25/cvm/tc3_request</code> .

HashedCanonicalRequest

Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is Lowercase(HexEncode(Hash.SHA256(CanonicalRequest))). The calculation result in this example is

```
2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3ad
```

Note:

1. Date has to be calculated from the timestamp "X-TC-Timestamp" and the time zone is UTC+0. If you add the system's local time zone information (such as UTC+8), calls can succeed both day and night but will definitely fail at 00:00. For example, if the timestamp is 1551113065 and the time in UTC+8 is 2019-02-26 00:44:25, the UTC+0 date in the calculated Date value should be 2019-02-25 instead of 2019-02-26.
2. Timestamp must be the same as your current system time, and your system time and standard time must be synced; if the difference between Timestamp and your current system time is larger than five minutes, the request will fail. If your system time is out of sync with the standard time for a while, the request will fail and return a signature expiration error.

According to the preceding rules, the string to be signed obtained in the example is as follows:

```
TC3-HMAC-SHA256
1551113065
2019-02-25/cvm/tc3_request
2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

3. Calculating the Signature

1. Calculate the derived signature key with the following pseudocode:

```
SecretKey = "Gu5t9xGARNpq86cd98joQYCN3*****"
SecretDate = HMAC_SHA256("TC3" + SecretKey, Date)
SecretService = HMAC_SHA256(SecretDate, Service)
SecretSigning = HMAC_SHA256(SecretService, "tc3_request")
```

Field Name	Explanation
SecretKey	The original SecretKey, i.e., <code>Gu5t9xGARNpq86cd98joQYCN3*****</code> .
Date	The Date field information in <code>Credential</code> , such as <code>2019-02-25</code> in this example.

Service	Value in the Service field in <code>Credential</code> , such as <code>cvm</code> in this example.
---------	---

2. Calculate the signature with the following pseudocode:

```
Signature = HexEncode(HMAC_SHA256(SecretSigning, StringToSign))
```

4. Concatenating the Authorization

The Authorization is concatenated as follows:

```
Authorization =
Algorithm + ' ' +
'Credential=' + SecretId + '/' + CredentialScope + ', ' +
'SignedHeaders=' + SignedHeaders + ', ' +
'Signature=' + Signature
```

Field Name	Explanation
Algorithm	Signature algorithm, which is always <code>TC3-HMAC-SHA256</code> .
SecretId	The SecretId in the key pair, i.e., <code>AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****</code> .
CredentialScope	Credential scope (see above). The calculation result in this example is <code>2019-02-25/cvm/tc3_request</code> .
SignedHeaders	Header information for signature calculation (see above), such as <code>content-type;host</code> in this example.
Signature	Signature value. The calculation result in this example is <code>c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff</code> .

According to the rules above, the value obtained in the example is:

```
TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
```

The following example shows a finished authorization header:

```
POST https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
```

```
Content-Type: application/json; charset=utf-8
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1551113065
X-TC-Region: ap-guangzhou

{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}
```

5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceId=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=EliP9YW3pW28FpsEdkXt%2F%2BWcGel%3D&Timestamp=1465185768&Version=2017-03-12.`

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

Java

```
import java.nio.charset.Charset;
import java.nio.charset.StandardCharsets;
import java.security.MessageDigest;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.TimeZone;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPITC3Demo {
    private final static Charset UTF8 = StandardCharsets.UTF_8;
    private final static String SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    private final static String SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
    private final static String CT_JSON = "application/json; charset=utf-8";

    public static byte[] hmac256(byte[] key, String msg) throws Exception {
        Mac mac = Mac.getInstance("HmacSHA256");
        SecretKeySpec secretKeySpec = new SecretKeySpec(key, mac.getAlgorithm());
        mac.init(secretKeySpec);
        return mac.doFinal(msg.getBytes(UTF8));
    }

    public static String sha256Hex(String s) throws Exception {
        MessageDigest md = MessageDigest.getInstance("SHA-256");
        byte[] d = md.digest(s.getBytes(UTF8));
        return DatatypeConverter.printHexBinary(d).toLowerCase();
    }

    public static void main(String[] args) throws Exception {
        String service = "cvm";
        String host = "cvm.tencentcloudapi.com";
        String region = "ap-guangzhou";
        String action = "DescribeInstances";
        String version = "2017-03-12";
        String algorithm = "TC3-HMAC-SHA256";
        String timestamp = "1551113065";
        //String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
        SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
        // Pay attention to the time zone; otherwise, errors may occur
        sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
        String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));

        // ***** Step 1: Concatenate the CanonicalRequest string *****
    }
```

```

String httpRequestMethod = "POST";
String canonicalUri = "/";
String canonicalQueryString = "";
String canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + host + "\n";
String signedHeaders = "content-type;host";

String payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}";
String hashedRequestPayload = sha256Hex(payload);
String canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
System.out.println(canonicalRequest);

// ***** Step 2: Concatenate the string to sign *****
String credentialScope = date + "/" + service + "/" + "tc3_request";
String hashedCanonicalRequest = sha256Hex(canonicalRequest);
String stringToSign = algorithm + "\n" + timestamp + "\n" + credentialScope +
"\n" + hashedCanonicalRequest;
System.out.println(stringToSign);

// ***** Step 3: Calculate the signature *****
byte[] secretDate = hmac256(("TC3" + SECRET_KEY).getBytes(UTF8), date);
byte[] secretService = hmac256(secretDate, service);
byte[] secretSigning = hmac256(secretService, "tc3_request");
String signature = DatatypeConverter.printHexBinary(hmac256(secretSigning, stringToSign)).toLowerCase();
System.out.println(signature);

// ***** Step 4: Concatenate the Authorization *****
String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
System.out.println(authorization);

TreeMap<String, String> headers = new TreeMap<String, String>();
headers.put("Authorization", authorization);
headers.put("Content-Type", CT_JSON);
headers.put("Host", host);
headers.put("X-TC-Action", action);
headers.put("X-TC-Timestamp", timestamp);
headers.put("X-TC-Version", version);
headers.put("X-TC-Region", region);

StringBuilder sb = new StringBuilder();
sb.append("curl -X POST https://").append(host)

```

```

.append(" -H \"Authorization: ").append(authorization).append("\")
.append(" -H \"Content-Type: application/json; charset=utf-8\"")
.append(" -H \"Host: ").append(host).append("\")
.append(" -H \"X-TC-Action: ").append(action).append("\")
.append(" -H \"X-TC-Timestamp: ").append(timestamp).append("\")
.append(" -H \"X-TC-Version: ").append(version).append("\")
.append(" -H \"X-TC-Region: ").append(region).append("\")
.append(" -d '").append(payload).append("'");
System.out.println(sb.toString());
}
}

```

Python

```

# -*- coding: utf-8 -*-
import hashlib, hmac, json, os, sys, time
from datetime import datetime

# Key Parameters
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"

service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
#timestamp = int(time.time())
timestamp = 1551113065
date = datetime.utcfromtimestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 1, "Filters": [{"Name": "instance-name", "Values": ["unnamed"]}]}

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = "POST"
canonical_uri = "/"
canonical_querystring = ""
ct = "application/json; charset=utf-8"
payload = json.dumps(params)
canonical_headers = "content-type:%s\nhost:%s\n" % (ct, host)
signed_headers = "content-type;host"
hashed_request_payload = hashlib.sha256(payload.encode("utf-8")).hexdigest()
canonical_request = (http_request_method + "\n" +
canonical_uri + "\n" +

```

```

canonical_querystring + "\n" +
canonical_headers + "\n" +
signed_headers + "\n" +
hashed_request_payload)
print(canonical_request)

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + "/" + service + "/" + "tc3_request"
hashed_canonical_request = hashlib.sha256(canonical_request.encode("utf-8")).hexdigest()
string_to_sign = (algorithm + "\n" +
str(timestamp) + "\n" +
credential_scope + "\n" +
hashed_canonical_request)
print(string_to_sign)

# ***** Step 3: Calculate the Signature *****
# Function for computing signature digest
def sign(key, msg):
return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()
secret_date = sign(("TC3" + secret_key).encode("utf-8"), date)
secret_service = sign(secret_date, service)
secret_signing = sign(secret_service, "tc3_request")
signature = hmac.new(secret_signing, string_to_sign.encode("utf-8"), hashlib.sha256).hexdigest()
print(signature)

# ***** Step 4: Concatenate the Authorization *****
authorization = (algorithm + " " +
"Credential=" + secret_id + "/" + credential_scope + ", " +
"SignedHeaders=" + signed_headers + ", " +
"Signature=" + signature)
print(authorization)

print('curl -X POST ' + endpoint
+ ' -H "Authorization: ' + authorization + '" '
+ ' -H "Content-Type: application/json; charset=utf-8" '
+ ' -H "Host: ' + host + '" '
+ ' -H "X-TC-Action: ' + action + '" '
+ ' -H "X-TC-Timestamp: ' + str(timestamp) + '" '
+ ' -H "X-TC-Version: ' + version + '" '
+ ' -H "X-TC-Region: ' + region + '" '
+ " -d '" + payload + "'")

```

Golang

```
package main

import (
    "crypto/hmac"
    "crypto/sha256"
    "encoding/hex"
    "fmt"
    "time"
)

func sha256hex(s string) string {
    b := sha256.Sum256([]byte(s))
    return hex.EncodeToString(b[:])
}

func hmacsha256(s, key string) string {
    hashed := hmac.New(sha256.New, []byte(key))
    hashed.Write([]byte(s))
    return string(hashed.Sum(nil))
}

func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
    host := "cvm.tencentcloudapi.com"
    algorithm := "TC3-HMAC-SHA256"
    service := "cvm"
    version := "2017-03-12"
    action := "DescribeInstances"
    region := "ap-guangzhou"
    //var timestamp int64 = time.Now().Unix()
    var timestamp int64 = 1551113065

    // step 1: build canonical request string
    httpRequestMethod := "POST"
    canonicalURI := "/"
    canonicalQueryString := ""
    canonicalHeaders := "content-type:application/json; charset=utf-8\n" + "host:" +
        host + "\n"
    signedHeaders := "content-type;host"
    payload := `{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-na
me"}]}`
    hashedRequestPayload := sha256hex(payload)
    canonicalRequest := fmt.Sprintf("%s\n%s\n%s\n%s\n%s\n%s",
        httpRequestMethod,
        canonicalURI,
```

```

canonicalQueryString,
canonicalHeaders,
signedHeaders,
hashedRequestPayload)
fmt.Println(canonicalRequest)

// step 2: build string to sign
date := time.Unix(timestamp, 0).UTC().Format("2006-01-02")
credentialScope := fmt.Sprintf("%s/%s/tc3_request", date, service)
hashedCanonicalRequest := sha256hex(canonicalRequest)
string2sign := fmt.Sprintf("%s\n%d\n%s\n%s",
algorithm,
timestamp,
credentialScope,
hashedCanonicalRequest)
fmt.Println(string2sign)

// step 3: sign string
secretDate := hmacsha256(date, "TC3"+secretKey)
secretService := hmacsha256(service, secretDate)
secretSigning := hmacsha256("tc3_request", secretService)
signature := hex.EncodeToString([]byte(hmacsha256(string2sign, secretSigning)))
fmt.Println(signature)

// step 4: build authorization
authorization := fmt.Sprintf("%s Credential=%s/%s, SignedHeaders=%s, Signature=%s",
algorithm,
secretId,
credentialScope,
signedHeaders,
signature)
fmt.Println(authorization)

curl := fmt.Sprintf(`curl -X POST https://%s\
-H "Authorization: %s"\
-H "Content-Type: application/json; charset=utf-8"\
-H "Host: %s" -H "X-TC-Action: %s"\
-H "X-TC-Timestamp: %d"\
-H "X-TC-Version: %s"\
-H "X-TC-Region: %s"\
-d '%s'`, host, authorization, host, action, timestamp, version, region, payload)
fmt.Println(curl)
}

```

PHP


