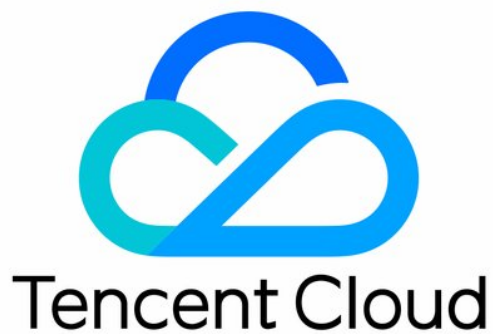


Secrets Manager

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

Data Security APIs

PutSecretValue

RestoreSecret

ListSecretVersionIds

GetServiceStatus

CreateSSHKeyPairSecret

UpdateRotationStatus

CreateSecret

DeleteSecret

DeleteSecretVersion

DescribeSecret

DisableSecret

EnableSecret

GetRegions

GetSecretValue

UpdateDescription

UpdateSecret

GetSSHKeyPairValue

CreateProductSecret

DescribeAsyncRequestInfo

DescribeRotationDetail

RotateProductSecret

DescribeRotationHistory

ListSecrets

Other APIs

DescribeSupportedProducts

Data Types

Error Codes

API Documentation

History

Last updated : 2023-09-18 17:15:26

Release 6

Release time: 2023-09-18 17:12:52

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateSecret](#)
 - New input parameters: SecretType, AdditionalConfig
 - **Modified input parameters:** VersionId
- [DescribeSecret](#)
 - New output parameters: AdditionalConfig

Modified data structures:

- [SecretMetadata](#)
 - New members: RotationFrequency, ResourceId, RotationBeginTime

Release 5

Release time: 2022-09-26 16:37:16

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateSSHKeyPairSecret](#)
 - New input parameters: SSHKeyName

Release 4

Release time: 2022-01-25 16:37:17

Release updates:

Improvement to existing documentation.

Modified APIs:

- [DescribeSecret](#)
 - New output parameters:TargetUin
- [GetServiceStatus](#)
 - New output parameters:AccessKeyEscrowEnabled

Modified data structures:

- [SecretMetadata](#)
 - New members:TargetUin

Release 3

Release time: 2021-09-13 16:14:42

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateSSHKeyPairSecret](#)
- [GetSSHKeyPairValue](#)

Modified APIs:

- [DeleteSecret](#)
 - New input parameters:CleanSSHKey
- [DescribeSecret](#)
 - New output parameters:ResourceName, ProjectID, AssociatedInstanceIDs
- [ListSecrets](#)
 - New input parameters:ProductName

Modified data structures:

- [SecretMetadata](#)
 - New members:ResourceName, ProjectID, AssociatedInstanceIDs

Release 2

Release time: 2021-08-02 11:34:03

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateProductSecret](#)
- [DescribeAsyncRequestInfo](#)
- [DescribeRotationDetail](#)
- [DescribeRotationHistory](#)
- [DescribeSupportedProducts](#)
- [RotateProductSecret](#)
- [UpdateRotationStatus](#)

Modified APIs:

- [DescribeSecret](#)
 - New output parameters: SecretType, ProductName, ResourceID, RotationStatus, RotationFrequency
- [ListSecrets](#)
 - New input parameters: SecretType

New data structures:

- [ProductPrivilegeUnit](#)

Modified data structures:

- [SecretMetadata](#)
 - New members: RotationStatus, NextRotationTime, SecretType, ProductName

Release 1

Release time: 2020-10-30 16:12:43

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateSecret](#)
- [DeleteSecret](#)
- [DeleteSecretVersion](#)
- [DescribeSecret](#)
- [DisableSecret](#)
- [EnableSecret](#)
- [GetRegions](#)
- [GetSecretValue](#)
- [GetServiceStatus](#)
- [ListSecretVersionIds](#)
- [ListSecrets](#)
- [PutSecretValue](#)
- [RestoreSecret](#)
- [UpdateDescription](#)
- [UpdateSecret](#)

New data structures:

- [SecretMetadata](#)
- [Tag](#)
- [TagFilter](#)
- [VersionInfo](#)

Introduction

Last updated : 2022-09-26 16:40:04

Secrets Manager (SSM) is a management service that enables you to create, retrieve, update, and delete secrets through their lifecycle. You can use SSM together with resource-level role authorization and comprehensive audit control to centrally manage sensitive secrets easily. Users and applications can call SSM APIs to avoid risks of sensitive configuration and sensitive secret hard-coding, and avoid sensitive information leakage as well as business risks caused by out-of-control permissions.

API Category

Last updated : 2023-09-18 17:15:25

Other APIs

API Name	Feature	Frequency Limit (maximum requests per second)
DescribeSupportedProducts	Queries the list of supported Tencent Cloud services	20

Data Security APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateProductSecret	Creates Tencent Cloud service credential	20
CreateSSHKeyPairSecret	Creates an SSH key secret	20
CreateSecret	Creates a Secret	100
DeleteSecret	Deletes a Secret	50
DeleteSecretVersion	Deletes a Secret version	50
DescribeAsyncRequestInfo	Queries the execution result of async task	20
DescribeRotationDetail	Queries credential rotation details	20
DescribeRotationHistory	Queries the historical versions of rotated credential	20
DescribeSecret	Obtains the detailed information of a Secret	40
DisableSecret	Disables a Secret	50
EnableSecret	Enables a Secret	50

GetRegions	Obtains the list of regions displayed on Console	20
GetSSHKeyPairValue	Obtains the plaintext value of the SSH key secret	20
GetSecretValue	Obtains the plaintext of a Secret	300
GetServiceStatus	Obtains the service status of a user	50
ListSecretVersionIds	Obtains the list of versions of a Secret	40
ListSecrets	Obtains the list of Secret information	30
PutSecretValue	Adds a new Secret version	100
RestoreSecret	Restores a <code>PendingDelete</code> Secret	50
RotateProductSecret	Rotates Tencent Cloud service credential	20
UpdateDescription	Updates the description of a Secret	20
UpdateRotationStatus	Sets Tencent Cloud service credential rotation policy	20
UpdateSecret	Updates the content of a Secret	50

