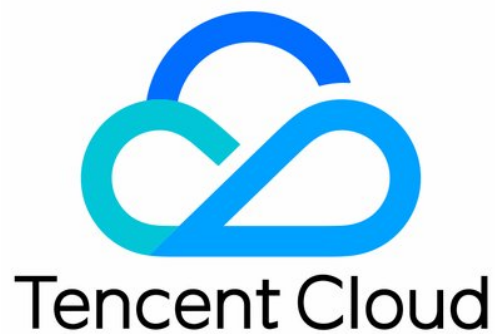


Game Server Elastic-scaling

API Documentation

Product Documentation



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Last updated : 2021-06-23 17:07:02

Release 7

Release time: 2021-06-23 17:06:15

Release updates:

Improvement to existing documentation.

New APIs:

- [EndGameServerSessionAndProcess](#)

Release 6

Release time: 2021-05-26 17:42:14

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeInstanceTypes](#)

New data structures:

- [InstanceTypeInfo](#)

Release 5

Release time: 2021-05-11 10:57:47

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CopyFleet](#)
 - New input parameters:InternetMaxBandwidthOut

Modified data structures:

- [FleetAttributes](#)
 - New members:InternetMaxBandwidthOut

Release 4

Release time: 2021-04-08 11:33:43

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CopyFleet](#)
 - New input parameters:CcnInfos

New data structures:

- [CcnInfo](#)
- [RelatedCcnInfo](#)

Modified data structures:

- [FleetAttributes](#)
 - New members:RelatedCcnInfos

Release 3

Release time: 2021-03-18 10:25:01

Release updates:

Improvement to existing documentation.

New APIs:

- [DeleteTimerScalingPolicy](#)
- [DescribeTimerScalingPolicies](#)

- [PutTimerScalingPolicy](#)
- [SetServerReserved](#)

New data structures:

- [TargetConfiguration](#)
- [TimerConfiguration](#)
- [TimerFleetCapacity](#)
- [TimerScalingPolicy](#)
- [TimerValue](#)

Release 2

Release time: 2021-02-08 17:35:20

Release updates:

Improvement to existing documentation.

New APIs:

- [CopyFleet](#)
- [UpdateBucketAccelerateOpt](#)
- [UpdateBucketCORSOpt](#)

New data structures:

- [DiskInfo](#)
- [FleetAttributes](#)
- [InboundPermission](#)
- [ResourceCreationLimitPolicy](#)
- [RuntimeConfiguration](#)
- [ServerProcesse](#)
- [Tag](#)

Release 1

Release time: 2020-12-24 10:56:29

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateGameServerSession](#)
- [DescribeGameServerSessionDetails](#)
- [DescribeGameServerSessionPlacement](#)
- [DescribeGameServerSessions](#)
- [DescribePlayerSessions](#)
- [GetGameServerSessionLogUrl](#)
- [GetInstanceAccess](#)
- [JoinGameServerSession](#)
- [JoinGameServerSessionBatch](#)
- [SearchGameServerSessions](#)
- [StartGameServerSessionPlacement](#)
- [StopGameServerSessionPlacement](#)
- [UpdateGameServerSession](#)

New data structures:

- [Credentials](#)
- [DesiredPlayerSession](#)
- [GameProperty](#)
- [GameServerSession](#)
- [GameServerSessionDetail](#)
- [GameServerSessionPlacement](#)
- [InstanceAccess](#)
- [PlacedPlayerSession](#)
- [PlayerDataMap](#)
- [PlayerLatency](#)
- [PlayerSession](#)

API Category

Last updated : 2021-06-23 17:07:01

Session APIs

API Name	Feature
CreateGameServerSession	Creates game server session
DescribeGameServerSessionDetails	Queries the list of game server session details
DescribeGameServerSessionPlacement	Queries game server session placement
DescribeGameServerSessions	Queries game server session list
DescribePlayerSessions	Queries player session list
EndGameServerSessionAndProcess	Terminates the game server session and the corresponding process
GetGameServerSessionLogUrl	Gets the log URL of game server session
JoinGameServerSession	Joins game server session
JoinGameServerSessionBatch	Joins game server sessions in batch
SearchGameServerSessions	Searches in game server session list
StartGameServerSessionPlacement	Starts placing game server session
StopGameServerSessionPlacement	Stops placing game server session
UpdateGameServerSession	Updates game server session