```
<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$host = "cvm.tencentcloudapi.com";
$service = "cvm";
$version = "2017-03-12";
$action = "DescribeInstances";
$region = "ap-guangzhou";
// $timestamp = time();
$timestamp = 1551113065;
$algorithm = "TC3-HMAC-SHA256";

// step 1: build canonical request string
$httpRequestMethod = "POST";
$canonicalUri = "/";
$canonicalQueryString = "";
$canonicalHeaders = "content-type:application/json; charset=utf-8\n"."host:". $host. "\n";
$signedHeaders = "content-type;host";
$payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}';
$hashedRequestPayload = hash("SHA256", $payload);
$canonicalRequest = $httpRequestMethod. "\n"
.$canonicalUri. "\n"
.$canonicalQueryString. "\n"
.$canonicalHeaders. "\n"
.$signedHeaders. "\n"
.$hashedRequestPayload;
echo $canonicalRequest.PHP_EOL;

// step 2: build string to sign
$date = gmdate("Y-m-d", $timestamp);
$credentialScope = $date. "/" . $service. "/tc3_request";
$hashedCanonicalRequest = hash("SHA256", $canonicalRequest);
$stringToSign = $algorithm. "\n"
.$timestamp. "\n"
.$credentialScope. "\n"
.$hashedCanonicalRequest;
echo $stringToSign.PHP_EOL;

// step 3: sign string
$secretDate = hash_hmac("SHA256", $date, "TC3". $secretKey, true);
$secretService = hash_hmac("SHA256", $service, $secretDate, true);
$secretSigning = hash_hmac("SHA256", "tc3_request", $secretService, true);
$signature = hash_hmac("SHA256", $stringToSign, $secretSigning);
echo $signature.PHP_EOL;
```

```
// step 4: build authorization
$authorization = $algorithm
." Credential=".$secretId."/".$credentialScope
.", SignedHeaders=content-type;host, Signature=".$signature;
echo $authorization.PHP_EOL;

$curl = "curl -X POST https://".$host
.' -H "Authorization: '.$authorization.'"
.' -H "Content-Type: application/json; charset=utf-8"
.' -H "Host: '.$host.'"
.' -H "X-TC-Action: '.$action.'"
.' -H "X-TC-Timestamp: '.$timestamp.'"
.' -H "X-TC-Version: '.$version.'"
.' -H "X-TC-Region: '.$region.'"
." -d ".$payload."";
echo $curl.PHP_EOL;
```

Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'digest'
require 'json'
require 'time'
require 'openssl'

# Key Parameters
secret_id = 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****'
secret_key = 'Gu5t9xGARNpq86cd98joQYCN3*****'

service = 'cvm'
host = 'cvm.tencentcloudapi.com'
endpoint = 'https://' + host
region = 'ap-guangzhou'
action = 'DescribeInstances'
version = '2017-03-12'
algorithm = 'TC3-HMAC-SHA256'
# timestamp = Time.now.to_i
timestamp = 1551113065
date = Time.at(timestamp).utc.strftime('%Y-%m-%d')

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = 'POST'
canonical_uri = '/'
canonical_querystring = ''
```

```

canonical_headers = "content-type:application/json; charset=utf-8\nhost:#{host}
\n"
signed_headers = 'content-type;host'
# params = { 'Limit' => 1, 'Filters' => [{ 'Name' => 'instance-name', 'Values' =>
['unnamed'] }] }
# payload = JSON.generate(params, { 'ascii_only' => true, 'space' => ' ' })
# json will generate in random order, to get specified result in example, we hard
-code it here.
payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-nam
e"}]}'
hashed_request_payload = Digest::SHA256.hexdigest(payload)
canonical_request = [
http_request_method,
canonical_uri,
canonical_querystring,
canonical_headers,
signed_headers,
hashed_request_payload,
].join("\n")

puts canonical_request

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + '/' + service + '/' + 'tc3_request'
hashed_request_payload = Digest::SHA256.hexdigest(canonical_request)
string_to_sign = [
algorithm,
timestamp.to_s,
credential_scope,
hashed_request_payload,
].join("\n")
puts string_to_sign

# ***** Step 3: Calculate the Signature *****
digest = OpenSSL::Digest.new('sha256')
secret_date = OpenSSL::HMAC.digest(digest, 'TC3' + secret_key, date)
secret_service = OpenSSL::HMAC.digest(digest, secret_date, service)
secret_signing = OpenSSL::HMAC.digest(digest, secret_service, 'tc3_request')
signature = OpenSSL::HMAC.hexdigest(digest, secret_signing, string_to_sign)
puts signature

# ***** Step 4: Concatenate the Authorization *****
authorization = "#{algorithm} Credential=#{secret_id}/#{credential_scope}, Signed
Headers=#{signed_headers}, Signature=#{signature}"
puts authorization

puts 'curl -X POST ' + endpoint \

```

```
+ ' -H "Authorization: ' + authorization + "' \
+ ' -H "Content-Type: application/json; charset=utf-8" \
+ ' -H "Host: ' + host + "' \
+ ' -H "X-TC-Action: ' + action + "' \
+ ' -H "X-TC-Timestamp: ' + timestamp.to_s + "' \
+ ' -H "X-TC-Version: ' + version + "' \
+ ' -H "X-TC-Region: ' + region + "' \
+ " -d '" + payload + "'"
```

DotNet

```
using System;
using System.Collections.Generic;
using System.Security.Cryptography;
using System.Text;

public class Application
{
    public static string SHA256Hex(string s)
    {
        using (SHA256 algo = SHA256.Create())
        {
            byte[] hashbytes = algo.ComputeHash(Encoding.UTF8.GetBytes(s));
            StringBuilder builder = new StringBuilder();
            for (int i = 0; i < hashbytes.Length; ++i)
            {
                builder.Append(hashbytes[i].ToString("x2"));
            }
            return builder.ToString();
        }
    }

    public static byte[] HmacSHA256(byte[] key, byte[] msg)
    {
        using (HMACSHA256 mac = new HMACSHA256(key))
        {
            return mac.ComputeHash(msg);
        }
    }

    public static Dictionary<String, String> BuildHeaders(string secretid,
        string secretkey, string service, string endpoint, string region,
        string action, string version, DateTime date, string requestPayload)
    {
        string datestr = date.ToString("yyyy-MM-dd");
        DateTime startTime = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc);
        long requestTimestamp = (long)Math.Round((date - startTime).TotalMilliseconds, Mi
```

```

dpointRounding.AwayFromZero) / 1000;
// ***** Step 1: Concatenate the CanonicalRequest string *****
string algorithm = "TC3-HMAC-SHA256";
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string contentType = "application/json";
string canonicalHeaders = "content-type:" + contentType + "; charset=utf-8\n" +
"host:" + endpoint + "\n";
string signedHeaders = "content-type;host";
string hashedRequestPayload = SHA256Hex(requestPayload);
string canonicalRequest = httpRequestMethod + "\n"
+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload;
Console.WriteLine(canonicalRequest);
Console.WriteLine("-----");

// ***** Step 2: Concatenate the string to sign *****
string credentialScope = datestr + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = SHA256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + requestTimestamp.ToString() + "\n" + cre
dentialScope + "\n" + hashedCanonicalRequest;
Console.WriteLine(stringToSign);
Console.WriteLine("-----");

// ***** Step 3: Calculate the signature *****
byte[] tc3SecretKey = Encoding.UTF8.GetBytes("TC3" + secretkey);
byte[] secretDate = HmacSHA256(tc3SecretKey, Encoding.UTF8.GetBytes(datestr));
byte[] secretService = HmacSHA256(secretDate, Encoding.UTF8.GetBytes(service));
byte[] secretSigning = HmacSHA256(secretService, Encoding.UTF8.GetBytes("tc3_requ
est"));
byte[] signatureBytes = HmacSHA256(secretSigning, Encoding.UTF8.GetBytes(stringTo
Sign));
string signature = BitConverter.ToString(signatureBytes).Replace("-", "").ToLower
();
Console.WriteLine(signature);
Console.WriteLine("-----");

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " "
+ "Credential=" + secretid + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", "
+ "Signature=" + signature;
Console.WriteLine(authorization);

```

```
Console.WriteLine("-----");

Dictionary<string, string> headers = new Dictionary<string, string>();
headers.Add("Authorization", authorization);
headers.Add("Host", endpoint);
headers.Add("Content-Type", contentType + "; charset=utf-8");
headers.Add("X-TC-Timestamp", requestTimestamp.ToString());
headers.Add("X-TC-Version", version);
headers.Add("X-TC-Action", action);
headers.Add("X-TC-Region", region);
return headers;
}

public static void Main(string[] args)
{
    // SecretID and SecretKey
    string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

    string service = "cvm";
    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";

    // The timestamp `2019-02-26 00:44:25` used here is only for reference. In a project, use the following parameter:
    // DateTime date = DateTime.UtcNow;
    // Enter the correct time zone. We recommend using UTC timestamp to avoid errors.
    DateTime date = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc).AddSeconds(1551113065);
    string requestPayload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"\\u672a\\u547d\\u540d\"], \"Name\": \"instance-name\"}]}";

    Dictionary<string, string> headers = BuildHeaders(SECRET_ID, SECRET_KEY, service, endpoint, region, action, version, date, requestPayload);

    Console.WriteLine("POST https://cvm.tencentcloudapi.com");
    foreach (KeyValuePair<string, string> kv in headers)
    {
        Console.WriteLine(kv.Key + ": " + kv.Value);
    }
    Console.WriteLine();
    Console.WriteLine(requestPayload);
}
```

NodeJS

```
const crypto = require('crypto');

function sha256(message, secret = '', encoding) {
  const hmac = crypto.createHmac('sha256', secret)
  return hmac.update(message).digest(encoding)
}

function getHash(message, encoding = 'hex') {
  const hash = crypto.createHash('sha256')
  return hash.update(message).digest(encoding)
}

function getDate(timestamp) {
  const date = new Date(timestamp * 1000)
  const year = date.getUTCFullYear()
  const month = ('0' + (date.getUTCMonth() + 1)).slice(-2)
  const day = ('0' + date.getUTCDate()).slice(-2)
  return `${year}-${month}-${day}`
}

function main(){

const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"

const endpoint = "cvm.tencentcloudapi.com"
const service = "cvm"
const region = "ap-guangzhou"
const action = "DescribeInstances"
const version = "2017-03-12"
//const timestamp = getTime()
const timestamp = 1551113065
const date = getDate(timestamp)

// ***** Step 1: Concatenate the CanonicalRequest string *****
const signedHeaders = "content-type;host"

const payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}"

const hashedRequestPayload = getHash(payload);
const httpRequestMethod = "POST"
const canonicalUri = "/"
const canonicalQueryString = ""
const canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + endpoint + "\n"

const canonicalRequest = httpRequestMethod + "\n"
```

```

+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload
console.log(canonicalRequest)
console.log("-----")

// ***** Step 2: Concatenate the string to sign *****
const algorithm = "TC3-HMAC-SHA256"
const hashedCanonicalRequest = getHash(canonicalRequest);
const credentialScope = date + "/" + service + "/" + "tc3_request"
const stringToSign = algorithm + "\n" +
timestamp + "\n" +
credentialScope + "\n" +
hashedCanonicalRequest
console.log(stringToSign)
console.log("-----")

// ***** Step 3: Calculate the signature *****
const kDate = sha256(date, 'TC3' + SECRET_KEY)
const kService = sha256(service, kDate)
const kSigning = sha256('tc3_request', kService)
const signature = sha256(stringToSign, kSigning, 'hex')
console.log(signature)
console.log("-----")

// ***** Step 4: Concatenate the Authorization *****
const authorization = algorithm + " " +
"Credential=" + SECRET_ID + "/" + credentialScope + ", " +
"SignedHeaders=" + signedHeaders + ", " +
"Signature=" + signature
console.log(authorization)
console.log("-----")

const Call_Information = 'curl -X POST ' + "https://" + endpoint
+ ' -H "Authorization: ' + authorization + '"'
+ ' -H "Content-Type: application/json; charset=utf-8"'
+ ' -H "Host: ' + endpoint + '"'
+ ' -H "X-TC-Action: ' + action + '"'
+ ' -H "X-TC-Timestamp: ' + timestamp.toString() + '"'
+ ' -H "X-TC-Version: ' + version + '"'
+ ' -H "X-TC-Region: ' + region + '"'
+ " -d '" + payload + '"'
console.log(Call_Information)
}
main()