Making API Requests

Request Structure

Last updated : 2023-09-18 17:15:25

1. Service Address

The API supports access from either a nearby region (at `ssm.tencentcloudapi.com`) or a specified region (at `ssm.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 "`ssm.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>ssm.tencentcloudapi.com</code>
South China (Guangzhou)	<code>ssm.ap-guangzhou.tencentcloudapi.com</code>
East China (Shanghai)	<code>ssm.ap-shanghai.tencentcloudapi.com</code>
North China (Beijing)	<code>ssm.ap-beijing.tencentcloudapi.com</code>
Southwest China (Chengdu)	<code>ssm.ap-chengdu.tencentcloudapi.com</code>
Southwest China (Chongqing)	<code>ssm.ap-chongqing.tencentcloudapi.com</code>
Hong Kong, Macao, Taiwan (Hong Kong, China)	<code>ssm.ap-hongkong.tencentcloudapi.com</code>
Southeast Asia (Singapore)	<code>ssm.ap-singapore.tencentcloudapi.com</code>
Southeast Asia (Bangkok)	<code>ssm.ap-bangkok.tencentcloudapi.com</code>

South Asia (Mumbai)	ssm.ap-mumbai.tencentcloudapi.com
Northeast Asia (Seoul)	ssm.ap-seoul.tencentcloudapi.com
Northeast Asia (Tokyo)	ssm.ap-tokyo.tencentcloudapi.com
U.S. East Coast (Virginia)	ssm.na-ashburn.tencentcloudapi.com
U.S. West Coast (Silicon Valley)	ssm.na-siliconvalley.tencentcloudapi.com
North America (Toronto)	ssm.na-toronto.tencentcloudapi.com
Europe (Frankfurt)	ssm.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 : 2023-09-18 17:15:26

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 common 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 API 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/Region, SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as this value; - Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is the UNIX timestamp in 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 : 2020-10-30 16:16:49

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

```
2815843035062ffffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3ad
```

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
2815843035062ffffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

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 OPENSSSL_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 OPENSSSL_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 : 2021-10-14 17:01:46

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
```

```
// $param["Signature"] = $signature;
// $url = "https://cvm.tencentcloudapi.com/?".http_build_query($param);
// 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>(p
aram, 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 : 2020-10-30 16:16:49

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.

Data Security APIs

PutSecretValue

Last updated : 2023-09-18 17:15:27

1. API Description

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

This API adds the new version of the credential content under the specified credential. One credential can have up to 10 versions. New versions can be added to credentials only in `Enabled` or `Disabled` status.

This API is only applicable to user-defined credentials but not Tencent Cloud service credentials.

A maximum of 100 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: PutSecretValue.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of a Secret where the version is added to.
VersionId	Yes	String	ID of the new Secret version. It can be up to 64 bytes, contain letters, digits, hyphens (-), and underscores (_), and must begin with a letter or digit.
SecretBinary	No	String	Base64-encoded binary credential information.

			Either <code>SecretBinary</code> or <code>SecretString</code> must be set.
<code>SecretString</code>	No	String	Secret information plaintext in text format, base64 encoding is not needed. Either <code>SecretBinary</code> or <code>SecretString</code> must be set.

3. Output Parameters

Parameter Name	Type	Description
<code>SecretName</code>	String	Name of the Secret.
<code>VersionId</code>	String	Version ID that is newly added.
<code>RequestId</code>	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Adding new credential version

Input Example

```
https://ssm.tencentcloudapi.com/?Action=PutSecretValue
&SecretName=test
&VersionId=v2.0
&SecretString=test v2
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "6764f1f5-8229-4033-a831-46180aee30cf",
    "SecretName": "test",
    "VersionId": "v2.0"
  }
}
```

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	Operation failed.
FailedOperation.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
LimitExceeded	The quota limit is exceeded.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.

UnauthorizedOperation	The operation is unauthorized.
-----------------------	--------------------------------

RestoreSecret

Last updated : 2023-09-18 17:15:27

1. API Description

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

This API is used to restore a `PendingDelete` Secret, canceling its scheduled deletion. The restored Secret will be in `Disabled` status. You can call the `EnableSecret` API to enable this Secret again.

A maximum of 50 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: RestoreSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the Secret to be restored.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the Secret.

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

4. Example

Example1 Restoring a PendingDelete Secret

Input Example

```
https://ssm.tencentcloudapi.com/?Action=RestoreSecret
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "bf199317-0d31-4dba-a5e7-217dc37df2d4",
    "SecretName": "test"
  }
}
```

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	Operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

ListSecretVersionIds

Last updated : 2023-09-18 17:15:27

1. API Description

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

This API is used to obtain list of versions of a Secret.

A maximum of 40 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: ListSecretVersionIds.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the Secret.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the Secret.

Versions	Array of VersionInfo	<code>VersionId</code> list. Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining the list of versions of a Secret

Input Example

```
https://ssm.tencentcloudapi.com/?Action=ListSecretVersionIds
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "56fe436b-16ca-402e-a9bb-83c14e9cc9e8",
    "SecretName": "test",
    "Versions": [
      {
        "VersionId": "v2.0",
        "CreateTime": 1574161372
      },
      {
        "VersionId": "v1.0",
        "CreateTime": 1574161748
      }
    ]
  }
}
```

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	Operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

GetServiceStatus

Last updated : 2023-09-18 17:15:27

1. API Description

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

This API is used to obtain the SecretsManager service status of a user.

A maximum of 50 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: GetServiceStatus.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
ServiceEnabled	Boolean	<code>true</code> : The service is activated; <code>false</code> : The service is not activated.
InvalidType	Integer	Invalid service type. <code>0</code> : not purchased; <code>1</code> : normal; <code>2</code> : suspended due to arrears; <code>3</code> : resource released

AccessKeyEscrowEnabled	Boolean	<code>true</code> : Allow SSM to manage Tencent Cloud API key secrets. <code>false</code> : Forbid SSM to manage Tencent Cloud API key secrets.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining service status

Input Example

```
https://ssm.tencentcloudapi.com/?Action=GetServiceStatus  
&<Common request parameters>
```

Output Example

```
{  
  "Response": {  
    "RequestId": "1a327ad8-5fef-41d5-b1a1-73d58af83d66",  
    "ServiceEnabled": true,  
    "InvalidType": 1,  
    "AccessKeyEscrowEnabled": true  
  }  
}
```

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	An internal error occurred.
UnauthorizedOperation	The operation is unauthorized.