Asset Package APIs

API Name	Feature
UpdateBucketAccelerateOpt	Sets COS global acceleration
UpdateBucketCORSOpt	Sets COS CORS

Server Fleet APIs

API Name	Feature
CopyFleet	Replicates server fleet

Auto Scaling APIs

API Name	Feature
DeleteTimerScalingPolicy	Deleting a scheduled scaling policy
DescribeTimerScalingPolicies	Queries the list of scheduled scaling policies
PutTimerScalingPolicy	Creating or updating a scheduled scaling policy

Server Instance APIs

API Name	Feature
DescribeInstanceTypes	Obtains the list of CVM types in the specified region
GetInstanceAccess	Gets credentials required for instance login
SetServerReserved	Specifies whether to retain an exceptional instance for troubleshooting

Making API Requests

Request Structure

Last updated : 2020-12-24 11:02:20

1. Service Address

The API supports access from either a nearby region (at `gse.tencentcloudapi.com`) or a specified region (at `gse.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 "`gse.ap-guangzhou.tencentcloudapi.com`".

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

Tencent Cloud currently supports the following regions:

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

Southeast Asia (Singapore)	<code>gse.ap-singapore.tencentcloudapi.com</code>
Southeast Asia (Bangkok)	<code>gse.ap-bangkok.tencentcloudapi.com</code>
South Asia (Mumbai)	<code>gse.ap-mumbai.tencentcloudapi.com</code>
Northeast Asia (Seoul)	<code>gse.ap-seoul.tencentcloudapi.com</code>
Northeast Asia (Tokyo)	<code>gse.ap-tokyo.tencentcloudapi.com</code>
U.S. East Coast (Virginia)	<code>gse.na-ashburn.tencentcloudapi.com</code>
U.S. West Coast (Silicon Valley)	<code>gse.na-siliconvalley.tencentcloudapi.com</code>
North America (Toronto)	<code>gse.na-toronto.tencentcloudapi.com</code>
Europe (Frankfurt)	<code>gse.eu-frankfurt.tencentcloudapi.com</code>
Europe (Moscow)	<code>gse.eu-moscow.tencentcloudapi.com</code>

2. Communications Protocol

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

3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

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

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

4. Character Encoding

Only UTF-8 encoding is used.

Common Params

Last updated : 2021-06-23 17:07:02

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 description of common parameter <code>Action</code> in the input parameter documentation. For example, the API for querying the CVM <code>DescribeInstances</code> .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to work with belongs. For values supported for an API, see the parameter <code>Region</code> in the input parameters in related API documentation. This parameter is not required for some APIs (which will be indicated in the 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 request is sent. For example, 1529223702. Note: If the difference between the server time is greater than 5 minutes, a signature expires.
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the parameter <code>Version</code> in the API documentation. For example, 2017-03-12.
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service;SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as TC3-HMAC-SHA256 - Credential: Signature credential; AKIDEXAMPLE is the Secret Key ID

			time, and this value must match the value of X-TC-Timestamp in UTC time format; service is the name of the product/service domain name prefix. For example, a domain name cvm.tencentcloudapi.com for the CVM product and the value would be cvm; - SignedHeaders: The headers that contains the authentication 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 to obtain the temporary key and token by calling a CAM API, or a long-term key.