```


C++

```
#include <iostream>
#include <iomanip>
#include <sstream>
#include <string>
#include <stdio.h>
#include <time.h>
#include <openssl/sha.h>
#include <openssl/hmac.h>

using namespace std;

string get_data(int64_t &timestamp)
{
    string utcDate;
    char buff[20] = {0};
    // time_t timenow;
    struct tm sttime;
    sttime = *gmtime(&timestamp);
    strftime(buff, sizeof(buff), "%Y-%m-%d", &sttime);
    utcDate = string(buff);
    return utcDate;
}

string int2str(int64_t n)
{
    std::stringstream ss;
    ss << n;
    return ss.str();
}

string sha256Hex(const string &str)
{
    char buf[3];
    unsigned char hash[SHA256_DIGEST_LENGTH];
    SHA256_CTX sha256;
    SHA256_Init(&sha256);
    SHA256_Update(&sha256, str.c_str(), str.size());
    SHA256_Final(hash, &sha256);
    std::string NewString = "";
    for(int i = 0; i < SHA256_DIGEST_LENGTH; i++)
    {
        sprintf(buf, sizeof(buf), "%02x", hash[i]);
        NewString = NewString + buf;
    }
    return NewString;
}
```

```
}  
  
string HmacSha256(const string &key, const string &input)  
{  
    unsigned char hash[32];  
  
    HMAC_CTX *h;  
    #if OPENSSL_VERSION_NUMBER < 0x10100000L  
    HMAC_CTX hmac;  
    HMAC_CTX_init(&hmac);  
    h = &hmac;  
    #else  
    h = HMAC_CTX_new();  
    #endif  
  
    HMAC_Init_ex(h, &key[0], key.length(), EVP_sha256(), NULL);  
    HMAC_Update(h, ( unsigned char* )&input[0], input.length());  
    unsigned int len = 32;  
    HMAC_Final(h, hash, &len);  
  
    #if OPENSSL_VERSION_NUMBER < 0x10100000L  
    HMAC_CTX_cleanup(h);  
    #else  
    HMAC_CTX_free(h);  
    #endif  
  
    std::stringstream ss;  
    ss << std::setfill('0');  
    for (int i = 0; i < len; i++)  
    {  
        ss << hash[i];  
    }  
  
    return (ss.str());  
}  
  
string HexEncode(const string &input)  
{  
    static const char* const lut = "0123456789abcdef";  
    size_t len = input.length();  
  
    string output;  
    output.reserve(2 * len);  
    for (size_t i = 0; i < len; ++i)  
    {  
        const unsigned char c = input[i];  
        output.push_back(lut[c >> 4]);  
        output.push_back(lut[c & 15]);  
    }  
}
```

```

return output;
}

int main()
{
string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

string service = "cvm";
string host = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
string version = "2017-03-12";
int64_t timestamp = 1551113065;
string date = get_data(timestamp);

// ***** Step 1: Concatenate the CanonicalRequest string *****
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string canonicalHeaders = "content-type:application/json; charset=utf-8\nhost:" +
host + "\n";
string signedHeaders = "content-type;host";
string payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
string hashedRequestPayload = sha256Hex(payload);
string canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
cout << canonicalRequest << endl;
cout << "-----" << endl;

// ***** Step 2: Concatenate the string to sign *****
string algorithm = "TC3-HMAC-SHA256";
string RequestTimestamp = int2str(timestamp);
string credentialScope = date + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = sha256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + RequestTimestamp + "\n" + credentialScope + "\n" + hashedCanonicalRequest;
cout << stringToSign << endl;
cout << "-----" << endl;

// ***** Step 3: Calculate the signature *****
string kKey = "TC3" + SECRET_KEY;
string kDate = HmacSha256(kKey, date);
string kService = HmacSha256(kDate, service);
string kSigning = HmacSha256(kService, "tc3_request");

```

```

string signature = HexEncode(HmacSha256(kSigning, stringToSign));
cout << signature << endl;
cout << "-----" << endl;

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + creden
tialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
cout << authorization << endl;
cout << "-----" << endl;

string headers = "curl -X POST https://" + host + "\n"
+ " -H \"Authorization: \" + authorization + "\n"
+ " -H \"Content-Type: application/json; charset=utf-8\"" + "\n"
+ " -H \"Host: \" + host + "\n"
+ " -H \"X-TC-Action: \" + action + "\n"
+ " -H \"X-TC-Timestamp: \" + RequestTimestamp + "\n"
+ " -H \"X-TC-Version: \" + version + "\n"
+ " -H \"X-TC-Region: \" + region + "\n"
+ " -d '" + payload;
cout << headers << endl;
return 0;
};

```

Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error Code	Description
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes.
AuthFailure.SecretIdNotFound	The key does not exist. Please go to the console to check whether it is disabled or you copied fewer or more characters.
AuthFailure.SignatureFailure	Signature error. It is possible that the signature was calculated incorrectly, the signature does not match the content actually sent, or the SecretKey is incorrect.
AuthFailure.TokenFailure	Temporary certificate token error.
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type).

Signature

Last updated : 2024-04-07 11:57:41

Tencent Cloud API authenticates each access request, i.e. each request needs to include authentication information (Signature) in the common parameters to verify the identity of the requester.

The Signature is generated by the security credentials which include SecretId and SecretKey. If you don't have the security credentials yet, go to the [TencentCloud API Key](#) page to apply for them; otherwise, you cannot invoke the TencentCloud API.

1. Applying for Security Credentials

Before using the TencentCloud API for the first time, go to the [TencentCloud API Key](#) page to apply for security credentials.

Security credentials consist of SecretId and SecretKey:

- SecretId is used to identify the API requester.
- SecretKey is used to encrypt the signature string and verify it on the server.
- **You must keep your security credentials private and avoid disclosure.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) page.
3. On the [API Key Management](#) page, click **Create Key** to create a SecretId/SecretKey pair.

Note: Each account can have up to two pairs of SecretId/SecretKey.

2. Generating a Signature

With the SecretId and SecretKey, a signature can be generated. The following describes how to generate a signature:

Assume that the SecretId and SecretKey are:

- SecretId: AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****
- SecretKey: Gu5t9xGARNpq86cd98joQYCN3*****

Note: This is just an example. For actual operations, please use your own SecretId and SecretKey.

Take the Cloud Virtual Machine's request to view the instance list (DescribeInstances) as an example. When you invoke this API, the request parameters may be as follows:

Parameter name	Description	Parameter value
Action	Method name	DescribeInstances
SecretId	Key ID	AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****
Timestamp	Current timestamp	1465185768
Nonce	Random positive integer	11886
Region	Region where the instance is located	ap-guangzhou
InstanceIds.0	ID of the instance to query	ins-09dx96dg
Offset	Offset	0
Limit	Allowed maximum output	20
Version	API version number	2017-03-12

2.1. Sorting Parameters

First, sort all the request parameters in an ascending lexicographical order (ASCII code) by their names. Notes: (1) Parameters are sorted by their names instead of their values; (2) The parameters are sorted based on ASCII code, not in an alphabetical order or by values. For example, InstanceIds.2 should be arranged after InstanceIds.12. You can complete the sorting process using a sorting function in a programming language, such as the ksort function in PHP. The parameters in the example are sorted as follows:

```
{
  'Action' : 'DescribeInstances',
  'InstanceIds.0' : 'ins-09dx96dg',
  'Limit' : 20,
  'Nonce' : 11886,
  'Offset' : 0,
  'Region' : 'ap-guangzhou',
  'SecretId' : 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****',
  'Timestamp' : 1465185768,
  'Version' : '2017-03-12',
}
```

When developing in another programming language, you can sort these sample parameters and it will work as long as you obtain the same results.

2.2. Concatenating a Request String

This step generates a request string.

Format the request parameters sorted in the previous step into the form of "parameter name"="parameter value". For example, for the Action parameter, its parameter name is "Action" and its parameter value is "DescribeInstances", so it will become Action=DescribeInstances after formatted.

Note: The "parameter value" is the original value but not the value after URL encoding.

Then, concatenate the formatted parameters with "&". The resulting request string is as follows:

```
Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0
&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=1465
185768&Version=2017-03-12
```

2.3. Concatenating the Signature Original String

This step generates a signature original string.

The signature original string consists of the following parameters:

1. HTTP method: POST and GET modes are supported, and GET is used here for the request. Please note that the method name should be in all capital letters.
2. Request server: the domain name of the request to view the list of instances (DescribeInstances) is cvm.tencentcloudapi.com. The actual request domain name varies by the module to which the API belongs. For more information, see the instructions of the specific API.
3. Request path: The request path in the current version of TencentCloud API is fixed to /.
4. Request string: the request string generated in the previous step.

The concatenation rule of the signature original string is: Request method + request host + request path + ? + request string

The concatenation result of the example is:

```
GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&L
imit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WF
kmLPx3*****&Timestamp=1465185768&Version=2017-03-12
```

2.4. Generating a Signature String

This step generates a signature string.

First, use the HMAC-SHA1 algorithm to sign the **signature original string** obtained in the previous step, and then

encode the generated signature using Base64 to obtain the final signature.

The specific code is as follows with the PHP language being used as an example:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3*****';  
$srcStr = 'GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=1465185768&Version=2017-03-12';  
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));  
echo $signStr;
```

The final signature is:

```
zmmjn35mikh6pM3V7sUEuX4wyYM=
```

When developing in another programming language, you can sign and verify the original in the example above and it works as long as you get the same results.

3. Encoding a Signature String

The generated signature string cannot be directly used as a request parameter and must be URL encoded.

For example, if the signature string generated in the previous step is zmmjn35mikh6pM3V7sUEuX4wyYM=, the final signature string request parameter (Signature) is zmmjn35mikh6pM3V7sUEuX4wyYM%3D, which will be used to generate the final request URL.

Note: If your request method is GET, or the request method is POST and the Content-Type is application/x-www-form-urlencoded, then all the request parameter values need to be URL encoded (except the parameter key and the symbol of =) when sending the request. Non-ASCII characters need to be encoded with UTF-8 before URL encoding.

Note: The network libraries of some programming languages automatically URL encode all parameters, in which case there is no need to URL encode the signature string; otherwise, two rounds of URL encoding will cause the signature to fail.

Note: Other parameter values also need to be encoded using [RFC 3986](#). Use %XY in percent-encoding for special characters such as Chinese characters, where "X" and "Y" are hexadecimal characters (0-9 and uppercase A-F), and using lowercase will cause an error.

4. Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error code	Error description
AuthFailure.SignatureExpire	The signature is expired
AuthFailure.SecretIdNotFound	The key does not exist
AuthFailure.SignatureFailure	Signature error
AuthFailure.TokenFailure	Token error
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type)

5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=zmmjn35mikh6pM3V7sUEuX4wyYM%3D&Timestamp=1465185768&Version=2017-03-12` .

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

Java

