云 HDFS

API 文档

产品文档

腾讯云

文档目录

API 文档

History

最近更新时间：2023-06-26 16:48:07

Release 5

Release time: 2023-06-26 16:37:05

Release updates:

Improvement to existing documentation.

New data structures:

- Summary

Modified data structures:

- LifeCycleRule
  - New members:Summary, LastSummaryTime

Release 4

Release time: 2023-03-28 15:01:49

Release updates:

Improvement to existing documentation.

Modified APIs:

- CreateAccessRules
  - New output parameters:AccessRules
- DescribeFileSystem
  - New output parameters:DeepArchiveCapacityUsed, IntelligentCapacityUsed

Release 3

Release time: 2022-06-09 10:44:50

Release updates:

Improvement to existing documentation.

Modified APIs:

- CreateFileSystem
  - New input parameters:Tags

Release 2

Release time: 2022-01-06 11:28:14

Release updates:

Improvement to existing documentation.

Modified APIs:

- CreateFileSystem
  - New input parameters:EnableRanger, RangerServiceAddresses
- DescribeFileSystem
  - New output parameters:StandardCapacityUsed, DegradeCapacityUsed
- ModifyFileSystem
  - New input parameters:EnableRanger, RangerServiceAddresses

Modified data structures:

- FileSystem
  - New members:EnableRanger, RangerServiceAddresses

Release 1

Release time: 2021-09-16 16:51:20

Release updates:

Improvement to existing documentation.

New APIs:

- AssociateAccessGroups
- CreateAccessGroup
- CreateAccessRules

- CreateFileSystem
- CreateLifeCycleRules
- CreateMountPoint
- CreateRestoreTasks
- DeleteAccessGroup
- DeleteAccessRules
- DeleteFileSystem
- DeleteLifeCycleRules
- DeleteMountPoint
- DescribeAccessGroup
- DescribeAccessGroups
- DescribeAccessRules
- DescribeFileSystem
- DescribeFileSystems
- DescribeLifeCycleRules
- DescribeMountPoint
- DescribeMountPoints
- DescribeResourceTags
- DescribeRestoreTasks
- DisassociateAccessGroups
- ModifyAccessGroup
- ModifyAccessRules
- ModifyFileSystem
- ModifyLifeCycleRules
- ModifyMountPoint
- ModifyResourceTags

New data structures:

- AccessGroup
- AccessRule
- FileSystem
- LifeCycleRule
- MountPoint
- RestoreTask
- Tag
- Transition

Introduction

最近更新时间：2023-03-28 15:05:50

Cloud HDFS (CHDFS) provides the standard Hadoop Distributed File System (HDFS) access protocol, so you can use a distributed file system with high availability, high reliability, multidimensional security, and hierarchical namespaces without modifying your existing code. You can create and mount a CHDFS instance in the cloud in just a few minutes for big data storage. As your business needs change, you can easily expand or reduce the storage capacity in real time. CHDFS offers an unlimited storage space to satisfy your business needs for big data storage and analysis. In addition, it enables you to separate compute and storage, maximize the flexibility of computing resources, and implement permanent data storage, which help reduce the costs of your big data analysis resources.

API Category

最近更新时间：2023-06-26 16:48:07

File system APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateFileSystem	Creates file system	20
DeleteFileSystem	Deletes file system	20
DescribeFileSystem	Views file system details	20
DescribeFileSystems	Views file system list	20
ModifyFileSystem	Modifies file system attributes	20

Lifecycle rule APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateLifeCycleRules	Batch creates lifecycle rules	20
DeleteLifeCycleRules	Batch deletes lifecycle rules	20
DescribeLifeCycleRules	Views lifecycle rule list	20
ModifyLifeCycleRules	Batch modifies the attributes of lifecycle rules	20

Other APIs

API Name	Feature	Frequency Limit (maximum requests per second)
DescribeResourceTags	Views resource tag list	20
ModifyResourceTags	Modifies resource tag list	20

Mount point APIs

API Name	Feature	Frequency Limit (maximum requests per second)
AssociateAccessGroups	Binds permission group list	20
CreateMountPoint	Creates mount point	20
DeleteMountPoint	Deletes mount point	20
DescribeMountPoint	Views mount point details	20
DescribeMountPoints	Views mount point list	20
DisassociateAccessGroups	Unbinds permission group list	20
ModifyMountPoint	Modifies mount point attributes	20

Permission rule APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateAccessRules	Batch creates permission rules	20
DeleteAccessRules	Batch deletes permission rules	20
DescribeAccessRules	Views permission rule list	20
ModifyAccessRules	Batch modifies the attributes of permission rules	20

Permission group APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateAccessGroup	Creates permission group	20

DeleteAccessGroup	Deletes permission group	20
DescribeAccessGroup	Views permission group details	20
DescribeAccessGroups	Views permission group list	20
ModifyAccessGroup	Modifies permission group attributes	20

Restoration task APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateRestoreTasks	Batch creates restoration tasks	20
DescribeRestoreTasks	Views restoration task list	20

Making API Requests
Request Structure

最近更新时间：2023-03-28 15:05:51

1. Service Address

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

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

最近更新时间：2023-03-28 15:05:51

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 `Action` in the input parameters in r documentation. For example, the API for querying the CVM instance list i `DescribeInstances` .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to which the data y work with belongs. For values supported for an API, see the description c parameter `Region` in the input parameters in related API documentati parameter is not required for some APIs (which will be indicated in relate 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 for example, 1529223702. Note: If the difference between the UNIX times server time is greater than 5 minutes, a signature expiration error may oc
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the c parameter `Version` in the API documentation. For example, the versi 2017-03-12.
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_requ 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 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.tencen refers to the CVM product and the value would be cvm; - SignedHeaders: The headers that contains the authentication informatic 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 tempor can obtain the temporary key and token by calling a CAM API. No token i 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/20
18-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993
f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
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=582c400e06b5924a6f2b5d7d672d79c15b1316
2d9279b0855cfba6789a8edb4c
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=582c400e06b5924a6f2b5d7d672d79c15b1316
2d9279b0855cfba6789a8edb4c
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 `Action` in the input parameters in related API documentation. For example, the API for querying the CVM instance list is `DescribeInstances`.
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 `Region` 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 `Timestamp` 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 `Version` 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=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02&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=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d18
1d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