CreateSSHKeyPairSecret

Last updated : 2023-09-18 17:15:30

1. API Description

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

This API is used to create a secret that hosts SSH keys.

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: CreateSSHKeyPairSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Secret name, which must be unique in the same region. It can contain 128 bytes of letters, digits, hyphens and underscores and must begin with a letter or digit.
ProjectId	Yes	Integer	ID of the project to which the created SSH key belongs.
Description	No	String	Description, such as what it is used for. It contains up to 2,048 bytes.
KmsKeyId	No	String	Specifies a KMS CMK to encrypt the secret. If this parameter is left empty, the CMK created by Secrets Manager by default will be used for encryption.

			You can also specify a custom KMS CMK created in the same region for encryption.
Tags.N	No	Array of Tag	List of tags.
SSHKeyName	No	String	Name of the SSH key pair, which only contains digits, letters and underscores and must start with a digit or letter. The maximum length is 25 characters.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the created secret.
SSHKeyID	String	ID of the created SSH key.
SSHKeyName	String	Name of the created SSH key.
TagCode	Integer	Tag return code. <code>0</code> : success; <code>1</code> : internal error; <code>2</code> : business processing error. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TagMsg	String	Tag return message. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating an SSH key secret

This example shows you how to create an SSH key secret.

Input Example

```
POST / HTTP/1.1
Host: ssm.tencentcloudapi.comp
```

```
Content-Type: application/json
X-TC-Action: CreateSSHPKeyPairSecret
<Common request parameters>

{
  "ProjectId": 0,
  "Tags": [
    {
      "TagKey": "xx",
      "TagValue": "xx"
    }
  ],
  "KmsKeyId": "xx",
  "Description": "xx",
  "SecretName": "xx",
  "SSHKeyName": "xx"
}
```

Output Example

```
{
  "Response": {
    "SSHKeyID": "xx",
    "TagMsg": "xx",
    "TagCode": 1,
    "RequestId": "xx",
    "SecretName": "xx",
    "SSHKeyName": "xx"
  }
}
```

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	Operation failed.
FailedOperation.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

--	--

UpdateRotationStatus

Last updated : 2023-09-18 17:15:26

1. API Description

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

This API is used to set a Tencent Cloud service credential rotation policy, including the following parameters:

Specifies whether to enable rotation

Rotation frequency

Rotation start time

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: UpdateRotationStatus.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Tencent Cloud service credential name.
EnableRotation	Yes	Boolean	Specifies whether to enable rotation. <code>true</code> : enables rotation. <code>false</code> : disables rotation.
Frequency	No	Integer	Rotation frequency in days. Value range: 30–365.

RotationBeginTime	No	String	User-defined rotation start time in the format of 2006-01-02 15:04:05. When <code>EnableRotation</code> is <code>true</code> and <code>RotationBeginTime</code> is left empty, the current time will be entered by default.
-------------------	----	--------	--

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 Setting Tencent Cloud service credential rotation policy

Input Example

```
https://ssm.tencentcloudapi.com/?Action=UpdateRotationStatus
&SecretName=test
&EnableRotation=true
&Frequency=35
&RotationBeginTime=2006-01-02 15:04:05
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4"
  }
}
```

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.AccessKmsError	KMS operation failed.
FailedOperation.RotationForbidden	The rotation is prohibited.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.

MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

CreateSecret

Last updated : 2023-09-18 17:15:29

1. API Description

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

This API is used to create a KMS-encrypted Secret. You can create and store up to 1,000 Secrets in each region.

A maximum of 100 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: CreateSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Secret name, which must be unique in the same region. It can contain 128 bytes ([a-z], [A-Z], [0-9], [-_]). It must begin with a letter or digit. Note that it cannot be modified once created.
VersionId	No	String	Secret version. It can contain up to 64 bytes ([a-z], [A-Z], [0-9], [-_]). It must begin with a letter or digit. <code>SecretName</code> and <code>VersionId</code> are used to query the Secret information. If it is left empty, the initial Secret version number is used by default.
Description	No	String	Description information, such as the detailed use cases. It can be up to 2048 bytes.

KmsKeyId	No	String	KMS CMK used for Secret encryption. If this parameter is left empty, SecretsManager will create a CMK by default. You can also specify a KMS CMK that is created in the same region.
SecretType	No	Integer	Secret type. It defaults to <code>custom</code> .
SecretBinary	No	String	Base64-encoded plaintext of a binary Secret. Either <code>SecretBinary</code> or <code>SecretString</code> must be set. A maximum of 4096 bytes is supported.
SecretString	No	String	Plaintext of a Secret, in text format. Base64 encoding is not required. Either <code>SecretBinary</code> or <code>SecretString</code> must be set. A maximum of 4096 bytes is supported.
AdditionalConfig	No	String	Additional configuration of the Secret in JSON format
Tags.N	No	Array of Tag	List of tags.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the new Secret.
VersionId	String	ID of the new Secret version.
TagCode	Integer	Return code of tag operation. <code>0</code> : success; <code>1</code> : internal error; <code>2</code> : business processing error Note: This field may return <code>null</code> , indicating that no valid value was found.
TagMsg	String	Return message of tag operation. Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating a secret

This example shows you how to create a custom secret.