```
import java.io.UnsupportedEncodingException;
import java.net.URLEncoder;
import java.util.Random;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPIDemo {
    private final static String CHARSET = "UTF-8";

    public static String sign(String s, String key, String method) throws Exception {
        Mac mac = Mac.getInstance(method);
        SecretKeySpec secretKeySpec = new SecretKeySpec(key.getBytes(CHARSET), mac.getAlgorithm());
        mac.init(secretKeySpec);
        byte[] hash = mac.doFinal(s.getBytes(CHARSET));
        return DatatypeConverter.printBase64Binary(hash);
    }

    public static String getStringToSign(TreeMap<String, Object> params) {
        StringBuilder s2s = new StringBuilder("GETcvm.tencentcloudapi.com/?");
        // When signing, the parameters need to be sorted in lexicographical order. TreeMap
        // is used here to guarantee the correct order.
        for (String k : params.keySet()) {
            s2s.append(k).append("=").append(params.get(k).toString()).append("&");
        }
        return s2s.toString().substring(0, s2s.length() - 1);
    }

    public static String getUrl(TreeMap<String, Object> params) throws UnsupportedEncodingException {
        StringBuilder url = new StringBuilder("https://cvm.tencentcloudapi.com/?");
        // There is no requirement for the order of the parameters in the actual request
        // URL.
        for (String k : params.keySet()) {
```

```
// The request string needs to be URL encoded. As the Key is all in English letters, only the value is URL encoded here.
url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHARSET)).append("&");
}
return url.toString().substring(0, url.length() - 1);
}

public static void main(String[] args) throws Exception {
    TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap enables automatic sorting
    // A random number should be used when actually calling, for example: params.put("Nonce", new Random().nextInt(Integer.MAX_VALUE));
    params.put("Nonce", 11886); // Common parameter
    // The current time of the system should be used when actually calling, for example: params.put("Timestamp", System.currentTimeMillis() / 1000);
    params.put("Timestamp", 1465185768); // Common parameter
    params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"); // Common parameter
    params.put("Action", "DescribeInstances"); // Common parameter
    params.put("Version", "2017-03-12"); // Common parameter
    params.put("Region", "ap-guangzhou"); // Common parameter
    params.put("Limit", 20); // Business parameter
    params.put("Offset", 0); // Business parameter
    params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
    params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpq86cd98joQYCN3*****", "HmacSHA1")); // Common parameter
    System.out.println(getUrl(params));
}
}
```

Python

Note: If running in a Python 2 environment, the following requests dependency package must be installed first: `pip install requests`.

```
# -*- coding: utf8 -*-
import base64
import hashlib
import hmac
import time

import requests

secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
```

```

def get_string_to_sign(method, endpoint, params):
    s = method + endpoint + "/"
    query_str = "&".join("%s=%s" % (k, params[k]) for k in sorted(params))
    return s + query_str

def sign_str(key, s, method):
    hmac_str = hmac.new(key.encode("utf8"), s.encode("utf8"), method).digest()
    return base64.b64encode(hmac_str)

if __name__ == '__main__':
    endpoint = "cvm.tencentcloudapi.com"
    data = {
        'Action' : 'DescribeInstances',
        'InstanceIds.0' : 'ins-09dx96dg',
        'Limit' : 20,
        'Nonce' : 11886,
        'Offset' : 0,
        'Region' : 'ap-guangzhou',
        'SecretId' : secret_id,
        'Timestamp' : 1465185768, # int(time.time())
        'Version': '2017-03-12'
    }
    s = get_string_to_sign("GET", endpoint, data)
    data["Signature"] = sign_str(secret_key, s, hashlib.sha1)
    print(data["Signature"])
    # An actual invocation would occur here, which may incur fees after success
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)

```

Golang

```

package main

import (
    "bytes"
    "crypto/hmac"
    "crypto/sha1"
    "encoding/base64"
    "fmt"
    "sort"
)

func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"

```

```

params := map[string]string{
    "Nonce": "11886",
    "Timestamp": "1465185768",
    "Region": "ap-guangzhou",
    "SecretId": secretId,
    "Version": "2017-03-12",
    "Action": "DescribeInstances",
    "InstanceIds.0": "ins-09dx96dg",
    "Limit": "20",
    "Offset": "0",
}

var buf bytes.Buffer
buf.WriteString("GET")
buf.WriteString("cvm.tencentcloudapi.com")
buf.WriteString("/")
buf.WriteString("?")

// sort keys by ascii asc order
keys := make([]string, 0, len(params))
for k, _ := range params {
    keys = append(keys, k)
}
sort.Strings(keys)

for i := range keys {
    k := keys[i]
    buf.WriteString(k)
    buf.WriteString("=")
    buf.WriteString(params[k])
    buf.WriteString("&")
}
buf.Truncate(buf.Len() - 1)

hashed := hmac.New(sha1.New, []byte(secretKey))
hashed.Write(buf.Bytes())

fmt.Println(base64.StdEncoding.EncodeToString(hashed.Sum(nil)))
}

```

PHP

```

<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$params["Nonce"] = 11886; //rand();

```

```

$params["Timestamp"] = 1465185768;//time();
$params["Region"] = "ap-guangzhou";
$params["SecretId"] = $secretId;
$params["Version"] = "2017-03-12";
$params["Action"] = "DescribeInstances";
$params["InstanceIds.0"] = "ins-09dx96dg";
$params["Limit"] = 20;
$params["Offset"] = 0;

ksort($params);

$signStr = "GETcvm.tencentcloudapi.com/?";
foreach ( $params as $key => $value ) {
    $signStr = $signStr . $key . "=" . $value . "&";
}
$signStr = substr($signStr, 0, -1);

$signature = base64_encode(hash_hmac("sha1", $signStr, $secretKey, true));
echo $signature.PHP_EOL;
// need to install and enable curl extension in php.ini
// $params["Signature"] = $signature;
// $url = "https://cvm.tencentcloudapi.com/?".http_build_query($params);
// echo $url.PHP_EOL;
// $ch = curl_init();
// curl_setopt($ch, CURLOPT_URL, $url);
// $output = curl_exec($ch);
// curl_close($ch);
// echo json_decode($output);

```

Ruby

```

# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'time'
require 'openssl'
require 'base64'

secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"

method = 'GET'
endpoint = 'cvm.tencentcloudapi.com'
data = {
  'Action' => 'DescribeInstances',
  'InstanceIds.0' => 'ins-09dx96dg',
  'Limit' => 20,

```

```

'Nonce' => 11886,
'Offset' => 0,
'Region' => 'ap-guangzhou',
'SecretId' => secret_id,
'Timestamp' => 1465185768, # Time.now.to_i
'Version' => '2017-03-12',
}
sign = method + endpoint + '/'?
params = []
data.sort.each do |item|
  params << "#{item[0]}=#{item[1]}"
end
sign += params.join('&')
digest = OpenSSL::Digest.new('sha1')
data['Signature'] = Base64.encode64(OpenSSL::HMAC.digest(digest, secret_key, sign))
puts data['Signature']

# require 'net/http'
# uri = URI('https://' + endpoint)
# uri.query = URI.encode_www_form(data)
# p uri
# res = Net::HTTP.get_response(uri)
# puts res.body

```

DotNet

```

using System;
using System.Collections.Generic;
using System.Net;
using System.Security.Cryptography;
using System.Text;

public class Application {
  public static string Sign(string signKey, string secret)
  {
    string signRet = string.Empty;
    using (HMACSHA1 mac = new HMACSHA1(Encoding.UTF8.GetBytes(signKey)))
    {
      byte[] hash = mac.ComputeHash(Encoding.UTF8.GetBytes(secret));
      signRet = Convert.ToBase64String(hash);
    }
    return signRet;
  }

  public static string MakeSignPlainText(SortedDictionary<string, string> requestParams, string requestMethod, string requestHost, string requestPath)

```

```
{
    string retStr = "";
    retStr += requestMethod;
    retStr += requestHost;
    retStr += requestPath;
    retStr += "?";
    string v = "";
    foreach (string key in requestParams.Keys)
    {
        v += string.Format("{0}={1}&", key, requestParams[key]);
    }
    retStr += v.TrimEnd('&');
    return retStr;
}

public static void Main(string[] args)
{
    string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";
    double RequestTimestamp = 1465185768;
    // long timestamp = ToTimestamp() / 1000;
    // string requestTimestamp = timestamp.ToString();
    Dictionary<string, string> param = new Dictionary<string, string>();
    param.Add("Limit", "20");
    param.Add("Offset", "0");
    param.Add("InstanceIds.0", "ins-09dx96dg");
    param.Add("Action", action);
    param.Add("Nonce", "11886");
    // param.Add("Nonce", Math.Abs(new Random().Next()).ToString());

    param.Add("Timestamp", RequestTimestamp.ToString());
    param.Add("Version", version);

    param.Add("SecretId", SECRET_ID);
    param.Add("Region", region);
    SortedDictionary<string, string> headers = new SortedDictionary<string, string>(param, StringComparer.Ordinal);
    string sigInParam = MakeSignPlainText(headers, "GET", endpoint, "/");
    Console.WriteLine(sigInParam);
    string sigOutParam = Sign(SECRET_KEY, sigInParam);
}
```



```

Console.WriteLine("GET https://cvm.tencentcloudapi.com");
foreach (KeyValuePair<string, string> kv in headers)
{
    Console.WriteLine(kv.Key + ": " + kv.Value);
}
Console.WriteLine("Signature" + ": " + WebUtility.UrlEncode(sigOutParam));
Console.WriteLine();

string result = "https://cvm.tencentcloudapi.com/?";
foreach (KeyValuePair<string, string> kv in headers)
{
    result += WebUtility.UrlEncode(kv.Key) + "=" + WebUtility.UrlEncode(kv.Value) +
"&";
}
result += WebUtility.UrlEncode("Signature") + "=" + WebUtility.UrlEncode(sigOutPa
ram);
Console.WriteLine("GET " + result);
}
}

```

NodeJS

```

const crypto = require('crypto');

function get_req_url(params, endpoint){
    params['Signature'] = escape(params['Signature']);
    const url_strParam = sort_params(params)
    return "https://" + endpoint + "/" + url_strParam.slice(1);
}

function formatSignString(reqMethod, endpoint, path, strParam){
    let strSign = reqMethod + endpoint + path + "?" + strParam.slice(1);
    return strSign;
}

function sha1(secretKey, strsign){
    let signMethodMap = {'HmacSHA1': "sha1"};
    let hmac = crypto.createHmac(signMethodMap['HmacSHA1'], secretKey || "");
    return hmac.update(Buffer.from(strsign, 'utf8')).digest('base64')
}

function sort_params(params) {
    let strParam = "";
    let keys = Object.keys(params);
    keys.sort();
    for (let k in keys) {
        //k = k.replace(/_/g, '.');
    }
}

```

```
strParam += ("&" + keys[k] + "=" + params[keys[k]]);
}
return strParam
}

function main(){
const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"

const endpoint = "cvm.tencentcloudapi.com"
const Region = "ap-guangzhou"
const Version = "2017-03-12"
const Action = "DescribeInstances"
const Timestamp = 1465185768
// const Timestamp = Math.round(Date.now() / 1000)
const Nonce = 11886
//const nonce = Math.round(Math.random() * 65535)

let params = {};
params['Action'] = Action;
params['InstanceIds.0'] = 'ins-09dx96dg';
params['Limit'] = 20;
params['Offset'] = 0;
params['Nonce'] = Nonce;
params['Region'] = Region;
params['SecretId'] = SECRET_ID;
params['Timestamp'] = Timestamp;
params['Version'] = Version;

strParam = sort_params(params)

const reqMethod = "GET";
const path = "/";
strSign = formatSignString(reqMethod, endpoint, path, strParam)
console.log(strSign)
console.log("-----")

params['Signature'] = sha1(SECRET_KEY, strSign)
console.log(params['Signature'])
console.log("-----")

const req_url = get_req_url(params, endpoint)
console.log(params['Signature'])
console.log("-----")
console.log(req_url)
}
main()
```


Responses

Last updated : 2024-04-07 11:57:41

Response for Successful Requests

For example, when calling CAM API (version: 2017-03-12) to view the status of instances (DescribeInstancesStatus), if the request has succeeded, you may see the response as shown below:

```
{
  "Response": {
    "TotalCount": 0,
    "InstanceStatusSet": [],
    "RequestId": "b5b41468-520d-4192-b42f-595cc34b6c1c"
  }
}
```

- The API will return `Response` , which contains `RequestId` , as long as it processes the request. It does not matter if the request is successful or not.
- RequestId is the unique ID of an API request. Contact us with this ID when an exception occurs.
- Except for the fixed fields, all fields are action-specified. For the definitions of action-specified fields, see the corresponding API documentation. In this example, `TotalCount` and `InstanceStatusSet` are the fields specified by the API `DescribeInstancesStatus` . `0` `TotalCount` means that the requester owns 0 CVM instance so the `InstanceStatusSet` is empty.

Response for Failed Requests

If the request has failed, you may see the response as shown below:

```
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please ensure your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

- The presence of the `Error` field indicates that the request has failed. A response for a failed request will include `Error`, `Code` and `Message` fields.
- `Code` is the code of the error that helps you identify the cause and solution. There are two types of error codes so you may find the code in either common error codes or API-specified error codes.
- `Message` explains the cause of the error. Note that the returned messages are subject to service updates. The information the messages provide may not be up-to-date and should not be the only source of reference.
- `RequestId` is the unique ID of an API request. Contact us with this ID when an exception occurs.