Signature v3

最近更新时间：2022-04-06 15:24:50

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 `POST` .
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 st “” for POST requests, and is the string after the question mark (?) for GET requests. Fo example: Limit=10&Offset=0。 Note: `CanonicalQueryString` must be URL-encoded, referencing RFC3986, the UTF8 character set. We recommend using the programming language library. All speci characters must be encoded and capitalized.
CanonicalHeaders	Header information for signature calculation, including at least two headers of `host` `content-type` . Custom headers can be added to participate in the signature proce improve the uniqueness and security of the request. Concatenation rules: 1. Both the key and value of the header should be converted to lowercase with the lead and trailing spaces removed, so they are concatenated in the format of key:value\n format; 2. 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 `content-type:application/json; charset=utf-8\nhost:cvm.tencentcloudapi.com\n` . Note: `content-type` 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 sever 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 heac in CanonicalHeaders). `Content-type` and `host` are required headers. Concatenation rules: 1. Both the key and value of the header should be converted to lowercase; 2. 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 `content-type;host`

Field Name	Explanation
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as `{"Limit": 1, "Filter` `[{"Values": ["unnamed"], "Name": "instance-name"}]}` in this exampl The pseudocode for calculation is Lowercase(HexEncode(Hash.SHA256(RequestPayload))) by SHA256 hashing the pay of the HTTP request, performing hexadecimal encoding, and finally converting the enco string to lowercase letters. For GET requests, `RequestPayload` is always an empt string. The calculation result in this example is `99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b49`

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 `TC3-HMAC-SHA256` .
RequestTimestamp	Request timestamp, i.e., the value of the common parameter `X-TC-Timestamp` ir request header, which is the UNIX timestamp of the current time in seconds, such as `1551113065` in this example.

Field Name	Explanation
CredentialScope	Scope of the credential in the format of `Date/service/tc3_request`, 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`;** `service` is the product name, which should match the domain name of the product called. The calculation result in this example is `2019-02-25/cvm/tc3_request`.
HashedCanonicalRequest	Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is Lowercase(HexEncode(Hash.SHA256(CanonicalRequ The calculation result in this example is `2815843035062fffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3ad`

Note：

- i. 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.
- ii. 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
2815843035062fffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

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., `Gu5t9xGARNpq86cd98joQYCN3*******` .
Date	The Date field information in `Credential` , such as `2019-02-25` in this example.
Service	Value in the Service field in `Credential` , such as `cvm` 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 `TC3-HMAC-SHA256` .
SecretId	The SecretId in the key pair, i.e., `AKIDz8krbsJ5yKBZQpn74WFkmLPx3*******` .
CredentialScope	Credential scope (see above). The calculation result in this example is `2019-02-25/cvm/tc3_request` .
SignedHeaders	Header information for signature calculation (see above), such as `content-type;host` in this example.
Signature	Signature value. The calculation result in this example is `c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff` .

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*******/20
19-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437
e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
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&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*******&Signature=EliP9YW3pW28FpsEdkXt%2F%2BWcGeI%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" + "hos
t:" + 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" + canoni
calQueryString + "\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, string
ToSign)).toLowerCase();
System.out.println(signature);
// ************* Step 4: Concatenate the Authorization *************
String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + creden
tialScope + ", "
+ "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")).hexd
igest()
```

```
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.sha2
56).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 = "";
$canonicalHeaders = "content-type:application/json; charset=utf-8\n"."host:".$hos
t."\n";
$signedHeaders = "content-type;host";
$payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-na
me"}]}';
$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 proj
ect, 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\\u5
47d\\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" + "hos
t:" + 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++)
{
snprintf(buf, sizeof(buf), "%02x", hash[i]);
NewString = NewString + buf;
}
return NewString;
}
string HmacSha256(const string &key, const string &input)
{
unsigned char hash[32];
HMAC_CTX *h;
#if OPENSSL_VERSION_NUMBER < 0x10100000L
HMAC_CTX hmac;
HMAC_CTX_init(&hmac);
h = &hmac;
#else
h = HMAC_CTX_new();
#endif
HMAC_Init_ex(h, &key[0], key.length(), EVP_sha256(), NULL);
```

```
HMAC_Update(h, ( unsigned char* )&input[0], input.length());
unsigned int len = 32;
HMAC_Final(h, hash, &len);
#if OPENSSL_VERSION_NUMBER < 0x10100000L
HMAC_CTX_cleanup(h);
#else
HMAC_CTX_free(h);
#endif
std::stringstream ss;
ss << std::setfill('0');
for (int i = 0; i < len; i++)
{
ss << hash[i];
}
return (ss.str());
}
string HexEncode(const string &input)
{
static const char* const lut = "0123456789abcdef";
size_t len = input.length();
string output;
output.reserve(2 * len);
for (size_t i = 0; i < len; ++i)
{
const unsigned char c = input[i];
output.push_back(lut[c >> 4]);
output.push_back(lut[c & 15]);
}
return output;
}
int main()
{
string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*******";
string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*******";
string service = "cvm";
string host = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
string version = "2017-03-12";
int64_t timestamp = 1551113065;
string date = get_data(timestamp);
// ************* Step 1: Concatenate the CanonicalRequest string *************
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string canonicalHeaders = "content-type:application/json; charset=utf-8\nhost:" +
host + "\n";
```

```
string signedHeaders = "content-type;host";
string payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name
\": \"instance-name\"}]}";
string hashedRequestPayload = sha256Hex(payload);
string canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canoni
calQueryString + "\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" + credentialScop
e + "\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

最近更新时间：2022-04-06 15:24:20

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.getAlg
orithm());
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. TreeM
ap 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 UnsupportedEnc
odingException {
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 lette
rs, only the value is URL encoded here.
url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHAR
SET)).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 enable
s automatic sorting
// A random number should be used when actually calling, for example: params.put
("Nonce", new Random().nextInt(java.lang.Integer.MAX_VALUE));
params.put("Nonce", 11886); // Common parameter
// The current time of the system should be used when actually calling, for examp
le: params.put("Timestamp", System.currentTimeMillis() / 1000);
params.put("Timestamp", 1465185768); // Common parameter
params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*******"); // Common paramet
er
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*******";
$param["Nonce"] = 11886;//rand();
$param["Timestamp"] = 1465185768;//time();
$param["Region"] = "ap-guangzhou";
$param["SecretId"] = $secretId;
$param["Version"] = "2017-03-12";
$param["Action"] = "DescribeInstances";
$param["InstanceIds.0"] = "ins-09dx96dg";
$param["Limit"] = 20;
$param["Offset"] = 0;
ksort($param);
$signStr = "GETcvm.tencentcloudapi.com/?";
foreach ( $param 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, sig
n))
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> requestPa
rams, 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

最近更新时间：2022-04-06 15:24:31

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

Lifecycle rule APIs
ModifyLifeCycleRules

最近更新时间：2023-03-28 15:05:55

1. API Description

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

This API is used to batch modify the attributes of lifecycle rules, such as name, path, transition list, and status. You must specify the lifecycle rule IDs.