Input Example

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

{
  "VersionId": "v1.0",
  "SecretString": "test",
  "Description": "test create secret",
  "SecretName": "test_secret"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "9debf284-eff9-465a-97b7-163a8b1cccaf",
    "SecretName": "test_secret",
    "VersionId": "v1.0",
    "TagCode": 1,
    "TagMsg": "success"
  }
}
```

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.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

DeleteSecret

Last updated : 2023-09-18 17:15:29

1. API Description

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

This API is used to delete a Secret. You can set whether to delete the Secret immediately or on schedule using the `RecoveryWindowInDays` parameter. For a Secret to be deleted on schedule, its status will be `PendingDelete` before the scheduled deletion time. You can use `RestoreSecret` to restore a deleted Secret during this time. A deleted Secret will not be restorable after the scheduled deletion time. A Secret can only be deleted after being disabled using `DisableSecret`.

A maximum of 50 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: DeleteSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the Secret to be deleted.
RecoveryWindowInDays	No	Integer	Scheduled deletion time (in days), indicating the number of retention days for the secret. Value range: 0-30. If it is

			<code>0</code> , the secret is deleted immediately. For an SSH key secret, this field can only be <code>0</code> .
CleanSSHKey	No	Boolean	Specifies whether to delete the SSH key from both the secret and the SSH key list in the CVM console. This field is only valid for SSH key secrets. Valid values: <code>True</code> : deletes SSH key from both the secret and SSH key list in the CVM console. Note that the deletion will fail if the SSH key is already bound to a CVM instance. <code>False</code> : only deletes the SSH key information in the secret.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of deleted Secret.
DeleteTime	Integer	Secret deletion time, formatted as a Unix timestamp.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Deleting credential information

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DeleteSecret
&SecretName=test
&RecoveryWindowInDays=1
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4",
    "SecretName": "test",
```



```
"DeleteTime": 1574247268
}
```

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	Operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.

UnauthorizedOperation	The operation is unauthorized.
-----------------------	--------------------------------

DeleteSecretVersion

Last updated : 2023-09-18 17:15:29

1. API Description

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

This API is used to directly delete a single credential version under the specified credential. The deletion takes effect immediately, and the credential version in all status can be deleted.

This API is only applicable to user-defined credentials but not Tencent Cloud service credentials.

A maximum of 50 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: DeleteSecretVersion.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the Secret.
VersionId	Yes	String	ID of the Secret version to be deleted.

3. Output Parameters

--	--	--

Parameter Name	Type	Description
SecretName	String	Name of the Secret.
VersionId	String	Version ID of the Secret.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Deleting specified credential version

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DeleteSecretVersion
&SecretName=test
&VersionId=v1.0
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "c701cf6d-4199-4822-8630-d48ee953f485",
    "SecretName": "test",
    "VersionId": "v1.0"
  }
}
```

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	Operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
UnauthorizedOperation	The operation is unauthorized.

DescribeSecret

Last updated : 2023-09-18 17:15:28

1. API Description

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

This API is used to obtain the detailed attribute information of a Secret.

A maximum of 40 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: DescribeSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of a Secret whose detailed information is to be obtained.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the Secret.
Description	String	Description of the Secret.
KmsKeyId	String	ID of the KMS CMK used for encryption.

CreateUin	Integer	Creator UIN.
Status	String	Credential status: Enabled, Disabled, PendingDelete, Creating, Failed.
DeleteTime	Integer	Deletion time, formatted as a Unix timestamp. For a Secret that is not in <code>PendingDelete</code> status, this value is 0.
CreateTime	Integer	Creation time.
SecretType	Integer	0 : user-defined secret; 1 : database credential; 2 : SSH key secret. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ProductName	String	Tencent Cloud service name. Note: this field may return null, indicating that no valid values can be obtained.
ResourceID	String	Tencent Cloud service instance ID. Note: this field may return null, indicating that no valid values can be obtained.
RotationStatus	Boolean	Whether to enable rotation. <code>True</code> : enable rotation; <code>False</code> : disable rotation. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RotationFrequency	Integer	Rotation frequency in days by default. Note: this field may return null, indicating that no valid values can be obtained.
ResourceName	String	Secret name. This field is only valid when the <code>SecretType</code> is set to 2 (SSH key secret). Note: this field may return null, indicating that no valid values can be obtained.
ProjectID	Integer	Project ID. This field is only valid when the <code>SecretType</code> is set to 2 (SSH key secret). Note: this field may return null, indicating that no valid values can be obtained.
AssociatedInstanceIDs	Array of String	ID of the CVM instance associated with the SSH key. ID. This field is only valid when the <code>SecretType</code> is set to 2 (SSH key secret). Note: this field may return null, indicating that no valid values can be obtained.

TargetUin	Integer	UIN of the Tencent Cloud API key. This field is valid when the secret type is Tencent Cloud API key secret. Note: this field may return null, indicating that no valid values can be obtained.
AdditionalConfig	String	Additional configuration of the Secret Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining the secret details

This example shows you how to obtain the secret details.

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DescribeSecret
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "Status": "Enabled",
    "Description": "hello",
    "CreateUin": 1,
    "ResourceID": "inst-1",
    "ProductName": "redis",
    "RotationStatus": true,
    "KmsKeyId": "abc-ddd",
    "RequestId": "abc-hhm",
    "SecretType": 0,
    "SecretName": "secret-a",
    "RotationFrequency": 1,
    "DeleteTime": 1,
    "CreateTime": 1,
    "ResourceName": "db-user1",
    "ProjectID": 1,
    "AssociatedInstanceIDs": [
```



```
"inst-1"  
],  
"TargetUin": 12345,  
"AdditionalConfig": "{}"  
}  
}
```

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	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
OperationDenied.RoleNotExist	The role does not exist.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.

ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

DisableSecret

Last updated : 2023-09-18 17:15:28

1. API Description

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

This API is used to disable a Secret and will change its status to `Disabled`. The plaintext of a disabled Secret cannot be obtained through APIs.

A maximum of 50 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: DisableSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the Secret to be disabled.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the disabled Secret.