Common Error Codes

If there is an `Error` field in the response, it means that the API call failed. The `Code` field in `Error` indicates the error code. The following table lists the common error codes that all actions can return.

Error Code	Description
<code>AuthFailure.InvalidSecretId</code>	Invalid key (not a TencentCloud API key type).
<code>AuthFailure.MFAFailure</code>	MFA failed.
<code>AuthFailure.SecretIdNotFound</code>	The key does not exist.
<code>AuthFailure.SignatureExpire</code>	Signature expired.
<code>AuthFailure.SignatureFailure</code>	Signature error.
<code>AuthFailure.TokenFailure</code>	Token error.
<code>AuthFailure.UnauthorizedOperation</code>	The request does not have CAM authorization.
<code>DryRunOperation</code>	DryRun Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
<code>FailedOperation</code>	Operation failed.
<code>InternalError</code>	Internal error.
<code>InvalidAction</code>	The API does not exist.
<code>InvalidParameter</code>	Incorrect parameter.
<code>InvalidParameterValue</code>	Invalid parameter value.
<code>LimitExceeded</code>	Quota limit exceeded.
<code>MissingParameter</code>	A parameter is missing.

NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTPS request method error. Only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

Private DNS APIs

CreatePrivateDNSAccount

Last updated : 2024-04-07 11:57:53

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to create a Private DNS account.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreatePrivateDNSAccount.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Account	Yes	PrivateDNSAccount	Private DNS account

3. Output Parameters

--	--	--

Parameter Name	Type	Description
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Creating Private DNS account

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreatePrivateDNSAccount
<Common request parameters>

{
  "Account": {
    "Uin": "123456789"
  }
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)

- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.AccountExist	A bound account already exists.
InvalidParameter.RecordExist	The record already exists.
InvalidParameter.RecordNotExist	The record does not exist.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.

ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

CreatePrivateZone

Last updated : 2024-04-07 11:57:52

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to create a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreatePrivateZone.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Domain	Yes	String	Domain name, which must be in the format of standard TLD
TagSet.N	No	Array of TagInfo	Tags the private domain when it is created
VpcSet.N	No	Array of VpcInfo	Associates the private domain to a VPC when it is created
Remark	No	String	Remarks

DnsForwardStatus	No	String	Whether to enable subdomain recursive DNS. Valid values: <code>ENABLED</code> (default) and <code>DISABLED</code> .
Vpcs.N	No	Array of VpcInfo	Associates the private domain to a VPC when it is created
AccountVpcSet.N	No	Array of AccountVpcInfo	List of authorized accounts' VPCs to associate with the private domain
CnameSpeedupStatus	No	String	Whether to enable CNAME flattening. Valid values: <code>ENABLED</code> (default) and <code>DISABLED</code> .

3. Output Parameters

Parameter Name	Type	Description
Zoneld	String	Private domain ID, such as zone-xxxxxx
Domain	String	Private domain
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Creating a private domain

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreatePrivateZone
<Common request parameters>

{
  "Domain": "a.com",
  "TagSet": [
    {
      "TagKey": "owner",
```

```
"TagValue": "xxxxxxxxxx"
},
],
"VpcSet": [
{
"Region": "ap-guangzhou",
"UniqVpcId": "vpc-xxxxxl"
}
],
"AccountVpcSet": [
{
"Uin": "123456789",
"Region": "ap-guangzhou",
"UniqVpcId": "vpc-adsebmy1",
"VpcName": "vpcname"
}
],
"Remark": "Test domain name",
"DnsForwardStatus": "ENABLED",
"CnameSpeedupStatus": "ENABLED"
}
```

Output Example

```
{
"Response": {
"RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845",
"ZoneId": "41",
"Domain": "a.com"
}
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)

- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.CreateZoneFailed	Failed to create the private domain.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.IllegalCidr	Invalid CIDR.
InvalidParameter.IllegalDomain	Incorrect domain name.
InvalidParameter.IllegalDomainTld	Incorrect top-level domain name.
InvalidParameter.IllegalRecord	Invalid record.
InvalidParameter.IllegalRecordValue	Invalid record value.
InvalidParameter.RecordLevelExceed	The number of record levels exceeds the limit.
InvalidParameter.VpcBinded	The VPC has been bound to another domain.
InvalidParameter.VpcBindedMainDomain	The VPC has been associated with the same primary domain.

InvalidParameter.VpcPtrZoneBindExceed	The number of PTR records associated with the VPC has reached the limit.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.ReservedDomain	This is a reserved domain name and cannot be created.
LimitExceeded	The quota limit is exceeded.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.
LimitExceeded.TldOutOfRange	The number of private domains using the custom TLD exceeds the total quota.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.RoleUnauthorized	Role not authorized.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedOperation.AccountNotBound	Account not bound.
UnsupportedOperation.NotSupportDnsForward	Subdomain recursive DNS is not supported.

CreatePrivateZoneRecord

Last updated : 2024-04-07 11:57:52

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to add a DNS record for a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreatePrivateZoneRecord.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	Yes	String	Private domain ID
RecordType	Yes	String	Record type. Valid values: "A", "AAAA", "CNAME", "MX", "TXT", "PTR"
SubDomain	Yes	String	Subdomain, such as "www", "m", and "@"
RecordValue	Yes	String	Record value, such as IP: 192.168.10.2, CNAME: cname.qcloud.com., and MX: mail.qcloud.com.
Weight	No	Integer	Record weight. Value range: 1–100

MX	No	Integer	MX priority, which is required when the record type is MX. Valid values: 5, 10, 15, 20, 30, 40, 50
TTL	No	Integer	Record cache time. The smaller the value, the faster the record will take effect. Value range: 1–86400s. Default value: 600

3. Output Parameters

Parameter Name	Type	Description
RecordId	String	Record ID
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Private domain - adding an A record

This example shows you how to add an A record.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreatePrivateZoneRecord
<Common request parameters>

{
  "ZoneId": "zone-123456",
  "RecordType": "A",
  "SubDomain": "b",
  "RecordValue": "3.3.3.3",
  "Weight": 100,
  "TTL": 600
}
```

Output Example

```
{
  "Response": {
    "RequestId": "a98891db-9d73-514a-8751422197b540cd",
    "RecordId": 1111
  }
}
```

Example2 Private domain - adding an MX record

This example shows you how to add an MX record.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreatePrivateZoneRecord
<Common request parameters>
```

```
{
  "ZoneId": "zone-123456",
  "RecordType": "MX",
  "SubDomain": "b",
  "RecordValue": "3.3.3.3",
  "Weight": 100,
  "MX": 5
}
```

Output Example

```
{
  "Response": {
    "RequestId": "a98891db-9d73-514a-8751422197b540cd",
    "RecordId": 1111
  }
}
```

Example3 Private domain - adding a PTR record

This example shows you how to add a PTR record.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreatePrivateZoneRecord
<Common request parameters>
```

```
{
  "ZoneId": "zone-123456",
  "RecordType": "PTR",
  "SubDomain": "1.1.1",
  "RecordValue": "qq.com"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "a98891db-9d73-514a-8751422197b540cd",
    "RecordId": 1111
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.CreateRecordFailed	Failed to create the record.
FailedOperation.DataError	Data exception.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.IllegalPTRRecord	Invalid PTR record.
InvalidParameter.IllegalRecord	Invalid record.
InvalidParameter.IllegalRecordValue	Invalid record value.
InvalidParameter.InvalidMX	The MX value must be a multiple of 5 between 5 and 50.
InvalidParameter.MXNotSupported	
InvalidParameter.RecordAAAACountExceed	The number of round-robin DNS AAAA records exceeds 50.
InvalidParameter.RecordACountExceed	The number of round-robin DNS A records exceeds 50.
InvalidParameter.RecordCNAMECountExceed	The number of round-robin DNS CNAME records exceeds 50.
InvalidParameter.RecordConflict	Records conflict.
InvalidParameter.RecordCountExceed	The number of records exceeds the limit.
InvalidParameter.RecordExist	The record already exists.
InvalidParameter.RecordMXCountExceed	The number of round-robin DNS MX records exceeds 50.

InvalidParameter.RecordRollimitCountExceed	The number of round-robin DNS records exceeds the limit.
InvalidParameter.RecordTXTCountExceed	The number of round-robin DNS TXT records exceeds 10.
InvalidParameter.RecordUnsupportWeight	The current record type does not support weight.
InvalidParameter.VpcBindedMainDomain	The VPC has been associated with the same primary domain.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.IllegalTTLValue	The TTL value must be in the range of 1-86400.
LimitExceeded	The quota limit is exceeded.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DeletePrivateZoneRecord

Last updated : 2024-04-07 11:57:51

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to delete a DNS record for a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeletePrivateZoneRecord.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	No	String	Private domain ID
RecordId	No	String	Record ID
RecordIdSet.N	No	Array of String	Array of record IDs. <code>RecordId</code> takes precedence.