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: ModifyLifeCycleRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
LifeCycleRules.N	Yes	Array of LifeCycleRule	Multiple lifecycle rules (up to 10)

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 Batch modifying the attributes of lifecycle rules

This example shows how to batch modify the attributes of lifecycle rules.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=ModifyLifeCycleRules
&LifeCycleRules.0.LifeCycleRuleId=1
&LifeCycleRules.0.LifeCycleRuleName=test1
&LifeCycleRules.0.Status=1
&LifeCycleRules.1.LifeCycleRuleId=2
&LifeCycleRules.1.Path=/test2
&LifeCycleRules.1.Transitions.0.Days=7
&LifeCycleRules.1.Transitions.0.Type=1
&LifeCycleRules.1.Transitions.1.Days=7
&LifeCycleRules.1.Transitions.1.Type=2
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "baaf73f9-0c42-441b-afdb-b9da71a50f47"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
ResourceInUse	The resource is in use.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	Unauthorized operation.

CreateLifeCycleRules

最近更新时间：2023-03-28 15:05:56

1. API Description

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

This API is used to batch create lifecycle rules. You don't need to enter the lifecycle rule IDs and creation 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: CreateLifeCycleRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID
LifeCycleRules.N	Yes	Array of LifeCycleRule	Multiple lifecycle rules (up to 10)

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 Batch creating lifecycle rules

This example shows you how to batch create lifecycle rules.

Input Example

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

{
"FileSystemId": "f4mhaqkciq0",
"LifeCycleRules": [
{
"Status": 1,
"Path": "/test2",
"LifeCycleRuleName": "test2",
"Transitions": [
{
"Type": 2,
"Days": 7
},
{
"Type": 1,
"Days": 7
}
]
},
{
"Status": 1,
"Path": "/test1",
"LifeCycleRuleName": "test1",
"Transitions": [
{
"Type": 1,
```

```
"Days": 7
}
]
}
]
}
```

Output Example

```
{
"Response": {
"RequestId": "5d6d3ef8-db1d-40de-afa1-d340302458bb"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description

FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceInUse	The resource is in use.
ResourceNotFound	The resource does not exist.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

DeleteLifeCycleRules

最近更新时间：2023-03-28 15:05:56

1. API Description

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

This API is used to batch delete lifecycle rules.

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: DeleteLifeCycleRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
LifeCycleRuleIds.N	Yes	Array of Integer	Multiple lifecycle rule IDs (up to 10)

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 Batch deleting lifecycle rules

This example shows how to batch delete lifecycle rules.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DeleteLifeCycleRules
&LifeCycleRuleIds.0=1
&LifeCycleRuleIds.1=2
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "b629358c-ed40-4747-9060-3fcd34a8f32f"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	Unauthorized operation.

DescribeLifeCycleRules

最近更新时间：2023-03-28 15:05:56

1. API Description

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

This API is used to view the list of lifecycle rules by file system ID.

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: DescribeLifeCycleRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID

3. Output Parameters

Parameter Name	Type	Description
LifeCycleRules	Array of	List of lifecycle rules

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

4. Example

Example1 Viewing the list of lifecycle rules

This example shows you how to view the list of lifecycle rules.

Input Example

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

{
"FileSystemId": "f4mnvilzmdd"
}
```

Output Example

```
{
"Response": {
"LifeCycleRules": [
{
"LifeCycleRuleId": 1,
"LifeCycleRuleName": "test1",
"Path": "/test1",
"Transitions": [
{
"Days": 7,
"Type": 1
}
],
"Status": 1,
"CreateTime": "2019-07-30T16:24:38+08:00"
},
{
"LifeCycleRuleId": 2,
"LifeCycleRuleName": "test2",
```

```
"Path": "/test2",
"Transitions": [
{
"Days": 7,
"Type": 1
},
{
"Days": 7,
"Type": 2
}
],
"Status": 1,
"CreateTime": "2019-07-30T16:24:38+08:00"
}
],
"RequestId": "19d240f4-156d-4a3c-856c-216d64a6bb4a"
}
}
```


5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
MissingParameter	Missing parameter.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

File system APIs
DeleteFileSystem

最近更新时间：2023-03-28 15:05:57

1. API Description

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

This API is used to delete a file system. Non-empty file systems cannot be deleted.

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: DeleteFileSystem.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID

3. Output Parameters

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

		locating a problem.

4. Example

Example1 Deleting file system

This example shows how to delete a file system.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DeleteFileSystem
&FileSystemId=f4mhaqkciq0
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "a66caf7a-0f2b-48d8-bfb6-1ff9e0713d75"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.FileSystemNotEmpty	The file system is not empty.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
MissingParameter	Missing parameter.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

DescribeFileSystems

最近更新时间：2023-03-28 15:05:56

1. API Description

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

This API is used to view the list of file systems.

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: DescribeFileSystems.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
FileSystems	Array of FileSystem	List of file systems

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

4. Example

Example1 Viewing the list of file systems

This example shows you how to view the list of file systems.

Input Example

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

Output Example

```
{
"Response": {
"FileSystems": [
{
"AppId": 1251006373,
"FileSystemName": "test",
"Description": "",
"Region": "ap-guangzhou",
"FileSystemId": "f4mnvilzmdd",
"CreateTime": "2019-07-30T17:03:20+08:00",
"BlockSize": 4194304,
"CapacityQuota": 1073741824,
"SuperUsers": [
"hadoop"
],
"PosixAcl": true,
"Status": 2,
"EnableRanger": false,
"RangerServiceAddresses": [
"127.0.0.1:8080"
]
}
],
"RequestId": "a6d1c90a-a86a-45e2-b031-0de50f1ffc35"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

ModifyFileSystem

最近更新时间：2023-03-28 15:05:56

1. API Description

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

This API is used to modify the attributes of a successfully created file system.

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: ModifyFileSystem.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID
FileSystemName	No	String	File system name
Description	No	String	File system description
CapacityQuota	No	Integer	File system capacity (in bytes), which can range from 1 GB to 1 PB and must be an integer multiple of 1 GB Note: the file system capacity after change cannot be smaller than the currently used capacity

SuperUsers.N	No	Array of String	List of superuser names, which can be an empty array
PosixAcl	No	Boolean	Whether to verify POSIX ACL
EnableRanger	No	Boolean	Whether to enable verification of Ranger service addresses
RangerServiceAddresses.N	No	Array of String	List of Ranger service addresses, which can be an empty array

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 Modifying file system attributes

This example shows how to modify the attributes of a file system.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=ModifyFileSystem
&FileSystemId=f4mhaqkciq0
&FileSystemName=test
&Description=test
&CapacityQuota=1073741824
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "61046a25-2eda-4495-b9b6-eab6edf41d79"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.QuotaLessThanCurrentUsed	The file system capacity after change is smaller than the currently used capacity.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidCapacityQuota	Incorrect parameter value: CapacityQuota.
InvalidParameterValue.InvalidDescription	Incorrect parameter value: Description.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
InvalidParameterValue.InvalidFileSystemName	Incorrect parameter value: FileSystemName.