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

4. Example

Example1 Disabling specified credential

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DisableSecret
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "SecretName": "test",
    "RequestId": "1b580852-1e38-11e9-b129-5cb9019b4b00"
  }
}
```

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	Operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
UnauthorizedOperation	The operation is unauthorized.

EnableSecret

Last updated : 2023-09-18 17:15:28

1. API Description

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

This API is used to enable a Secret and will change its status to `Enabled` . You can call the `GetSecretValue` API to obtain the plaintext of this Secret. Secrets in `PendingDelete` status can only be enabled after being restored by using `RestoreSecret` .

A maximum of 50 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: EnableSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the Secret to be enabled.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the enabled Secret.

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

4. Example

Example1 Enabling credential

Input Example

```
https://ssm.tencentcloudapi.com/?Action=EnableSecret
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "SecretName": "test",
    "RequestId": "1b580852-1e38-11e9-b129-5cb9019b4b00"
  }
}
```

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	Operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
UnauthorizedOperation	The operation is unauthorized.

GetRegions

Last updated : 2023-09-18 17:15:28

1. API Description

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

This API is used to obtain the list of regions displayed on Console.

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: GetRegions.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

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

4. Example

Example1 Obtaining the list of regions displayed on Console

Input Example

```
https://ssm.tencentcloudapi.com/?Action=GetRegions  
&<Common request parameters>
```

Output Example

```
{  
  "Response": {  
    "RequestId": "d1f030f9-35ea-4727-9867-f7b0e214feea",  
    "Regions": [  
      "ap-guangzhou",  
      "ap-hongkong"  
    ]  
  }  
}
```

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	An internal error occurred.
UnauthorizedOperation	The operation is unauthorized.

GetSecretValue

Last updated : 2023-09-18 17:15:28

1. API Description

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

For user-defined credentials, this API is used to get the plaintext information of a credential by specifying the credential name and version.

For Tencent Cloud service credentials such as MySQL credentials, this API is used to get the plaintext information of a previously rotated credential by specifying the credential name and historical version number. If you want to get the plaintext of the credential version currently in use, you need to specify the version number as `SSM_Current`.

A maximum of 300 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: GetSecretValue.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of a Secret.
VersionId	Yes	String	Specifies the version number of the corresponding credential. For Tencent Cloud service credentials such as MySQL credentials, this API is used to get the plaintext information of a previously rotated credential by specifying the credential name and historical version number. If you want to get the plaintext of the credential version

currently in use, you need to specify the version number as `SSM_Current` .

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the Secret.
VersionId	String	ID of the Secret version.
SecretBinary	String	When creating a credential (CreateSecret), if you specify binary data, this field will be the Base64-encoded returned result. The application needs to Base64-decode the result to get the original data. Either <code>SecretBinary</code> or <code>SecretString</code> cannot be empty.
SecretString	String	When creating a credential (CreateSecret), if you specify general text data, this field will be the returned result. Either <code>SecretBinary</code> or <code>SecretString</code> cannot be empty.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining the plaintext of a Secret

This example shows you how to obtain the plaintext of a Secret.

Input Example

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

{
  "VersionId": "v1.0",
  "SecretName": "test_secret"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "b8e6b67f-3ca7-4341-b4fa-a372bdf4e11c",
    "SecretName": "test_secret",
    "VersionId": "v1.0",
    "SecretBinary": "",
    "SecretString": "test"
  }
}
```

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	Operation failed.
FailedOperation.AccessKmsError	KMS operation failed.

InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
OperationDenied.RoleNotExist	The role does not exist.
ResourceNotFound	The resource does not exist.
ResourceNotFound.SecretNotExist	The secret does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
UnauthorizedOperation	The operation is unauthorized.

UpdateDescription

Last updated : 2023-09-18 17:15:26

1. API Description

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

This API is used to update the description of a Secret. This API can only update Secrets in `Enabled` or `Disabled` 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: UpdateDescription.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of a Secret whose description is to be updated.
Description	Yes	String	New description information, which can be up to 2048 bytes.

3. Output Parameters

Parameter Name	Type	Description

SecretName	String	Name of the Secret.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Updating the description of a Secret

Input Example

```
https://ssm.tencentcloudapi.com/?Action=UpdateDescription
&SecretName=test
&Description=new desc
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "dfa4908b-a586-4d44-8f76-3fad156c1be2",
    "SecretName": "test"
  }
}
```

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	Operation failed.
InternalError	An internal error occurred.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

UpdateSecret

Last updated : 2023-09-18 17:15:26

1. API Description

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

This API is used to update the credential content of the specified credential name and version number. Calling this API will encrypt the content of the new credential and overwrite the old content. Only credentials in `Enabled` or `Disabled` status can be updated.

This API is only applicable to user-defined credentials but not Tencent Cloud service credentials.

A maximum of 50 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: UpdateSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of a Secret whose content is to be updated.
VersionId	Yes	String	ID of the Secret version whose content is to be updated.
SecretBinary	No	String	This field should be used and Base64-encoded if the content of the new credential is binary. Either <code>SecretBinary</code> or <code>SecretString</code> cannot be empty.

SecretString	No	String	This field should be used without being Base64-encoded if the content of the new credential is text. Either <code>SecretBinary</code> or <code>SecretString</code> cannot be empty.
--------------	----	--------	---

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the Secret.
VersionId	String	Version ID of the Secret.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Updating credential content

Input Example

```
https://ssm.tencentcloudapi.com/?Action=UpdateSecret
&SecretName=test
&VersionId=v1.0
&SecretString=new value
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "e6993612-6922-4f2d-bb36-37348f36eba5",
    "SecretName": "test",
    "VersionId": "v2.0"
  }
}
```

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	Operation failed.
FailedOperation.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameterValue	The parameter value is invalid.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
ResourceNotFound	The resource does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

GetSSHKeyPairValue

Last updated : 2023-09-18 17:15:28

1. API Description

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

This API is used to obtain the plaintext value of the SSH key secret.

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: GetSSHKeyPairValue.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	No	String	Secret name. This field is only valid for SSH key secrets.
SSHKeyId	No	String	ID of the key pair, which is the unique identifier of the key pair in the CVM.

3. Output Parameters

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

SSHKeyID	String	ID of the SSH key.
PublicKey	String	Plaintext value of the Base64-encoded public key.
PrivateKey	String	Plaintext value of the Base64-encoded private key.
ProjectID	Integer	ID of the project to which the SSH key belongs.
SSHKeyDescription	String	Description of the SSH key. The description can be modified in the CVM console.
SSHKeyName	String	Name of the SSH key. The name can be modified in the CVM console.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining the plaintext value of the SSH key secret

This example shows you how to obtain the plaintext value of the SSH key secret.