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

Example of an HTTP GET request structure:

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

```
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
```

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

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

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

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

```
X-TC-Timestamp: 1539084154
```

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

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

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

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

```
Content-Type: application/json
```

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

```
--58731222010402
```

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

```
0
```

```
--58731222010402
```

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

```
10
```

```
--58731222010402--
```

Common parameters for Signature Algorithm v1

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

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

			documentation), and will not take effect even if it is passed.
Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request was initiated, for example, 1529223702. If the difference between the value and the current system time is too large, a signature expiration error may occur.
Nonce	Integer	Yes	A random positive integer used along with <code>Timestamp</code> to prevent replay attacks.
SecretId	String	Yes	The identifying SecretId obtained on the Cloud API Key page. A SecretId corresponds to a unique SecretKey which is used to generate the request signature (Signature).
Signature	String	Yes	Request signature used to verify the validity of this request. This is calculated based on the actual input parameters. For more information about how this is calculated, see the API authentication documentation.
Version	String	Yes	API version of the action. For the valid values, see the description of the common input parameter <code>Version</code> in the API documentation. For example, the version of CVM is 2017-03-12.
SignatureMethod	String	No	Signature method. Currently, only HmacSHA256 and HmacSHA1 are supported. The HmacSHA256 algorithm is used to verify the signature only when this parameter is specified as HmacSHA256. In other cases, the signature is verified with HmacSHA1.
Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

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

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=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=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

Region List

The supported Region field values for all APIs in this product are listed as below. For any API that does not support any of the following regions, this field will be described additionally in the relevant API document.

Region	Value
Southeast Asia Pacific (Bangkok)	ap-bangkok
North China (Beijing)	ap-beijing
Southwest China (Chengdu)	ap-chengdu
South China (Guangzhou)	ap-guangzhou
Hong Kong/Macao/Taiwan (Hong Kong, China)	ap-hongkong
South Asia Pacific (Mumbai)	ap-mumbai
Northeast Asia Pacific (Seoul)	ap-seoul
East China (Shanghai)	ap-shanghai
Southeast Asia Pacific (Singapore)	ap-singapore

Northeast Asia Pacific (Tokyo)	ap-tokyo
Europe (Frankfurt)	eu-frankfurt
Eastern U.S. (Virginia)	na-ashburn
Western U.S. (Silicon Valley)	na-siliconvalley

Signature v3

Last updated : 2020-12-24 11:02:21

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=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff" ¥
-H "Content-Type: application/json; charset=utf-8" ¥
-H "Host: cvm.tencentcloudapi.com" ¥
-H "X-TC-Action: DescribeInstances" ¥
-H "X-TC-Timestamp: 1551113065" ¥
-H "X-TC-Version: 2017-03-12" ¥
-H "X-TC-Region: ap-guangzhou" ¥
-d '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
```

The signature calculation process is explained in detail below.

1. Concatenating the CanonicalRequest String

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

```
CanonicalRequest =
HTTPRequestMethod + '¥n' +
CanonicalURI + '¥n' +
CanonicalQueryString + '¥n' +
CanonicalHeaders + '¥n' +
SignedHeaders + '¥n' +
HashedRequestPayload
```

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

	CanonicalHeaders). <code>Content-type</code> and <code>host</code> are required headers. Concatenation rules: - Both the key and value of the header should be converted to lowercase; - If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase) and separated by semicolons (;). The value in this example is <code>content-type;host</code>
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}</code> in this example). The pseudocode for calculation is <code>Lowercase(HexEncode(Hash.SHA256(RequestPayload)))</code> by SHA256 hashing the payload of the HTTP request, performing hexadecimal encoding, and finally converting the encoded string to lowercase letters. For GET requests, <code>RequestPayload</code> is always an empty string. The calculation result in this example is <code>99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907</code>.

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

POST

/

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

host:cvm.tencentcloudapi.com

content-type;host

99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907

2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

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

Field Name	Explanation
Algorithm	Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .

RequestTimestamp	Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in the request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.
CredentialScope	Scope of the credential in the format of <code>Date/service/tc3_request</code> , including the date, requested service and termination string (<code>tc3_request</code>). Date is a date in UTC time, whose value should match the UTC date converted by the common parameter <code>X-TC-Timestamp</code> ; <code>service</code> is the product name, which should match the domain name of the product called. The calculation result in this example is <code>2019-02-25/cvm/tc3_request</code> .
HashedCanonicalRequest	Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is <code>Lowercase(HexEncode(Hash.SHA256(CanonicalRequest)))</code> . The calculation result in this example is <code>2815843035062ffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a</code> .

Note:

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

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