MissingParameter	Missing parameter.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

DescribeFileSystem

最近更新时间：2023-03-28 15:05:57

1. API Description

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

This API is used to view the details of a file system.

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: DescribeFileSystem.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID

3. Output Parameters

Parameter Name	Type	Description
FileSystem	FileSystem	File system

CapacityUsed	Integer	Used capacity of the file system, in bytes Note: this field may return `null` , indicating that no valid value was found.
ArchiveCapacityUsed	Integer	Used ARCHIVE capacity of COS, in bytes Note: this field may return `null` , indicating that no valid values can be obtained.
StandardCapacityUsed	Integer	Used STANDARD capacity of COS, in bytes Note: this field may return `null` , indicating that no valid values can be obtained.
DegradeCapacityUsed	Integer	Used STANDARD_IA capacity of COS, in bytes Note: this field may return `null` , indicating that no valid value was found.
DeepArchiveCapacityUsed	Integer	COS DEEP ARCHIVE storage usage, in bytes Note: This field may return null, indicating that no valid values can be obtained.
IntelligentCapacityUsed	Integer	COS INTELLIGENT TIERING storage usage, in bytes 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 Viewing the details of a file system

This example shows you how to view the details of a file system.

Input Example

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

{
"FileSystemId": "f4mhaqkciq0"
}
```

Output Example


```
{
"Response": {
"FileSystem": {
"AppId": 1251006373,
"FileSystemName": "test",
"Description": "",
"Region": "ap-guangzhou",
"FileSystemId": "f4mhaqkciq0",
"CreateTime": "2019-07-30T17:03:20+08:00",
"BlockSize": 4194304,
"CapacityQuota": 1073741824,
"SuperUsers": [
"hadoop"
],
"PosixAcl": true,
"Status": 2,
"EnableRanger": false,
"RangerServiceAddresses": [
"127.0.0.1:8080"
]
},
"CapacityUsed": 0,
"ArchiveCapacityUsed": 0,
"StandardCapacityUsed": 0,
"DegradeCapacityUsed": 0,
"DeepArchiveCapacityUsed": 0,
"IntelligentCapacityUsed": 0,
"RequestId": "22e36f95-9295-4132-a75e-09a08d2e13fc"
}
}
```


5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go

- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
MissingParameter	Missing parameter.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

CreateFileSystem

最近更新时间：2023-06-26 16:48:07

1. API Description

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

This API is used to create a file system (asynchronously).

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: CreateFileSystem.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemName	Yes	String	File system name
CapacityQuota	Yes	Integer	File system capacity (in bytes), which can range from 1 GB to 1 PB and must be an integer multiple of 1 GB
PosixAcl	Yes	Boolean	Whether to verify POSIX ACL
Description	No	String	File system description, which is an empty string by default

SuperUsers.N	No	Array of String	List of superuser names, which is an empty array by default
RootInodeUser	No	String	Username of the root directory Inode, which is `hadoop` by default
RootInodeGroup	No	String	Group name of the root directory Inode, which is `supergroup` by default
EnableRanger	No	Boolean	Whether to enable verification of Ranger service addresses
RangerServiceAddresses.N	No	Array of String	List of Ranger service addresses (empty array by default)
Tags.N	No	Array of Tag	Multiple resource tags, which can be an empty array

3. Output Parameters

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

4. Example

Example1 Creating a file system

This example shows you how to create a file system.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=CreateFileSystem
&FileSystemName=test
&Description=test
&CapacityQuota=1073741824
&SuperUsers.0=hadoop
&PosixAcl=true
&RootInodeUser=hadoop
```

```
&RootInodeGroup=supergroup
&<Common request parameters>
```

Output Example

```
{
"Response": {
"FileSystem": {
"AppId": 1251006373,
"FileSystemName": "test",
"Description": "test",
"Region": "ap-guangzhou",
"FileSystemId": "f4mhaqkciq0",
"CreateTime": "2019-07-30T16:51:41+08:00",
"BlockSize": 4194304,
"CapacityQuota": 1073741824,
"SuperUsers": [
"hadoop"
],
"PosixAcl": true,
"Status": 1,
"EnableRanger": false,
"RangerServiceAddresses": [
"127.0.0.1:8080"
]
},
"RequestId": "ecba2ede-de08-41d5-99cc-b5444912b7f2"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET

- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.AccountInsufficientBalance	The account balance is insufficient.
FailedOperation.AccountUnauthenticated	The account identity is not verified.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidCapacityQuota	Incorrect parameter value: CapacityQuota.
InvalidParameterValue.InvalidDescription	Incorrect parameter value: Description.
InvalidParameterValue.InvalidFileSystemName	Incorrect parameter value: FileSystemName.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

Restoration task APIs
CreateRestoreTasks

最近更新时间：2023-03-28 15:05:52

1. API Description

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

This API is used to batch create restoration tasks. You don't need to enter the restoration task IDs, status, and creation 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: CreateRestoreTasks.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID
RestoreTasks.N	Yes	Array of RestoreTask	Multiple restoration tasks (up to 10)

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 Batch creating restoration tasks

This example shows how to batch create restoration tasks.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=CreateRestoreTasks
&FileSystemId=f4mhaqkciq0
&RestoreTasks.0.FilePath=/test/file1
&RestoreTasks.0.Type=1
&RestoreTasks.0.Days=7
&RestoreTasks.1.FilePath=/test/file2
&RestoreTasks.1.Type=2
&RestoreTasks.1.Days=7
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "5d6d3ef8-db1d-40de-afa1-d340302458bb"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceInUse	The resource is in use.
ResourceNotFound	The resource does not exist.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

DescribeRestoreTasks

最近更新时间：2023-03-28 15:05:51

1. API Description

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

This API is used to view the list of restoration tasks by file system ID.

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: DescribeRestoreTasks.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID

3. Output Parameters

Parameter Name	Type	Description
RestoreTasks	Array of	List of restoration tasks

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

4. Example

Example1 Viewing restoration task list

This example shows how to view the list of restoration tasks.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeRestoreTasks
&FileSystemId=f4mnvilzmdd
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RestoreTasks": [
{
"RestoreTaskId": 1,
"FilePath": "/test/file1",
"Type": 1,
"Days": 7,
"Status": 1,
"CreateTime": "2019-07-30T16:24:38+08:00"
},
{
"RestoreTaskId": 2,
"FilePath": "/test/file2",
"Type": 2,
"Days": 7,
"Status": 2,
"CreateTime": "2019-07-30T16:24:38+08:00"
}
],
"RequestId": "19d240f4-156d-4a3c-856c-216d64a6bb4a"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
MissingParameter	Missing parameter.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

Mount point APIs
DescribeMountPoints

最近更新时间：2023-03-28 15:05:54

1. API Description

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

This API is used to view the list of mount points.

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: DescribeMountPoints.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	No	String	File system ID Note: only one of `AccessGroupId` , `FileSystemId` , and `OwnerUin` can be specified as the input parameter
AccessGroupId	No	String	Permission group ID
OwnerUin	No	Integer	Resource owner `Uin`

3. Output Parameters

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

4. Example

Example1 Viewing mount point list

This example shows how to view the list of mount points.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeMountPoints
&AccessGroupId=ag-fmfpk1hk
&<Common request parameters>
```