Input Example

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

{
  "SecretName": "xx"
}
```

Output Example

```
{
  "Response": {
    "SSHKeyID": "xx",
    "ProjectID": 0,
    "PrivateKey": "xx",
    "PublicKey": "xx",
    "RequestId": "xx",
    "SSHKeyName": "xx",
```

```
"SSHKeyDescription": "xx"
}
```

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	Operation failed.
FailedOperation.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.

InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

CreateProductSecret

Last updated : 2023-09-18 17:15:30

1. API Description

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

This API is used to create a Tencent Cloud service credential.

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: CreateProductSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Credential name, which must be unique in the same region. It can contain 128 bytes of letters, digits, hyphens, and underscores and must begin with a letter or digit.
UserNamePrefix	Yes	String	Prefix of the user account name, which is specified by you and can contain up to 8 characters. Supported character sets include: Digits: [0, 9]. Lowercase letters: [a, z].

			Uppercase letters: [A, Z]. Special symbols: underscore. The prefix must begin with a letter.
ProductName	Yes	String	Name of the Tencent Cloud service bound to the credential, such as <code>Mysql</code> . The <code>DescribeSupportedProducts</code> API can be used to get the names of the supported Tencent Cloud services.
InstanceId	Yes	String	Tencent Cloud service instance ID.
Domains.N	Yes	Array of String	Domain name of the account in the form of IP. You can enter <code>%</code> .
PrivilegesList.N	Yes	Array of ProductPrivilegeUnit	List of permissions that need to be granted when the credential is bound to a Tencent Cloud service.
Description	No	String	Description, which is used to describe the purpose in detail and can contain up to 2,048 bytes.
KmsKeyId	No	String	Specifies the KMS CMK that encrypts the credential. If this parameter is left empty, the CMK created by Secrets Manager by default will be used for encryption. You can also specify a custom KMS CMK created in the same region for encryption.
Tags.N	No	Array of Tag	List of tags.
RotationBeginTime	No	String	User-Defined rotation start time in the format of 2006-01-02 15:04:05. When <code>EnableRotation</code> is <code>True</code> , this parameter is required.
EnableRotation	No	Boolean	Specifies whether to enable rotation True - enable False - do not enable If this parameter is not specified, <code>False</code> will be used by default.
RotationFrequency	No	Integer	Rotation frequency in days. Default value: 1 day.

3. Output Parameters

Parameter Name	Type	Description
SecretName	String	Name of the created credential.
TagCode	Integer	Tag operation return code. 0: success; 1: internal error; 2: business processing error. Note: this field may return null, indicating that no valid values can be obtained. Note: this field may return null, indicating that no valid values can be obtained.
TagMsg	String	Tag operation return message. Note: this field may return null, indicating that no valid values can be obtained.
FlowID	Integer	ID of the created Tencent Cloud service credential async task.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating Tencent Cloud service credential

Input Example

```
https://ssm.tencentcloudapi.com/?Action=CreateProductSecret
&SecretName=testName
&UserNamePrefix=testPrefix
&ProductName=Mysql
&InstanceID=cdb-vosgis
&Description=test
&KmsKeyId=2609a8fd-4584-4f89-98be-8c7ae1b81ef4
&RotationBeginTime=2006-01-02 15:04:05
&EnableRotation=true
&RotationFrequency=35
&Domains.0=%
&Tags.0.TagKey=tagKey
&Tags.0.TagValue=tagVal
&PrivilegesList.0.PrivilegeName=object
&PrivilegesList.0.Privileges.0=read
&PrivilegesList.0.Database=testdb
&PrivilegesList.0.TableName=testtable
```

```
&PrivilegesList.0.ColumnName=testColumn
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4",
    "SecretName": "testName",
    "TagCode": 0,
    "TagMsg": "success",
    "FlowID": 123
  }
}
```

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	Operation failed.
FailedOperation.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.

UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribeAsyncRequestInfo

Last updated : 2023-09-18 17:15:29

1. API Description

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

This API is used to query the execution result of an async task.

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: DescribeAsyncRequestInfo.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
FlowID	Yes	Integer	Async task ID.

3. Output Parameters

Parameter Name	Type	Description
TaskStatus	Integer	0: processing, 1: processing succeeded, 2: processing failed

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

4. Example

Example1 Querying the execution result of async task

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DescribeAsyncRequestInfo
&FlowID=123
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "Description": "task is processing",
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4",
    "TaskStatus": 0
  }
}
```

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.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.

ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribeRotationDetail

Last updated : 2023-09-18 17:15:29

1. API Description

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

This API is used to query the details of a credential rotation policy.

This API is only applicable to Tencent Cloud service credentials.

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: DescribeRotationDetail.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Specifies the name of the credential for which to get the credential rotation details.

3. Output Parameters

Parameter Name	Type	Description

EnableRotation	Boolean	Whether to enable rotation. <code>true</code> : enabled; <code>false</code> : disabled.
Frequency	Integer	Rotation frequency in days. Default value: 1 day. Note: this field may return null, indicating that no valid values can be obtained.
LatestRotateTime	String	Last rotation time, which is an explicitly visible time string in the format of 2006-01-02 15:04:05. Note: this field may return null, indicating that no valid values can be obtained.
NextRotateBeginTime	String	Next rotation start time, which is an explicitly visible time string in the format of 2006-01-02 15:04:05. Note: this field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying credential rotation details

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DescribeRotationDetail
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4",
    "EnableRotation": true,
    "Frequency": 35,
    "LatestRotateTime": "2021-01-02 15:04:05",
    "NextRotateBeginTime": "2021-02-02 15:04:05"
  }
}
```

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.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.

LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

RotateProductSecret

Last updated : 2023-09-18 17:15:27

1. API Description

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

This API is used to rotate secrets for Tencent Cloud services or Tencent Cloud API key pairs.

Note that only the secrets with the "Enabled" status can be rotated.

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: RotateProductSecret.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Name of the credential to be rotated.

3. Output Parameters

Parameter Name	Type	Description

FlowID	Integer	Asynchronous rotation task ID. This field is valid when <code>SecretType</code> is <code>1</code> (i.e., the secret type is Tencent Cloud services secret, such as MySQL/TDSQL credentials).
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Rotating Tencent Cloud service credential

Input Example