3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Deleting DNS record for private domain

This example shows you how to delete a DNS record.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeletePrivateZoneRecord
<Common request parameters>

{
  "ZoneId": "zone-xxxxxx",
  "RecordId": "11111"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "a3ed908c-5848-1a98-d7aaa92528e28303"
  }
}
```

Example2 Batch deleting DNS records for private domain

This example shows you how to batch delete DNS records.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeletePrivateZoneRecord
```

<Common request parameters>

```
{
  "ZoneId": "zone-xxxxxx",
  "RecordIdSet": [
    "10001",
    "20201",
    "33401",
    "11111"
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.DeleteLastBindVpcRecordFailed	The private domain is currently associated with a VPC. Please disassociate the VPC first before clearing its records.
FailedOperation.DeleteRecordFailed	
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.RecordNotExist	The record does not exist.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.

UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedOperation.FrequencyLimit	

DescribeAccountVpcList

Last updated : 2024-04-07 11:57:50

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the VPC list of a Private DNS account.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeAccountVpcList.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
AccountUin	Yes	String	UIN of account
Offset	No	Integer	Pagination offset, starting from 0
Limit	No	Integer	Number of entries per page. Maximum value: 100 . Default value: 20
Filters.N	No	Array of Filter	Filter parameters

3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of VPCs
VpcSet	Array of AccountVpcInfoOut	VPC list
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting the VPC list of a Private DNS account

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeAccountVpcList
<Common request parameters>

{
  "AccountUin": "123456789",
  "Limit": 200,
  "Offset": 0,
  "Filters": [
    {
      "Name": "Region",
      "Values": [
        "ap-guangzhou"
      ]
    },
    {
      "Name": "VpcName",
      "Values": [
        "test"
      ]
    }
  ],
}
```

```
{
  "Name": "VpcId",
  "Values": [
    "vpc-sdfwadf1"
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "443f1f2b-9be4-4a2c-b1a6-0494c2d980ff",
    "TotalCount": 1,
    "VpcSet": [
      {
        "VpcId": "vpc-ofnocfe1",
        "VpcName": "testname",
        "Uin": 700000136857,
        "Region": "ap-guangzhou"
      }
    ]
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
AuthFailure.TokenFailure	Token verification failed.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.RoleUnAuthorized	Role not authorized.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.

UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedOperation.AccountNotBound	Account not bound.

DescribeAuditLog

Last updated : 2024-04-07 11:57:50

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the list of operation logs.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeAuditLog.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
TimeRangeBegin	Yes	String	Request volume statistics start time
Filters.N	No	Array of Filter	Filter parameter. Valid values: ZoneId (private domain ID), Domain (private domain), OperatorUin (operator account ID)
TimeRangeEnd	No	String	Request volume statistics end time
Offset	No	Integer	Pagination offset, starting from 0
Limit	No	Integer	Number of entries per page. Maximum value: 100. Default value: 20

3. Output Parameters

Parameter Name	Type	Description
Data	Array of AuditLog	List of operation logs
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting the list of operation logs

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeAuditLog
<Common request parameters>

{
  "Filters": [
    {
      "Name": "ZoneId",
      "Values": [
        "xxxxxxx"
      ]
    },
    {
      "Name": "Domain",
      "Values": [
        "a.com"
      ]
    },
    {
      "Name": "OperatorUin",
      "Values": [
        "xxxxx"
      ]
    }
  ]
}
```

```

}
],
"TimeRangeBegin": "2020-11-22 00:00:00",
"TimeRangeEnd": "2020-11-23 23:59:59",
"Offset": 0,
"Limit": 20
}

```

Output Example

```

{
  "Response": {
    "RequestId": "5471b753-7d7a-8742-6cb079c6472692f2",
    "Data": [
      {
        "Resource": "all",
        "Metric": "request_count",
        "TotalCount": 48,
        "DataSet": [
          {
            "Date": "2020-11-22 00:00:00",
            "OperatorUin": "100000009719",
            "Content": "www(11111111111111) A , zone(777777) "
          },
          {
            "Date": "2020-11-22 01:00:00",
            "OperatorUin": "100000009719",
            "Content": "www(11111111111111) A , zone(777777) "
          },
          {
            "Date": "2020-11-22 02:00:00",
            "OperatorUin": "100000009719",
            "Content": "www.baidu.com 600 TXT aaaaaaaaaaaaaaaaaaaaaaaa zone(666666) "
          },
          {
            "Date": "2020-11-22 03:00:00",
            "OperatorUin": "100000009719",
            "Content": "www.baidu.com 600 TXT aaaaaaaaaaaaaaaaaaaaaaaa zone(666666) "
          },
          {
            "Date": "2020-11-22 04:00:00",
            "OperatorUin": "100000009719",
            "Content": "[Subdomain recursive DNS: disable -> enable ][], zone(444444) "
          }
        ]
      }
    ]
  }
}

```

```
]
}
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.

MissingParameter	Missing parameter.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribeDashboard

Last updated : 2024-04-07 11:57:49

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the overview of private DNS records.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeDashboard.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
ZoneTotal	Integer	Total number of private domain DNS records
ZoneVpcCount	Integer	Number of VPCs associated with private domain

RequestTotalCount	Integer	Total number of historical requests
FlowUsage	Array of FlowUsage	Traffic package usage
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting the overview of private DNS records

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDashboard
<Common request parameters>

{}
```

Output Example

```
{
  "Response": {
    "RequestId": "3c979890-0dcf-917e-d7a696c04d429009",
    "ZoneTotal": 20,
    "ZoneVpcCount": 7,
    "RequestTotalCount": 10000,
    "FlowUsage": [
      {
        "FlowType": "zone",
        "TotalQuantity": 20,
        "AvailableQuantity": 20
      },
      {
        "FlowType": "traffic",
        "TotalQuantity": 2000000,
        "AvailableQuantity": 2000000
      }
    ]
  }
}
```

```
}  
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.

InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribePrivateDNSAccountList

Last updated : 2024-04-07 11:57:48

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the list of Private DNS accounts.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribePrivateDNSAccountList.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Offset	No	Integer	Pagination offset, starting from <code>0</code>
Limit	No	Integer	Number of entries per page. Maximum value: <code>100</code> . Default value: <code>20</code>
Filters.N	No	Array of Filter	Filter parameters

3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of Private DNS accounts
AccountSet	Array of PrivateDNSAccount	List of Private DNS accounts
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting the list of Private DNS accounts

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribePrivateDNSAccountList
<Common request parameters>

{
  "Limit": 200,
  "Offset": 0,
  "Filters": [
    {
      "Name": "AccountUin",
      "Values": [
        "123456789"
      ]
    }
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "14413609-3e4e-9003-c5df01ee3e4b0df7",
```

```
"TotalCount": 1,
"AccountSet": [
{
  "Uin": "1234567898",
  "Account": "privatedns***@tencent.com",
  "Nickname": "Private DNS test account"
}
]
}
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
FailedOperation	Operation failed.
InternalError	Internal error.

InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribePrivateZoneList

Last updated : 2024-04-07 11:57:48

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the list of private domains.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribePrivateZoneList.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Offset	No	Integer	Pagination offset, starting from 0
Limit	No	Integer	Number of entries per page. Maximum value: 100. Default value: 20
Filters.N	No	Array of Filter	Filter parameter

3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of private domains
PrivateZoneSet	Array of PrivateZone	List of private domains
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 查询私有域详情列表

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribePrivateZoneList
<common request parameters>

{
  "Limit": "1",
  "Offset": "0"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "a92efb27-74e6-462a-9b92-c836468eb111",
    "TotalCount": 22,
    "PrivateZoneSet": [
      {
        "ZoneId": "zone-e1g2senm",
        "OwnerUin": 100000123998,
        "Domain": "b.ac.cn",
        "CreatedOn": "2022-11-14 16:42:58",
        "UpdatedOn": "2022-11-14 16:42:59",
        "RecordCount": 0,
        "Remark": "tag",

```

```
"VpcSet": [
{
  "UniqVpcId": "vpc-39kkc543",
  "Region": "ap-taipei"
},
],
"AccountVpcSet": [],
"Status": "ENABLED",
"DnsForwardStatus": "ENABLED",
"Tags": []
}
]
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description

AuthFailure	Error with CAM signature/authentication.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribePrivateZoneRecordList

Last updated : 2024-04-07 11:57:47

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the list of records for a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribePrivateZoneRecordList.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	Yes	String	Private domain ID: zone-xxxxxx
Filters.N	No	Array of Filter	Filter parameter
Offset	No	Integer	Pagination offset, starting from 0
Limit	No	Integer	Number of entries per page. Maximum value: 100. Default value: 20

3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of DNS records
RecordSet	Array of PrivateZoneRecord	List of DNS records
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting the list of DNS records

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribePrivateZoneRecordList
<Common request parameters>

{
  "ZoneId": "zone-123456",
  "Limit": 2,
  "Offset": 0,
  "Filters": [
    {
      "Name": "Value",
      "Values": [
        "3",
        "b"
      ]
    },
    {
      "Name": "RecordType",
      "Values": [
        "A",
        "AAAA"
      ]
    }
  ]
}
```

```
]
}
]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "8a4ea9cc-b1df-f8f8-ffe7efbe98f9ff85",
    "TotalCount": 5,
    "RecordSet": [
      {
        "RecordId": "66",
        "ZoneId": "zone-123456",
        "SubDomain": "b",
        "RecordType": "A",
        "RecordValue": "3.3.3.3",
        "TTL": 600,
        "MX": 0,
        "Status": "enabled",
        "Extra": "weight:100",
        "CreatedOn": "2020-11-16 17:16:24",
        "UpdatedOn": "2020-11-16 17:16:24",
        "Weight": 100
      },
      {
        "RecordId": "65",
        "ZoneId": "zone-123456",
        "SubDomain": "mail",
        "RecordType": "MX",
        "RecordValue": "5.5.5.5",
        "TTL": 600,
        "MX": 10,
        "Status": "enabled",
        "Extra": null,
        "CreatedOn": "2020-11-16 17:14:02",
        "UpdatedOn": "2020-11-16 17:14:02",
        "Weight": null
      }
    ]
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.ZoneNotExists	The domain does not exist.
MissingParameter	Missing parameter.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
UnauthorizedOperation	Unauthorized operation.

UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribePrivateZoneService

Last updated : 2024-04-07 11:57:47

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to query the Private DNS activation status.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribePrivateZoneService.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
ServiceStatus	String	Private DNS service activation status. Valid values: ENABLED, DISABLED
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if

	the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.
--	--

4. Example

Example1 Querying Private DNS activation status

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribePrivateZoneService
<Common request parameters>

{}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845",
    "ServiceStatus": "ENABLED"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.

UnsupportedOperation	Unsupported operation.
----------------------	------------------------

DescribeQuotaUsage

Last updated : 2024-04-07 11:57:46

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to query quota usage.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeQuotaUsage.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
TldQuota	TldQuota	TLD quota usage
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if

the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Querying the user's quota usage

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeQuotaUsage
<Common request parameters>

{}
```

Output Example

```
{
  "Response": {
    "RequestId": "89aa867e-74db-4fce-9cab-add371622723",
    "TldQuota": {
      "Total": 1,
      "Used": 1,
      "Stock": 5000,
      "Quota": 100
    }
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)

- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
InternalServerError	Internal error.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.RoleUnauthorized	Role not authorized.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribeRequestData

Last updated : 2024-04-07 11:57:45

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the DNS request volume of a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeRequestData.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
TimeRangeBegin	Yes	String	Request volume statistics start time in the format of 2020-11-22 00:00:00
Filters.N	No	Array of Filter	Filter parameter:
TimeRangeEnd	No	String	Request volume statistics end time in the format of 2020-11-22 23:59:59

3. Output Parameters

Parameter Name	Type	Description
Data	Array of MetricData	Request volume statistics table
Interval	String	Request volume unit time. Valid values: Day, Hour
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting the DNS request volume of private domain

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeRequestData
<Common request parameters>
```

```
{
  "Filters": [
    {
      "Name": "Vpc",
      "Values": [
        "vpc-qxxxxxx5"
      ]
    },
    {
      "Name": "ZoneId",
      "Values": [
        "vpc-asdfasdf"
      ]
    },
    {
      "Name": "Region",
      "Values": [
        "ap-guangzhou"
      ]
    }
  ]
}
```

```
],  
  "TimeRangeBegin": "2020-11-22 00:00:00",  
  "TimeRangeEnd": "2020-11-23 23:59:59"  
}
```