Output Example

```
{
"Response": {
"MountPoints": [
{
"MountPointId": "f4mnvilzmdd-Tx5f",
"MountPointName": "test",
"FileSystemId": "f4mnvilzmdd",
"AccessGroupIds": [
"ag-fmfpk1hk"
],
"Status": 2,
"CreateTime": "2019-07-30T18:19:18+08:00"
},
{
"MountPointId": "f4mnvilzmdd-fj7A",
"MountPointName": "test",
"FileSystemId": "f4mnvilzmdd",
"AccessGroupIds": [
```

```
"ag-fmfpk1hk"
],
"Status": 1,
"CreateTime": "2019-07-30T18:14:45+08:00"
},
{
"MountPointId": "f4mnvilzmdd-k2tC",
"MountPointName": "test",
"FileSystemId": "f4mnvilzmdd",
"AccessGroupIds": [
"ag-fmfpk1hk"
],
"Status": 1,
"CreateTime": "2019-07-30T18:15:53+08:00"
}
],
"RequestId": "ff98aad2-e290-4512-af5c-ab24993591e3"
}
}
```


5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

DescribeMountPoint

最近更新时间：2023-03-28 15:05:55

1. API Description

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

This API is used to view the details of a mount point.

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: DescribeMountPoint.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
MountPointId	Yes	String	Mount point ID

3. Output Parameters

Parameter Name	Type	Description
MountPoint	MountPoint	Mount point

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

4. Example

Example1 Viewing mount point details

This example shows how to view the details of a mount point.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeMountPoint
&MountPointId=f4mnvilzmdd-Tx5f
&<Common request parameters>
```

Output Example

```
{
"Response": {
"MountPoint": {
"MountPointId": "f4mnvilzmdd-Tx5f",
"MountPointName": "test",
"FileSystemId": "f4mnvilzmdd",
"AccessGroupIds": [
"ag-fmfpk1hk"
],
"Status": 2,
"CreateTime": "2019-07-30T18:19:18+08:00"
},
"RequestId": "9e0a4f46-e326-4e03-bc84-721008bb7a9d"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java

- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidMountPointId	Incorrect parameter value: MountPointId.
MissingParameter	Missing parameter.
ResourceNotFound.MountPointNotExists	The mount point does not exist.
UnauthorizedOperation	Unauthorized operation.

CreateMountPoint

最近更新时间：2023-03-28 15:05:55

1. API Description

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

This API is used to create a mount point for a successfully created file system.

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: CreateMountPoint.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
MountPointName	Yes	String	Mount point name
FileSystemId	Yes	String	File system ID
MountPointStatus	Yes	Integer	Mount point status (1: enabled; 2: disabled)

3. Output Parameters

Parameter	Type	Description

Name		
MountPoint	MountPoint	Mount point
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating mount point

This example shows how to create a mount point.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=CreateMountPoint
&MountPointName=test
&FileSystemId=f4mnvilzmdd
&MountPointStatus=1
&<Common request parameters>
```

Output Example

```
{
"Response": {
"MountPoint": {
"MountPointId": "f4mnvilzmdd-Tx5f",
"MountPointName": "test",
"FileSystemId": "f4mnvilzmdd",
"AccessGroupIds": [],
"Status": 1,
"CreateTime": "2019-07-30T18:19:18+08:00"
},
"RequestId": "b3caa32f-5e39-4360-91e4-5724369b78a6"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
InvalidParameterValue.InvalidMountPointName	Incorrect parameter value: MountPointName.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

AssociateAccessGroups

最近更新时间：2023-03-28 15:05:55

1. API Description

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

This API is used to bind multiple permission groups to a mount point.

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: AssociateAccessGroups.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
MountPointId	Yes	String	Mount point ID
AccessGroupIds.N	Yes	Array of String	List of permission group IDs

3. Output Parameters

Parameter	Type	Description

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

4. Example

Example1 Binding permission group list

This example shows how to bind the list of permission groups.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=AssociateAccessGroups
&MountPointId=f4mnvilzmdd-Tx5f
&AccessGroupIds.0=ag-fmfpk1hk
&AccessGroupIds.1=ag-avgx2dox
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "b3caa32f-5e39-4360-91e4-5724369b78a6"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidMountPointId	Incorrect parameter value: MountPointId.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
ResourceNotFound.MountPointNotExists	The mount point does not exist.
UnauthorizedOperation	Unauthorized operation.

DeleteMountPoint

最近更新时间：2023-03-28 15:05:55

1. API Description

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

This API is used to delete a mount point.

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: DeleteMountPoint.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
MountPointId	Yes	String	Mount point ID

3. Output Parameters

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

4. Example

Example1 Deleting mount point

This example shows how to delete a mount point.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DeleteMountPoint
&MountPointId=f4mnvilzmdd-fj7A
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "85a1accb-0456-45b3-9eb2-52ae76430ca3"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidMountPointId	Incorrect parameter value: MountPointId.
MissingParameter	Missing parameter.
ResourceNotFound.MountPointNotExists	The mount point does not exist.
UnauthorizedOperation	Unauthorized operation.

DisassociateAccessGroups

最近更新时间：2023-03-28 15:05:54

1. API Description

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

This API is used to unbind multiple permission groups from a mount point.

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: DisassociateAccessGroups.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
MountPointId	Yes	String	Mount point ID
AccessGroupIds.N	Yes	Array of String	List of permission group IDs

3. Output Parameters

Parameter	Type	Description

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

4. Example

Example1 Unbinding permission group list

This example shows how to unbind the list of permission groups.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DisassociateAccessGroups
&MountPointId=f4mnvilzmdd-Tx5f
&AccessGroupIds.0=ag-fmfpk1hk
&AccessGroupIds.1=ag-avgx2dox
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "b3caa32f-5e39-4360-91e4-5724369b78a6"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidMountPointId	Incorrect parameter value: MountPointId.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
ResourceNotFound.MountPointNotExists	The mount point does not exist.
UnauthorizedOperation	Unauthorized operation.