```
https://ssm.tencentcloudapi.com/?Action=RotateProductSecret
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4",
    "FlowID": 0
  }
}
```

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.AccessKmsError	KMS operation failed.
FailedOperation.RotationForbidden	The rotation is prohibited.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AccessKeyOverLimit	Reached the upper limit of access keys.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
OperationDenied.UinNotMatch	The secret is not owned by the current account.
RequestLimitExceeded	The number of requests exceeds the frequency limit.

ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

DescribeRotationHistory

Last updated : 2023-09-18 17:15:29

1. API Description

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

This API is used to query the historical versions of a rotated credential.

This API is only applicable to Tencent Cloud service credentials.

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: DescribeRotationHistory.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
SecretName	Yes	String	Specifies the name of the credential for which to get the credential rotation records.

3. Output Parameters

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

VersionIDs	Array of String	List of version numbers.
TotalCount	Integer	Number of version numbers. The maximum number of version numbers that can be shown to users is 10.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying the historical versions of rotated credential

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DescribeRotationHistory
&SecretName=test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "VersionIDs": [
      "testId"
    ],
    "TotalCount": 1,
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4"
  }
}
```

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.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
RequestLimitExceeded	The number of requests exceeds the frequency limit.

ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

ListSecrets

Last updated : 2023-09-18 17:15:27

1. API Description

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

This API is used to obtain the detailed information list of all Secrets. You can specify the filter fields and sorting order as needed.

A maximum of 30 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: ListSecrets.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.
Offset	No	Integer	Starting position of the list, starting at 0. If not specified, 0 is used by default.
Limit	No	Integer	Maximum number of returned Secrets in a query. If not set or set to 0, 20 is used by default.
OrderType	No	Integer	Sorting order according to the creation time. If not set or set to 0, descending order is used; if set to 1, ascending order is used.
State	No	Integer	Filter based on credential status. The default value is 0, indicating to query all.

			1: query the list of credentials in <code>Enabled</code> status. 2: query the list of credentials in <code>Disabled</code> status. 3: query the list of credentials in <code>PendingDelete</code> status. 4: query the list of credentials in <code>PendingCreate</code> status. 5: query the list of credentials in <code>CreateFailed</code> status. The <code>PendingCreate</code> and <code>CreateFailed</code> status only take effect when <code>SecretType</code> is Tencent Cloud service credential
SearchSecretName	No	String	Filter according to Secret names. If left empty, this filter is not applied.
TagFilters.N	No	Array of TagFilter	Tag filter.
SecretType	No	Integer	0 (default): user-defined secret. 1 : Tencent Cloud services secret. 2 : SSH key secret. 3 : Tencent Cloud API key secret.
ProductName	No	String	This parameter is valid only when SecretType is <code>1</code> . An empty value indicates querying all types of Tencent Cloud service secrets. <code>Mysql</code> : queries MySQL database credentials. <code>Tdsq1-mysql</code> : queries TDSQL MySQL database credentials.

3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of filtered Secrets according to <code>State</code> and <code>SearchSecretName</code> .
SecretMetadatas	Array of SecretMetadata	List of Secret information.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining the list of secret details

Input Example

```
https://ssm.tencentcloudapi.com/?Action=ListSecrets
&Limit=2
&SecretType=0
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "SecretMetadatas": [
      {
        "Status": "xx",
        "Description": "xx",
        "AssociatedInstanceIDs": [
          "xx"
        ],
        "CreateUin": 1,
        "ProjectID": 0,
        "ProductName": "xx",
        "RotationStatus": 0,
        "SecretType": 0,
        "KmsKeyId": "xx",
        "KmsKeyType": "xx",
        "SecretName": "xx",
        "ResourceName": "xx",
        "DeleteTime": 1,
        "CreateTime": 1,
        "NextRotationTime": 1,
        "TargetUin": 0
      },
      {
        "Status": "xx",
        "Description": "xx",
        "AssociatedInstanceIDs": [
          "xx"
        ],
        "CreateUin": 1,
        "SecretName": "xx",
        "KmsKeyType": "xx",
        "ProductName": "xx",
        "SecretType": 0,

```

```
"KmsKeyId": "xx",
"RotationStatus": 0,
"ProjectID": 0,
"ResourceName": "xx",
"DeleteTime": 1,
"CreateTime": 1,
"NextRotationTime": 1,
"TargetUin": 0
},
"RequestId": "xx"
}
```

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	An internal error occurred.

InvalidParameterValue	The parameter value is invalid.
ResourceUnavailable.NotPurchased	The service is not purchased.
UnauthorizedOperation	The operation is unauthorized.

Other APIs

DescribeSupportedProducts

Last updated : 2023-09-18 17:15:26

1. API Description

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

This API is used to query the list of supported Tencent Cloud services.

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: DescribeSupportedProducts.
Version	Yes	String	Common Params . The value used for this API: 2019-09-23.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
Products	Array of	List of supported services.

	String	
TotalCount	Integer	Number of supported services
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying the list of supported Tencent Cloud services

Input Example

```
https://ssm.tencentcloudapi.com/?Action=DescribeSupportedProducts
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "Products": [
      "Mysql"
    ],
    "RequestId": "2609a8fd-4584-4f89-98be-8c7ae1b81ef4"
  }
}
```

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.AccessKmsError	KMS operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	The parameter value is invalid.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInUse.SecretExists	The Secret name already exists.

ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.

Data Types

Last updated : 2023-09-18 17:15:30

ProductPrivilegeUnit

Permission granted when the credential is associated with the service

Used by actions: CreateProductSecret.