```
TC3-HMAC-SHA256
1551113065
2019-02-25/cvm/tc3_request
2815843035062ffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```


3. Calculating the Signature

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

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

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

2) Calculate the signature with the following pseudocode:

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

4. Concatenating the Authorization

The Authorization is concatenated as follows:

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

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

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

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

The following example shows a finished authorization header:

```
POST https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
Content-Type: application/json; charset=utf-8
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1551113065
X-TC-Region: ap-guangzhou

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

5. Signature Demo

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

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

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

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceId=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-`

guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=ElIP9YW3pW28FpsEdkXt%2F%2BWcGel%3D&Timestamp=1465185768&Version=2017-03-12.

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

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

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

Java

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

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

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

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

```

return DatatypeConverter.printHexBinary(d).toLowerCase();
}

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

// ***** Step 1: Concatenate the CanonicalRequest string *****
String httpRequestMethod = "POST";
String canonicalUri = "/";
String canonicalQueryString = "";
String canonicalHeaders = "content-type:application/json; charset=utf-8" + "host:" + host +
"n";
String signedHeaders = "content-type;host";

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

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

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

```

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

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

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

Python

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

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

service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
#timestamp = int(time.time())
timestamp = 1551113065
```

```

date = datetime.utcnow().timestamp().strftime("%Y-%m-%d")
params = {"Limit": 1, "Filters": [{"Name": "instance-name", "Values": ["unnamed"]}]}

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

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

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

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

print('curl -X POST ' + endpoint

```

```

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

```

Golang

```

package main

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

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

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

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

    // step 1: build canonical request string
    httpRequestMethod := "POST"
    canonicalURI := "/"

```

```

canonicalQueryString := ""
canonicalHeaders := "content-type:application/json; charset=utf-8" + "host:" + host + "
signedHeaders := "content-type;host"
payload := `{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}`
hashedRequestPayload := sha256hex(payload)
canonicalRequest := fmt.Sprintf("%s%s%s%s%s%s%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%d%s",
algorithm,
timestamp,
credentialScope,
hashedCanonicalRequest)
fmt.Println(string2sign)

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

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

curl := fmt.Sprintf(`curl -X POST https://%s%
-H "Authorization: %s"
-H "Content-Type: application/json; charset=utf-8"
-H "Host: %s" -H "X-TC-Action: %s"
-H "X-TC-Timestamp: %d"
-H "X-TC-Version: %s"
-H "X-TC-Region: %s"

```



```
-d '%s'`, host, authorization, host, action, timestamp, version, region, payload)
fmt.Println(curl)
}
```

PHP

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

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

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

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

```

$secretSigning = hash_hmac("SHA256", "tc3_request", $secretService, true);
$signature = hash_hmac("SHA256", $stringToSign, $secretSigning);
echo $signature.PHP_EOL;

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

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

```

Ruby

```

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

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

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

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = 'POST'

```

```

canonical_uri = '/'
canonical_querystring = ''
canonical_headers = "content-type:application/json; charset=utf-8\nhost:#{host}\n"
signed_headers = 'content-type;host'
# params = { 'Limit' => 1, 'Filters' => [{ 'Name' => 'instance-name', 'Values' => ['unnamed'] }]
}
# payload = JSON.generate(params, { 'ascii_only' => true, 'space' => ' ' })
# json will generate in random order, to get specified result in example, we hard-code it here.
payload = '{ "Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
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}, SignedHeaders=#{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, MidpointRounding.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" + "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" + credentialScope + "\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_request"));
byte[] signatureBytes = HmacSHA256(secretSigning, Encoding.UTF8.GetBytes(stringToSign));
string signature = BitConverter.ToString(signatureBytes).Replace("-", "").ToLower();
Console.WriteLine(signature);
Console.WriteLine("-----");

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

Dictionary<string, string> headers = new Dictionary<string, string>();
headers.Add("Authorization", authorization);
headers.Add("Host", endpoint);
headers.Add("Content-Type", contentType + "; charset=utf-8");
headers.Add("X-TC-Timestamp", requestTimestamp.ToString());