ModifyMountPoint

最近更新时间：2023-03-28 15:05:54

1. API Description

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

This API is used to modify the attributes of a mount point.

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: ModifyMountPoint.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
MountPointId	Yes	String	Mount point ID
MountPointName	No	String	Mount point name
MountPointStatus	No	Integer	Mount point status

3. Output Parameters

Parameter	Type	Description

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

4. Example

Example1 Modifying mount point attributes

This example shows how to modify the attributes of a mount point.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=ModifyMountPoint
&MountPointId=f4mnvilzmdd-Tx5f
&MountPointName=test
&MountPointStatus=2
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "7de3434f-ad14-403b-8138-7396549d4bc1"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidMountPointId	Incorrect parameter value: MountPointId.
InvalidParameterValue.InvalidMountPointName	Incorrect parameter value: MountPointName.
MissingParameter	Missing parameter.
ResourceNotFound.MountPointNotExists	The mount point does not exist.
UnauthorizedOperation	Unauthorized operation.

Permission rule APIs

CreateAccessRules

最近更新时间：2023-03-28 15:05:52

1. API Description

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

This API is used to batch create permission rules. You don't need to enter the permission rule IDs and creation 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: CreateAccessRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessRules.N	Yes	Array of AccessRule	Multiple permission rules (up to 10)
AccessGroupId	Yes	String	Permission group ID

3. Output Parameters

Parameter Name	Type	Description
AccessRules	Array of AccessRule	List of permission rules 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 Batch creating permission rules

This example shows you how to batch create permission rules.

Input Example

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

{
"AccessRules": [
{
"Priority": "2",
"AccessMode": "2",
"Address": "127.0.0.1"
},
{
"Priority": "1",
"AccessMode": "1",
"Address": "127.0.0.1"
}
],
"AccessGroupId": "ag-jwmfdcul"
}
```

Output Example

```
{
"Response": {
"AccessRules": [
{
"AccessRuleId": 13001,
"Address": "127.0.0.1",
"AccessMode": 1,
"Priority": 1,
"CreateTime": "2019-07-30T16:24:38+08:00"
},
{
"AccessRuleId": 13002,
"Address": "127.0.0.1",
"AccessMode": 2,
"Priority": 2,
"CreateTime": "2019-07-30T16:24:38+08:00"
}
],
"RequestId": "5d6d3ef8-db1d-40de-afa1-d340302458bb"
}
}
```


5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidAccessRuleAddress	Incorrect parameter value: `Address` of the permission rule.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

DeleteAccessRules

最近更新时间：2023-03-28 15:05:52

1. API Description

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

This API is used to batch delete permission rules.

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: DeleteAccessRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessRuleIds.N	Yes	Array of Integer	Multiple permission rule IDs (up to 10)

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 Batch deleting permission rules

This example shows how to batch delete permission rules.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DeleteAccessRules
&AccessRuleIds.0=13001
&AccessRuleIds.1=13002
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "b629358c-ed40-4747-9060-3fcd34a8f32f"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
ResourceNotFound.AccessRuleNotExists	The permission rule does not exist.
UnauthorizedOperation	Unauthorized operation.

ModifyAccessRules

最近更新时间：2023-03-28 15:05:52

1. API Description

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

This API is used to batch modify the attributes of permission rules, such as address, access mode, and priority. You must specify the permission rule IDs.

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: ModifyAccessRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessRules.N	Yes	Array of AccessRule	Multiple permission rules (up to 10)

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 Batch modifying the attributes of permission rules

This example shows how to batch modify the attributes of permission rules.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=ModifyAccessRules
&AccessRules.0.AccessRuleId=13001
&AccessRules.0.Address=127.0.0.1
&AccessRules.0.AccessMode=1
&AccessRules.0.Priority=2
&AccessRules.1.AccessRuleId=13002
&AccessRules.1.Address=127.0.0.1
&AccessRules.1.AccessMode=1
&AccessRules.1.Priority=1
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "baaf73f9-0c42-441b-afdb-b9da71a50f47"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java

- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessRuleAddress	Incorrect parameter value: `Address` of the permission rule.
MissingParameter	Missing parameter.
ResourceNotFound.AccessRuleNotExists	The permission rule does not exist.
UnauthorizedOperation	Unauthorized operation.

DescribeAccessRules

最近更新时间：2023-03-28 15:05:52

1. API Description

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

This API is used to view the list of permission rules by permission group ID.

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: DescribeAccessRules.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessGroupId	Yes	String	Permission group ID

3. Output Parameters

Parameter Name	Type	Description
AccessRules	Array of	List of permission rules

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

4. Example

Example1 Viewing permission rule list

This example shows how to view the list of permission rules.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeAccessRules
&AccessGroupId=ag-jwmfdcul
&<Common request parameters>
```

Output Example

```
{
"Response": {
"AccessRules": [
{
"AccessRuleId": 13001,
"Address": "127.0.0.1",
"AccessMode": 1,
"Priority": 1,
"CreateTime": "2019-07-30T16:24:38+08:00"
},
{
"AccessRuleId": 13002,
"Address": "127.0.0.1",
"AccessMode": 2,
"Priority": 2,
"CreateTime": "2019-07-30T16:24:38+08:00"
}
],
"RequestId": "19d240f4-156d-4a3c-856c-216d64a6bb4a"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
UnauthorizedOperation	Unauthorized operation.

Permission group APIs
DeleteAccessGroup

最近更新时间：2023-03-28 15:05:53

1. API Description

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

This API is used to delete a permission group.

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: DeleteAccessGroup.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessGroupId	Yes	String	Permission group ID

3. Output Parameters

Parameter Name	Type	Description

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

4. Example

Example1 Deleting permission group

This example shows how to delete a permission group.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DeleteAccessGroup
&AccessGroupId=ag-f8xoises
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "ad3bd8a7-e9b8-436c-b32c-d285654ff592"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.AccessGroupBound	The permission group has been bound.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
UnauthorizedOperation	Unauthorized operation.

DescribeAccessGroups

最近更新时间：2023-03-28 15:05:53

1. API Description

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

This API is used to view the list of permission groups.

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: DescribeAccessGroups.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
VpcId	No	String	VPC ID Note: either `VpcId` or `OwnerUin` can be specified as the input parameter
OwnerUin	No	Integer	Resource owner `Uin`

3. Output Parameters

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

4. Example

Example1 Viewing permission group list

This example shows how to view the list of permission groups.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeAccessGroups
&VpcId=vpc-967aipkx
&<Common request parameters>
```