Name	Type	Required	Description
PrivilegeName	String	Yes	Permission name. Valid values: - GlobalPrivileges - DatabasePrivileges - TablePrivileges - ColumnPrivileges When the permission is <code>DatabasePrivileges</code> , the database name must be specified by the <code>Database</code> parameter; When the permission is <code>TablePrivileges</code> , the database name and the table name in the database must be specified by the <code>Database</code> and <code>TableName</code> parameters; When the permission is <code>ColumnPrivileges</code> , the database name, table name in the database, and column name in the table must be specified by the <code>Database</code> , <code>TableName</code> , and <code>ColumnName</code> parameters.
Privileges	Array of String	Yes	Permission list. For the <code>Mysql</code> service, optional permission values are: 1. Valid values of <code>GlobalPrivileges</code> : "SELECT","INSERT","UPDATE","DELETE","CREATE", "PROCESS", "DROP","REFERENCES","INDEX","ALTER","SHOW DATABASES","CREATE TEMPORARY TABLES","LOCK TABLES","EXECUTE","CREATE VIEW","SHOW VIEW","CREATE ROUTINE","ALTER ROUTINE","EVENT","TRIGGER". Note: if this parameter is not passed in, it means to clear the permission. 2. Valid values of <code>DatabasePrivileges</code> :

			"SELECT","INSERT","UPDATE","DELETE","CREATE","DROP","REFERENCES","INDEX","ALTER","CREATE TEMPORARY TABLES","LOCK TABLES","EXECUTE","CREATE VIEW","SHOW VIEW","CREATE ROUTINE","ALTER ROUTINE","EVENT","TRIGGER". Note: if this parameter is not passed in, it means to clear the permission. 3. Valid values of <code>TablePrivileges</code> : "SELECT","INSERT","UPDATE","DELETE","CREATE","DROP","REFERENCES","INDEX","ALTER","CREATE VIEW","SHOW VIEW","TRIGGER". Note: if this parameter is not passed in, it means to clear the permission. 4. Valid values of <code>ColumnPrivileges</code> : "SELECT","INSERT","UPDATE","REFERENCES". Note: if this parameter is not passed in, it means to clear the permission.
Database	String	No	This value takes effect only when <code>PrivilegeName</code> is <code>DatabasePrivileges</code> .
TableName	String	No	This value takes effect only when <code>PrivilegeName</code> is <code>TablePrivileges</code> , and the <code>Database</code> parameter is required in this case to explicitly indicate the database instance.
ColumnName	String	No	This value takes effect only when <code>PrivilegeName</code> is <code>ColumnPrivileges</code> , and the following parameters are required in this case: Database: explicitly indicate the database instance. TableName: explicitly indicate the table

SecretMetadata

Basic information of the Secret.

Used by actions: ListSecrets.

Name	Type	Description
SecretName	String	Credential name
Description	String	Credential description

KmsKeyId	String	KMS <code>KeyId</code> used to encrypt the credential
CreateUin	Integer	Creator UIN
Status	String	Credential status: Enabled, Disabled, PendingDelete, Creating, Failed.
DeleteTime	Integer	Credential deletion date, which takes effect for credentials in <code>PendingDelete</code> status and is in UNIX timestamp format
CreateTime	Integer	Credential creation time in UNIX timestamp format
KmsKeyType	String	Type of the KMS CMK used to encrypt the credential. <code>DEFAULT</code> represents the default key created by Secrets Manager, and <code>CUSTOMER</code> represents the user-specified key
RotationStatus	Integer	1: enable rotation; 0: disable rotation Note: this field may return null, indicating that no valid values can be obtained.
NextRotationTime	Integer	Start time of the next rotation in UNIX timestamp format Note: this field may return null, indicating that no valid values can be obtained.
SecretType	Integer	0 : user-defined secret. 1 : Tencent Cloud services secret. 2 : SSH key secret. 3 : Tencent Cloud API key secret. Note: this field may return <code>null</code>, indicating that no valid values can be obtained.
ProductName	String	Tencent Cloud service name, which takes effect only when <code>SecretType</code> is 1 (Tencent Cloud service credential) Note: this field may return null, indicating that no valid values can be obtained.
ResourceName	String	Secret name. This field is only valid when the <code>SecretType</code> is set to 2 (SSH key secret). Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ProjectID	Integer	Project ID. This field is only valid when the <code>SecretType</code> is set to 2 (SSH key secret). Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
AssociatedInstanceIDs	Array of	ID of the CVM instance associated with the SSH key. ID. This field is only valid when the <code>SecretType</code> is set to 2 (SSH key secret).

	String	Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TargetUin	Integer	UIN of the Tencent Cloud API key. This field is valid when the secret type is Tencent Cloud API key secret. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RotationFrequency	Integer	Rotation frequency in days. It takes effect when the rotation feature is enabled. Note: This field may return null, indicating that no valid values can be obtained.
ResourceID	String	ID of Tencent Cloud resource corresponding with the Secret. Note: This field may return null, indicating that no valid values can be obtained.
RotationBeginTime	String	The rotation start time. Note: This field may return null, indicating that no valid values can be obtained.

Tag

Tag key and tag value.

Used by actions: CreateProductSecret, CreateSSHKeyPairSecret, CreateSecret.

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

TagFilter

Tag filter.

Used by actions: ListSecrets.

Name	Type	Required	Description
TagKey	String	Yes	Tag key

TagValue	Array of String	No	Tag value
----------	-----------------	----	-----------

VersionInfo

List of version ID information.

Used by actions: ListSecretVersionIds.

Name	Type	Description
VersionId	String	Version ID.
CreateTime	Integer	Creation time, formatted as a Unix timestamp.

Error Codes

Last updated : 2023-09-18 17:15:30

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	<code>Authorization</code> 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.AccessKmsError	KMS operation failed.
FailedOperation.RotationForbidden	The rotation is prohibited.
InvalidParameterValue.TagKeysDuplicated	The tag keys are duplicated.
InvalidParameterValue.TagsNotExisted	The tag key or tag value does not exist.
OperationDenied	Operation denied.
OperationDenied.AccessKeyOverLimit	Reached the upper limit of access keys.
OperationDenied.AutoRotatedResource	It is not allowed to manually update credentials with automatic rotation enabled.
OperationDenied.RoleNotExist	The role does not exist.

OperationDenied.UinNotMatch	The secret is not owned by the current account.
ResourceInUse.SecretExists	The Secret name already exists.
ResourceInUse.VersionIdExists	The Version ID already exists.
ResourceNotFound.SecretNotExist	The secret does not exist.
ResourceUnavailable.NotPurchased	The service is not purchased.
ResourceUnavailable.ResourceDisabled	The Secret is disabled.
ResourceUnavailable.ResourcePendingDeleted	The Secret is in <code>PendingDelete</code> status.
ResourceUnavailable.ResourceUninitialized	The credential has not been initialized.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation.AccessKmsError	Failed to access KMS.