Output Example

```
{  
  "Response": {  
    "RequestId": "e7b6e0f8-df16-afcf-507dea8b6958343d",  
    "Data": [  
      {  
        "Resource": "all",  
        "Metric": "request_count",  
        "DataSet": [  
          {  
            "Date": "2020-11-22 00:00:00",  
            "Value": 0  
          },  
          {  
            "Date": "2020-11-22 01:00:00",  
            "Value": 0  
          }  
        ]  
      },  
      {  
        "Interval": "hour"  
      }  
    ]  
  }  
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
InternalError.UndefiendError	Undefined error.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.

ModifyPrivateZone

Last updated : 2024-04-07 11:57:45

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to modify a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ModifyPrivateZone.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	Yes	String	Private domain ID
Remark	No	String	Remarks
DnsForwardStatus	No	String	Whether to enable subdomain recursive DNS. Valid values: ENABLED, DISABLED
CnameSpeedupStatus	No	String	Whether to enable CNAME flattening. Valid values: <code>ENABLED</code> and <code>DISABLED</code> .

3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Modifying a private domain

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyPrivateZone
<Common request parameters>

{
  "ZoneId": "1",
  "Remark": "Test domain name",
  "DnsForwardStatus": "ENABLED",
  "CnameSpeedupStatus": "ENABLED"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.ModifyZoneFailed	Failed to modify the private domain.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.

LimitExceeded.TldOutOfRange	The number of private domains using the custom TLD exceeds the total quota.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedOperation.NotSupportDnsForward	Subdomain recursive DNS is not supported.

ModifyPrivateZoneRecord

Last updated : 2024-04-07 11:57:44

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to modify a DNS record for a private domain.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ModifyPrivateZoneRecord.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	Yes	String	Private domain ID
RecordId	Yes	String	Record ID
RecordType	Yes	String	Record type. Valid values: "A", "AAAA", "CNAME", "MX", "TXT", "PTR"
SubDomain	Yes	String	Subdomain, such as "www", "m", and "@"
RecordValue	Yes	String	Record value, such as IP: 192.168.10.2, CNAME: cname.qcloud.com., and MX: mail.qcloud.com.

Weight	No	Integer	Record weight. Value range: 1–100
MX	No	Integer	MX priority, which is required when the record type is MX. Valid values: 5, 10, 15, 20, 30, 40, 50
TTL	No	Integer	Record cache time. The smaller the value, the faster the record will take effect. Value range: 1–86400s. Default value: 600

3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Modifying a DNS record (A record) for a private domain

This example shows you how to modify an A record.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyPrivateZoneRecord
<Common request parameters>

{
  "ZoneId": "zone-xxxxxx",
  "RecordId": "289",
  "RecordType": "A",
  "SubDomain": "@",
  "RecordValue": "8.8.8.8",
  "TTL": 600,
  "Weight": "100"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "d6f4fef6-8a3c-e2ee-792856f06fa696da"
  }
}
```

Example2 Modifying a DNS record (MX record) for a private domain

This example shows you how to modify an MX record.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyPrivateZoneRecord
<Common request parameters>

{
  "ZoneId": "zone-mao3y9jo",
  "SubDomain": "mail",
  "RecordType": "MX",
  "RecordValue": "stmp.qq.com",
  "TTL": 300,
  "MX": 10,
  "RecordId": "16125"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "660006f4-8531-46f0-a2ba-05daf4e7932e"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.DataError	Data exception.
FailedOperation.ModifyRecordFailed	Failed to modify the record.
InternalServerError	Internal error.
InternalServerError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.IllegalCidr	Invalid CIDR.
InvalidParameter.IllegalPTRRecord	Invalid PTR record.
InvalidParameter.IllegalRecord	Invalid record.
InvalidParameter.IllegalRecordValue	Invalid record value.
InvalidParameter.InvalidMX	The MX value must be a multiple of 5 between 5 and 50.

InvalidParameter.RecordAAAACountExceed	The number of round-robin DNS AAAA records exceeds 50.
InvalidParameter.RecordACountExceed	The number of round-robin DNS A records exceeds 50.
InvalidParameter.RecordCNAMECountExceed	The number of round-robin DNS CNAME records exceeds 50.
InvalidParameter.RecordConflict	Records conflict.
InvalidParameter.RecordCountExceed	The number of records exceeds the limit.
InvalidParameter.RecordExist	The record already exists.
InvalidParameter.RecordLevelExceed	The number of record levels exceeds the limit.
InvalidParameter.RecordMXCountExceed	The number of round-robin DNS MX records exceeds 50.
InvalidParameter.RecordNotExist	The record does not exist.
InvalidParameter.RecordRolllimitCountExceed	The number of round-robin DNS records exceeds the limit.
InvalidParameter.RecordTXTCountExceed	The number of round-robin DNS TXT records exceeds 10.
InvalidParameter.RecordUnsupportWeight	The current record type does not support weight.
InvalidParameter.VpcBindedMainDomain	The VPC has been associated with the same primary domain.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.IllegalTTLValue	The TTL value must be in the range of 1–86400.
LimitExceeded	The quota limit is exceeded.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.
LimitExceeded.TldOutOfRange	The number of private domains using the custom TLD exceeds the total quota.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.

ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

ModifyPrivateZoneVpc

Last updated : 2024-04-07 11:57:43

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to modify the VPC associated with a private domain.

A maximum of 2 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ModifyPrivateZoneVpc.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	Yes	String	Private domain ID
VpcSet.N	No	Array of VpcInfo	List of all VPCs associated with private domain
AccountVpcSet.N	No	Array of AccountVpcInfo	List of authorized accounts' VPCs to associate with the private domain

3. Output Parameters

Parameter Name	Type	Description
Zoneld	String	Private domain ID, such as zone-xxxxxx
VpcSet	Array of VpcInfo	List of VPCs associated with domain
AccountVpcSet	Array of AccountVpcInfoOutput	List of authorized accounts' VPCs associated with the private domain
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Modifying the VPCs associated with a private domain

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyPrivateZoneVpc
<Common request parameters>

{
  "ZoneId": "1",
  "VpcSet": [
    {
      "Region": "ap-guangzhou",
      "UniqVpcId": "vpc-xxxxxx"
    }
  ],
  "AccountVpcSet": [
    {
      "Uin": "123456789",
      "Region": "ap-guangzhou",
      "UniqVpcId": "vpc-xxxxxx",
      "VpcName": "vpcName"
    }
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845",
    "ZoneId": "1",
    "VpcSet": [
      {
        "UniqVpcId": "vpc-xxxxxxx",
        "Region": "ap-guangzhou"
      }
    ],
    "AccountVpcSet": [
      {
        "Uin": "123456789",
        "UniqVpcId": "vpc-xxxxxxx",
        "Region": "ap-guangzhou"
      }
    ]
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
AuthFailure.TokenFailure	Token verification failed.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.BindZoneVpcFailed	Failed to associate the private domain with the VPC.
FailedOperation.DataError	Data exception.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.IllegalVpcInfo	Invalid VPC.
InvalidParameter.VpcBinded	The VPC has been bound to another domain.
InvalidParameter.VpcBindedMainDomain	The VPC has been associated with the same primary domain.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.
LimitExceeded.TldOutOfRange	The number of private domains using the custom TLD exceeds the total quota.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.

ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.RoleUnauthorized	Role not authorized.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

ModifyRecordsStatus

Last updated : 2024-04-07 11:57:43

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to modify the DNS record status.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ModifyRecordsStatus.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.
Zoneld	Yes	String	The private domain ID
RecordIds.N	Yes	Array of Integer	The DNS record IDs.
Status	Yes	String	<code>enabled</code> : Enable; <code>disabled</code> : Disable.

3. Output Parameters

Parameter Name	Type	Description
ZoneId	String	The private domain ID
RecordIds	Array of Integer	The DNS record IDs.
Status	String	<code>enabled</code> : Enabled; <code>disabled</code> : Disabled.
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Modifying the DNS record status

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyRecordsStatus
<Common request parameters>

{
  "ZoneId": "zone-mao3y9jo",
  "RecordIds": [
    1,
    2,
    3
  ],
  "Status": "enabled"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "660006f4-8531-46f0-a2ba-05daf4e7932e",
    "ZoneId": "zone-mao3y9jo",
    "RecordIds": [
```

```
1,  
2,  
3  
],  
"Status": "enabled"  
}  
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation.ModifyRecordFailed	Failed to modify the record.
FailedOperation.UpdateRecordFailed	
InternalServerError	Internal error.
InternalServerError.UndefiendError	Undefined error.

InvalidParameter	Incorrect parameter.
InvalidParameter.RecordNotExist	The record does not exist.
InvalidParameter.ZoneNotExists	The domain does not exist.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.
LimitExceeded.TldOutOfRange	The number of private domains using the custom TLD exceeds the total quota.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.

SubscribePrivateZoneService

Last updated : 2024-04-07 11:57:42

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to activate the Private DNS service.

A maximum of 1 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: SubscribePrivateZoneService.
Version	Yes	String	Common Params . The value used for this API: 2020-10-28.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
ServiceStatus	String	Private DNS service activation status
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if

	the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.
--	--

4. Example

Example1 Activating Private DNS service

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: SubscribePrivateZoneService
<Common request parameters>

{}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845",
    "ServiceStatus": "ENABLED"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceInsufficient.Balance	Insufficient balance.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.

UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribePrivateZone

Last updated : 2021-09-18 16:39:43

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to get the private domain information.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribePrivateZone.
Version	Yes	String	Common parameter. The value used for this API: 2020-10-28.
Region	No	String	Common parameter. This parameter is not required for this API.
Zoneld	Yes	String	Domain name, which must be in the format of standard TLD

3. Output Parameters

Parameter Name	Type	Description
PrivateZone	PrivateZone	Private domain details

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

4. Example

Example1 Getting private domain information

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribePrivateZone
<Common request parameters>

{
  "ZoneId": "zone-123456"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "520fea07-9c1b-4560-1c8axxxx5275",
    "PrivateZone": {
      "ZoneId": "zone-123456",
      "OwnerUin": 1111111111111111,
      "Domain": "a.com",
      "CreatedOn": "2020-05-28 16:28:10",
      "UpdatedOn": "2020-11-18 00:11:59",
      "RecordCount": 10,
      "Remark": "Test domain name",
      "VpcSet": [
        {
          "UniqVpcId": "vpc-q1111115",
          "Region": "ap-guangzhou"
        }
      ],
      "AccountVpcSet": [
        {
          "UniqVpcId": "vpc-q1111115",
          "Region": "ap-guangzhou",
          "Uin": "123456789"
        }
      ]
    }
  }
}
```

```
],
"Status": "ENABLED",
"DnsForwardStatus": "DISABLED",
"Tags": [
{
"TagKey": "tagKey",
"TagValue": "tagValue"
}
]
}
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.

DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DeletePrivateDNSAccount

Last updated : 2021-12-27 11:44:27

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to delete a Private DNS account.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DeletePrivateDNSAccount.
Version	Yes	String	Common parameter. The value used for this API: 2020-10-28.
Region	No	String	Common parameter. This parameter is not required for this API.
Account	Yes	PrivateDNSAccount	Private DNS account

3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

4. Example

Example1 Deleting Private DNS account

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeletePrivateDNSAccount
<Common request parameters>

{
  "Account": {
    "Uin": "123456789"
  }
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)

- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
FailedOperation	Operation failed.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.

UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedOperation.ExistBoundVpc	There are bound VPC resources.

DeletePrivateZone

Last updated : 2021-09-18 16:39:44

1. API Description

Domain name for API request: privatedns.tencentcloudapi.com.

This API is used to delete a private domain and stop DNS.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DeletePrivateZone.
Version	Yes	String	Common parameter. The value used for this API: 2020-10-28.
Region	No	String	Common parameter. This parameter is not required for this API.
ZoneId	No	String	Private domain ID
ZoneIdSet.N	No	Array of String	Array of private domain IDs. <code>ZoneId</code> takes precedence.