Output Example

```
{
"Response": {
"AccessGroups": [
{
"AccessGroupId": "ag-f8xoises",
"AccessGroupName": "test",
"Description": "test",
"VpcId": "vpc-967aipkx",
"VpcType": 1,
"CreateTime": "2019-07-30T16:04:30+08:00"
}
],
"RequestId": "726c9744-6e89-457e-b8c0-7008e0a1cc51"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidVpcId	Incorrect parameter value: VpcId.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

ModifyAccessGroup

最近更新时间：2023-03-28 15:05:53

1. API Description

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

This API is used to modify the attributes of a permission group.

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: ModifyAccessGroup.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessGroupId	Yes	String	Permission group ID
AccessGroupName	No	String	Permission group name
Description	No	String	Permission group description

3. Output Parameters

Parameter	Type	Description

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

4. Example

Example1 Modifying permission group attributes

This example shows how to modify the attributes of a permission group.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=ModifyAccessGroup
&AccessGroupId=ag-f8xoises
&AccessGroupName=test
&Description=test
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "c77b62ec-b019-46fe-80e9-c842785cf9dc"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidAccessGroupName	Incorrect parameter value: AccessGroupName.
InvalidParameterValue.InvalidDescription	Incorrect parameter value: Description.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
UnauthorizedOperation	Unauthorized operation.

DescribeAccessGroup

最近更新时间：2023-03-28 15:05:53

1. API Description

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

This API is used to view the details of a permission group.

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: DescribeAccessGroup.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessGroupId	Yes	String	Permission group ID

3. Output Parameters

Parameter Name	Type	Description
AccessGroup	AccessGroup	Permission group

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

4. Example

Example1 Viewing permission group details

This example shows how to view the details of a permission group.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeAccessGroup
&AccessGroupId=ag-f8xoises
&<Common request parameters>
```

Output Example

```
{
"Response": {
"AccessGroup": {
"AccessGroupId": "ag-f8xoises",
"AccessGroupName": "test",
"Description": "test",
"VpcType": 1,
"VpcId": "vpc-967aipkx",
"CreateTime": "2019-07-30T16:04:30+08:00"
},
"RequestId": "ab3fff6b-7a36-4b7f-b2bb-bba87b5945a6"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP

- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
MissingParameter	Missing parameter.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
UnauthorizedOperation	Unauthorized operation.

CreateAccessGroup

最近更新时间：2023-06-26 16:48:07

1. API Description

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

This API is used to create a permission group.

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: CreateAccessGroup.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
AccessGroupName	Yes	String	Permission group name
VpcType	Yes	Integer	VPC type (1: CVM; 2: BM 1.0)
VpcId	Yes	String	VPC ID
Description	No	String	Permission group description, which is an empty string by default

3. Output Parameters

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

4. Example

Example1 Creating permission group

This example shows how to create a permission group.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=CreateAccessGroup
&AccessGroupName=test
&Description=test
&VpcType=1
&VpcId=vpc-967aipkx
&<Common request parameters>
```

Output Example

```
{
"Response": {
"AccessGroup": {
"AccessGroupId": "ag-f8xoises",
"AccessGroupName": "test",
"Description": "test",
"VpcType": 1,
"VpcId": "vpc-967aipkx",
"CreateTime": "2019-07-30T16:04:30+08:00"
},
"RequestId": "ab3fff6b-7a36-4b7f-b2bb-bba87b5945a6"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.AccountInsufficientBalance	The account balance is insufficient.
FailedOperation.AccountUnauthenticated	The account identity is not verified.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidAccessGroupName	Incorrect parameter value: AccessGroupName.
InvalidParameterValue.InvalidDescription	Incorrect parameter value: Description.
InvalidParameterValue.InvalidVpcId	Incorrect parameter value: VpcId.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.

ResourceNotFound	The resource does not exist.
ResourceNotFound.VpcNotExists	The VPC does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

Other APIs

DescribeResourceTags

最近更新时间：2023-03-28 15:05:54

1. API Description

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

This API is used to view the list of resource tags by file system ID.

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: DescribeResourceTags.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID

3. Output Parameters

Parameter Name	Type	Description

Tags	Array of Tag	List of resource tags
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Viewing resource tag list

This example shows how to view the list of resource tags.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=DescribeResourceTags
&FileSystemId=f4mhaqkciq0
&<Common request parameters>
```

Output Example

```
{
"Response": {
"Tags": [
{
"Key": "key1",
"Value": "value1"
},
{
"Key": "key2",
"Value": "value2"
}
],
"RequestId": "22e36f95-9295-4132-a75e-09a08d2e13fc"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS
- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
MissingParameter	Missing parameter.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

ModifyResourceTags

最近更新时间：2023-03-28 15:05:53

1. API Description

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

This API is used to modify the list of resource tags by overwriting them all.

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: ModifyResourceTags.
Version	Yes	String	Common Params. The value used for this API: 2020-11-12.
Region	No	String	Common Params. This parameter is not required for this API.
FileSystemId	Yes	String	File system ID
Tags.N	No	Array of Tag	Multiple resource tags, which can be an empty array

3. Output Parameters

Parameter	Type	Description

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

4. Example

Example1 Modifying resource tag list

This example shows how to modify the list of resource tags.

Input Example

```
https://chdfs.tencentcloudapi.com/?Action=ModifyResourceTags
&FileSystemId=f1mhaqkciq0
&Tags.0.Key=key1
&Tags.0.Value=value1
&Tags.1.Key=key2
&Tags.1.Value=value2
&<Common request parameters>
```

Output Example