3. Output Parameters

--	--	--

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Deleting private domain

This example shows you how to delete a private domain.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeletePrivateZone
<Common request parameters>

{
  "ZoneId": "zone-123456"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845"
  }
}
```

Example2 Batch deleting private domains

This example shows you how to batch delete private domains.

Input Example

```
POST / HTTP/1.1
Host: privatedns.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeletePrivateZone
<Common request parameters>
```

```
{
  "ZoneIdSet": [
    "zone-123456",
    "zone-789abc"
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "5cd964e2-b5e6-8a35-9ce5a1085860c845"
  }
}
```

5. Developer Resources

SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description

AuthFailure	Error with CAM signature/authentication.
DryRunOperation	<code>DryRun</code> Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
FailedOperation	Operation failed.
FailedOperation.DeleteZoneFailed	Failed to delete the domain.
InternalError	Internal error.
InternalError.UndefiendError	Undefined error.
InvalidParameter	Incorrect parameter.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	The operation was denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

Data Types

Last updated : 2024-04-07 11:57:54

AccountVpcInfo

VPC information of a Private DNS account

Used by actions: CreatePrivateZone, ModifyPrivateZoneVpc.

Name	Type	Required	Description
UniqVpcId	String	Yes	VpcId: vpc-xadsafsdasd
Region	String	Yes	VPC region: ap-guangzhou, ap-shanghai Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Uin	String	Yes	VPC account: 123456789 Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
VpcName	String	Yes	VPC name: testname Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

AccountVpcInfoOut

Output parameters of the associated VPC

Used by actions: DescribeAccountVpcList.

Name	Type	Description
VpcId	String	VpcId: vpc-xadsafsdasd
Region	String	Region: ap-guangzhou, ap-shanghai
Uin	String	VPC ID: 123456789
VpcName	String	VPC name: testname

AccountVpcInfoOutput

Output parameters of the associated VPC

Used by actions: DescribePrivateZoneList, ModifyPrivateZoneVpc.

Name	Type	Description
Uin	String	UIN of the VPC account
UniqVpcId	String	VPC ID
Region	String	Region

AuditLog

Operation log

Used by actions: DescribeAuditLog.

Name	Type	Description
Resource	String	Log type
Metric	String	Log table name
TotalCount	Integer	Total number of logs
DataSet	Array of AuditLogInfo	List of logs

AuditLogInfo

Log details

Used by actions: DescribeAuditLog.

Name	Type	Description
Date	Timestamp	Time
OperatorUin	String	Operator UIN
Content	String	Log content

DatePoint

Time statistics

Used by actions: DescribeRequestData.

Name	Type	Description
Date	Timestamp	Time
Value	Integer	Value

Filter

Filter parameter

Used by actions: DescribeAccountVpcList, DescribeAuditLog, DescribePrivateDNSAccountList, DescribePrivateZoneList, DescribePrivateZoneRecordList, DescribeRequestData.

Name	Type	Required	Description
Name	String	Yes	Parameter name
Values	Array of String	Yes	Array of parameter values

FlowUsage

Traffic package usage

Used by actions: DescribeDashboard.

Name	Type	Description
FlowType	String	Traffic package type, Valid values: ZONE (private domain); TRAFFIC (DNS traffic package)
TotalQuantity	Integer	Traffic package quota
AvailableQuantity	Integer	Available quota of traffic package

MetricData

Statistics table

Used by actions: DescribeRequestData.

Name	Type	Description
Resource	String	Resource description
Metric	String	Table name
DataSet	Array of DatePoint	Table data
MetricCount	Integer	The total number of requests within the query scope. Note: This field may return null, indicating that no valid value can be obtained.

PrivateDNSAccount

Private DNS account

Used by actions: CreatePrivateDNSAccount, DescribePrivateDNSAccountList.

Name	Type	Required	Description
Uin	String	Yes	Root account UIN
Account	String	No	Root account name
Nickname	String	No	Account name

PrivateZone

Private domain information

Used by actions: DescribePrivateZoneList.

Name	Type	Description
Zoneld	String	Private domain ID: zone-xxxxxxx
OwnerUin	Integer	Domain name owner UIN
Domain	String	Private domain

CreatedOn	Timestamp	Creation time
UpdatedOn	Timestamp	Modification time
RecordCount	Integer	Number of results
Remark	String	Remarks Note: this field may return null, indicating that no valid values can be obtained.
VpcSet	Array of VpcInfo	List of bound VPCs
Status	String	Private domain status. Valid values: ENABLED (DNS enabled); SUSPEND (DNS paused); FROZEN (locked)
DnsForwardStatus	String	Subdomain recursive DNS status. Valid values: ENABLED, DISABLED
Tags	Array of TagInfo	Set of tag key-value pairs
AccountVpcSet	Array of AccountVpcInfoOutput	List of authorized accounts' VPCs associated with the private domain Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

PrivateZoneRecord

Private domain information

Used by actions: DescribePrivateZoneRecordList.

Name	Type	Description
RecordId	String	Record ID
ZoneId	String	Private domain ID: zone-xxxxxxx
SubDomain	String	Subdomain
RecordType	String	Record type. Valid values: "A", "AAAA", "CNAME", "MX", "TXT", "PTR"
RecordValue	String	Record value
TTL	Integer	Record cache time. The smaller the value, the faster the record will take effect. Value range: 1-86400s. Default value: 600

MX	Integer	MX priority, which is required when the record type is MX. Valid values: 5, 10, 15, 20, 30, 40, 50 Note: this field may return null, indicating that no valid values can be obtained.
Status	String	Record status: ENABLED
Weight	Integer	Record weight. Value range: 1–100 Note: this field may return null, indicating that no valid values can be obtained.
CreatedOn	Timestamp	Record creation time
UpdatedOn	Timestamp	Record update time
Extra	String	Additional information Note: this field may return null, indicating that no valid values can be obtained.

TagInfo

Tag

Used by actions: CreatePrivateZone, DescribePrivateZoneList.

Name	Type	Required	Description
TagKey	String	Yes	Tag key
TagValue	String	Yes	Tag value

TldQuota

TLD quota

Used by actions: DescribeQuotaUsage.

Name	Type	Description
Total	Integer	Total quota
Used	Integer	Used quota
Stock	Integer	Available quota
Quota	Integer	User's quota

VpcInfo

VPC information

Used by actions: CreatePrivateZone, DescribePrivateZoneList, ModifyPrivateZoneVpc.

Name	Type	Required	Description
UniqVpcId	String	Yes	VpcId: vpc-xadsafsdasd
Region	String	Yes	VPC region: ap-guangzhou, ap-shanghai

Error Codes

Last updated : 2024-04-07 11:57:54

Feature Description

If there is an Error field in the response, it means that the API call failed. For example:

```
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please check your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

Code in Error indicates the error code, and Message indicates the specific information of the error.

Error Code List

Common Error Codes

Error Code	Description
ActionOffline	This API has been deprecated.
AuthFailure.InvalidAuthorization	Authorization in the request header is invalid.
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type).
AuthFailure.MFAFailure	MFA failed.
AuthFailure.SecretIdNotFound	Key does not exist. Check if the key has been deleted or disabled in the console, and if not, check if the key is correctly entered. Note that whitespaces should not exist before or after the key.
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes. Please

	ensure your current local time matches the standard time.
AuthFailure.SignatureFailure	Invalid signature. Signature calculation error. Please ensure you've followed the signature calculation process described in the Signature API documentation.
AuthFailure.TokenFailure	Token error.
AuthFailure.UnauthorizedOperation	The request is not authorized. For more information, see the CAM documentation.
DryRunOperation	DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidAction	The API does not exist.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Invalid parameter value.
InvalidRequest	The multipart format of the request body is incorrect.
IpInBlacklist	Your IP is in uin IP blacklist.
IpNotInWhitelist	Your IP is not in uin IP whitelist.
LimitExceeded	Quota limit exceeded.
MissingParameter	A parameter is missing.
NoSuchProduct	The product does not exist.
NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
RequestLimitExceeded.GlobalRegionUinLimitExceeded	Uin exceeds the frequency limit.
RequestLimitExceeded.IPLimitExceeded	The number of ip requests exceeds the frequency limit.
RequestLimitExceeded.UinLimitExceeded	The number of uin requests exceeds the frequency

	limit.
RequestSizeLimitExceeded	The request size exceeds the upper limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
ResponseSizeLimitExceeded	The response size exceeds the upper limit.
ServiceUnavailable	Service is unavailable now.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTP(S) request protocol error; only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

Service Error Codes

Error Code	Description
AuthFailure	Error with CAM signature/authentication.
FailedOperation.BindZoneVpcFailed	Failed to associate the private domain with the VPC.
FailedOperation.CreateRecordFailed	Failed to create the record.
FailedOperation.CreateZoneFailed	Failed to create the private domain.
FailedOperation.DataError	Data exception.
FailedOperation.DeleteLastBindVpcRecordFailed	The private domain is currently associated with a VPC. Please disassociate the VPC first before clearing its records.
FailedOperation.DeleteRecordFailed	
FailedOperation.ModifyRecordFailed	Failed to modify the record.

FailedOperation.ModifyZoneFailed	Failed to modify the private domain.
FailedOperation.UpdateRecordFailed	
InternalError.UndefiendError	Undefined error.
InvalidParameter.AccountExist	A bound account already exists.
InvalidParameter.IllegalCidr	Invalid CIDR.
InvalidParameter.IllegalDomain	Incorrect domain name.
InvalidParameter.IllegalDomainTld	Incorrect top-level domain name.
InvalidParameter.IllegalPTRRecord	Invalid PTR record.
InvalidParameter.IllegalRecord	Invalid record.
InvalidParameter.IllegalRecordValue	Invalid record value.
InvalidParameter.IllegalVpcInfo	Invalid VPC.
InvalidParameter.InvalidMX	The MX value must be a multiple of 5 between 5 and 50.
InvalidParameter.MXNotSupported	
InvalidParameter.RecordAAAACountExceed	The number of round-robin DNS AAAA records exceeds 50.
InvalidParameter.RecordACountExceed	The number of round-robin DNS A records exceeds 50.
InvalidParameter.RecordCNAMECountExceed	The number of round-robin DNS CNAME records exceeds 50.
InvalidParameter.RecordConflict	Records conflict.
InvalidParameter.RecordCountExceed	The number of records exceeds the limit.
InvalidParameter.RecordExist	The record already exists.
InvalidParameter.RecordLevelExceed	The number of record levels exceeds the limit.
InvalidParameter.RecordMXCountExceed	The number of round-robin DNS MX records exceeds 50.
InvalidParameter.RecordNotExist	The record does not exist.
InvalidParameter.RecordRollimitCountExceed	The number of round-robin DNS records exceeds the limit.
InvalidParameter.RecordTXTCountExceed	The number of round-robin DNS TXT records exceeds 10.

InvalidParameter.RecordUnsupportWeight	The current record type does not support weight.
InvalidParameter.VpcBinded	The VPC has been bound to another domain.
InvalidParameter.VpcBindedMainDomain	The VPC has been associated with the same primary domain.
InvalidParameter.VpcPtrZoneBindExceed	The number of PTR records associated with the VPC has reached the limit.
InvalidParameter.ZoneNotExists	The domain does not exist.
InvalidParameterValue.IllegalTTLValue	The TTL value must be in the range of 1–86400.
InvalidParameterValue.ReservedDomain	This is a reserved domain name and cannot be created.
LimitExceeded.TldOutOfLimit	Exceeded the custom TLD quota.
LimitExceeded.TldOutOfRange	The number of private domains using the custom TLD exceeds the total quota.
OperationDenied	The operation was denied.
ResourceInsufficient.Balance	Insufficient balance.
ResourceNotFound.ServiceNotSubscribed	The Private DNS service is not activated.
ResourceUnavailable.TldPackageExpired	The TLD value-added package expired.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation.RoleUnAuthorized	Role not authorized.
UnauthorizedOperation.UnauthorizedAccount	Unverified user.
UnsupportedOperation.AccountNotBound	Account not bound.
UnsupportedOperation.FrequencyLimit	
UnsupportedOperation.NotSupportDnsForward	Subdomain recursive DNS is not supported.