```
{
"Response": {
"RequestId": "61046a25-2eda-4495-b9b6-eab6edf41d79"
}
}
```

5. Developer Resources

SDK

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

- Tencent Cloud SDK 3.0 for Python
- Tencent Cloud SDK 3.0 for Java
- Tencent Cloud SDK 3.0 for PHP
- Tencent Cloud SDK 3.0 for Go
- Tencent Cloud SDK 3.0 for NodeJS

- Tencent Cloud SDK 3.0 for .NET
- Tencent Cloud SDK 3.0 for C++

Command Line Interface

- Tencent Cloud CLI 3.0

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	Unauthorized operation.

Data Types

最近更新时间：2023-06-26 16:48:07

AccessGroup

Permission group

Used by actions: CreateAccessGroup, DescribeAccessGroup, DescribeAccessGroups.

Name	Type	Description
AccessGroupId	String	Permission group ID
AccessGroupName	String	Permission group name
Description	String	Permission group description
CreateTime	Timestamp ISO8601	Creation time
VpcType	Integer	VPC type (1: CVM; 2: BM 1.0)
VpcId	String	VPC ID

AccessRule

Permission rule

Used by actions: CreateAccessRules, DescribeAccessRules, ModifyAccessRules.

Name	Type	Required	Description
AccessRuleId	Integer	No	Permission rule ID
Address	String	No	Permission rule address (IP range or IP)
AccessMode	Integer	No	Permission rule access mode (1: read-only; 2: read-write)
Priority	Integer	No	Priority (value range: 1–100. The smaller the value, the higher the priority)
CreateTime	Timestamp ISO8601	No	Creation time

FileSystem

File system

Used by actions: CreateFileSystem, DescribeFileSystem, DescribeFileSystems.

Name	Type	Description
AppId	Integer	Resource owner `AppId`
FileSystemName	String	File system name
Description	String	File system description
Region	String	Region
FileSystemId	String	File system ID
CreateTime	Timestamp ISO8601	Creation time
BlockSize	Integer	File system block size (in bytes)
CapacityQuota	Integer	File system capacity (in bytes)
Status	Integer	File system status (1: creating; 2: created successfully; 3: failed to create)
SuperUsers	Array of String	List of superuser names
PosixAcl	Boolean	POSIX permission control
EnableRanger	Boolean	Whether to enable verification of Ranger service addresses Note: this field may return `null` , indicating that no valid value was found.
RangerServiceAddresses	Array of String	List of Ranger service addresses Note: this field may return `null` , indicating that no valid value was found.

LifeCycleRule

Lifecycle rule

Used by actions: CreateLifeCycleRules, DescribeLifeCycleRules, ModifyLifeCycleRules.

Name	Type	Required	Description
LifeCycleRuleId	Integer	No	Lifecycle rule ID
LifeCycleRuleName	String	No	Lifecycle rule name
Path	String	No	Lifecycle rule path (directory or file)
Transitions	Array of Transition	No	List of lifecycle rule transitions
Status	Integer	No	Lifecycle rule status (1: enabled; 2: disabled)
CreateTime	Timestamp ISO8601	No	Creation time
Summary	Summary	No	Detailed storage usage of the current lifecycle rule path
LastSummaryTime	Timestamp ISO8601	No	Update time of `Summary`

MountPoint

Mount point

Used by actions: CreateMountPoint, DescribeMountPoint, DescribeMountPoints.

Name	Type	Description
MountPointId	String	Mount point ID
MountPointName	String	Mount point name
FileSystemId	String	File system ID
Status	Integer	Mount point status (1: enabled; 2: disabled)
CreateTime	Timestamp ISO8601	Creation time
AccessGroupIds	Array of String	List of IDs of the bound permission groups

RestoreTask

Restoration task

Used by actions: CreateRestoreTasks, DescribeRestoreTasks.

Name	Type	Required	Description
RestoreTaskId	Integer	No	Restoration task ID
FilePath	String	No	Restoration task file path
Type	Integer	No	Restoration task type (`1` : standard; `2` : expedited; `3` : bulk, with only the expedited type available currently)
Days	Integer	No	Validity period (in days) of the temporary copy generated during restoration
Status	Integer	No	Restoration task status (1: binding file; 2: file binding completed; 3: restoring file; 4: file restoration completed)
CreateTime	Timestamp ISO8601	No	Creation time

Summary

Details about the storage usage of the current lifecycle rule path

Used by actions: CreateLifeCycleRules, DescribeLifeCycleRules, ModifyLifeCycleRules.

Name	Type	Description
CapacityUsed	Integer	Capacity usage in bytes Note: This field may return null, indicating that no valid values can be obtained.
StandardCapacityUsed	Integer	COS STANDARD storage usage in bytes Note: This field may return null, indicating that no valid values can be obtained.
DegradeCapacityUsed	Integer	COS STANDARD_IA storage usage in bytes Note: This field may return null, indicating that no valid values can be obtained.
ArchiveCapacityUsed	Integer	COS ARCHIVE storage usage in bytes Note: This field may return null, indicating that no valid values can be obtained.
DeepArchiveCapacityUsed	Integer	COS DEEP ARCHIVE storage usage in bytes Note: This field may return null, indicating that no valid values can be

		obtained.
IntelligentCapacityUsed	Integer	COS INTELLIGENT TIERING storage usage in bytes Note: This field may return null, indicating that no valid values can be obtained.

Tag

Resource tag.

Used by actions: CreateFileSystem, DescribeResourceTags, ModifyResourceTags.

Name	Type	Required	Description
Key	String	Yes	Tag key
Value	String	Yes	Tag value

Transition

Lifecycle rule transition attribute

Used by actions: CreateLifeCycleRules, DescribeLifeCycleRules, ModifyLifeCycleRules.

Name	Type	Required	Description
Days	Integer	Yes	Trigger time (in days)
Type	Integer	Yes	Transition type (`1` : ARCHIVE; `2` : Delete; `3` : STANDARD_IA; `4` : DEEP ARCHIVE; `5` : INTELLIGENT TIERING)

Error Codes

最近更新时间：2023-06-26 16:48:07

Feature Description

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

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

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

Error Code List

Common Error Codes

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

	ensure your current local time matches the standard time.
AuthFailure.SignatureFailure	Invalid signature. Signature calculation error. Please ensure you've followed the signature calculation process described in the Signature API documentation.
AuthFailure.TokenFailure	Token error.
AuthFailure.UnauthorizedOperation	The request is not authorized. For more information, see the CAM documentation.
DryRunOperation	DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.
FailedOperation	Operation failed.
InternalError	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
FailedOperation.AccessGroupBound	The permission group has been bound.
FailedOperation.AccountInsufficientBalance	The account balance is insufficient.
FailedOperation.AccountUnauthenticated	The account identity is not verified.
FailedOperation.FileSystemNotEmpty	The file system is not empty.
FailedOperation.QuotaLessThanCurrentUsed	The file system capacity after change is smaller than the currently used capacity.
InvalidParameterValue.InvalidAccessGroupId	Incorrect parameter value: AccessGroupId.
InvalidParameterValue.InvalidAccessGroupName	Incorrect parameter value: AccessGroupName.
InvalidParameterValue.InvalidAccessRuleAddress	Incorrect parameter value: `Address` of the permission rule.

InvalidParameterValue.InvalidCapacityQuota	Incorrect parameter value: CapacityQuota.
InvalidParameterValue.InvalidDescription	Incorrect parameter value: Description.
InvalidParameterValue.InvalidFileSystemId	Incorrect parameter value: FileSystemId.
InvalidParameterValue.InvalidFileSystemName	Incorrect parameter value: FileSystemName.
InvalidParameterValue.InvalidMountPointId	Incorrect parameter value: MountPointId.
InvalidParameterValue.InvalidMountPointName	Incorrect parameter value: MountPointName.
InvalidParameterValue.InvalidVpcId	Incorrect parameter value: VpcId.
ResourceNotFound.AccessGroupNotExists	The permission group does not exist.
ResourceNotFound.AccessRuleNotExists	The permission rule does not exist.
ResourceNotFound.FileSystemNotExists	The file system does not exist.
ResourceNotFound.MountPointNotExists	The mount point does not exist.
ResourceNotFound.VpcNotExists	The VPC does not exist.