```

```

headers.Add("X-TC-Version", version);
headers.Add("X-TC-Action", action);
headers.Add("X-TC-Region", region);
return headers;
}

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

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

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

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

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

```

NodeJS

```

const crypto = require('crypto');

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

function getHash(message, encoding = 'hex') {

```

```

const hash = crypto.createHash('sha256')
return hash.update(message).digest(encoding)
}
function getDate(timestamp) {
const date = new Date(timestamp * 1000)
const year = date.getUTCFullYear()
const month = ('0' + (date.getUTCMonth() + 1)).slice(-2)
const day = ('0' + date.getUTCDate()).slice(-2)
return `${year}-${month}-${day}`
}
function main(){

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

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

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

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

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

const canonicalRequest = httpRequestMethod + "¥n"
+ canonicalUri + "¥n"
+ canonicalQueryString + "¥n"
+ canonicalHeaders + "¥n"
+ signedHeaders + "¥n"
+ hashedRequestPayload
console.log(canonicalRequest)
console.log("-----")

// ***** Step 2: Concatenate the string to sign *****
const algorithm = "TC3-HMAC-SHA256"

```

```

const hashedCanonicalRequest = getHash(canonicalRequest);
const credentialScope = date + "/" + service + "/" + "tc3_request"
const stringToSign = algorithm + "\n" +
timestamp + "\n" +
credentialScope + "\n" +
hashedCanonicalRequest
console.log(stringToSign)
console.log("-----")

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

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

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

```

C++

```

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

```



```
#include <openssl/hmac.h>

using namespace std;

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

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

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

```
#endif

HMAC_Init_ex(h, &key[0], key.length(), EVP_sha256(), NULL);
HMAC_Update(h, ( unsigned char* )&input[0], input.length());
unsigned int len = 32;
HMAC_Final(h, hash, &len);

#if OPENSSSL_VERSION_NUMBER < 0x10100000L
HMAC_CTX_cleanup(h);
#else
HMAC_CTX_free(h);
#endif

std::stringstream ss;
ss << std::setfill('0');
for (int i = 0; i < len; i++)
{
    ss << hash[i];
}

return (ss.str());
}

string HexEncode(const string &input)
{
    static const char* const lut = "0123456789abcdef";
    size_t len = input.length();

    string output;
    output.reserve(2 * len);
    for (size_t i = 0; i < len; ++i)
    {
        const unsigned char c = input[i];
        output.push_back(lut[c >> 4]);
        output.push_back(lut[c & 15]);
    }
    return output;
}

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

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

```

int64_t timestamp = 1551113065;
string date = get_data(timestamp);

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

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

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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-guang  
zhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=1465185768&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&Limit=20&Nonce=11  
886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=14651857  
68&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&InstanceId.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmlPx3*****&Signature=zmmjn35mikh6pM3V7sUEuX4wyYM%3D&Timestamp=1465185768&Version=2017-03-12
```

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

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

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

Java

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

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

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

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

    public static String getUrl(TreeMap<String, Object> params) throws UnsupportedEncodingException {
        StringBuilder url = new StringBuilder("https://cvm.tencentcloudapi.com/?");
        // There is no requirement for the order of the parameters in the actual request URL.
        for (String k : params.keySet()) {
            // The request string needs to be URL encoded. As the Key is all in English letters, only the val
```

```

ue is URL encoded here.
url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHARSET)).append("&");
}
return url.toString().substring(0, url.length() - 1);
}
public static void main(String[] args) throws Exception {
    TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap enables automatic sort
    ing
    // A random number should be used when actually calling, for example: params.put("Nonce", new Ran
    dom().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 example: params.put
    ("Timestamp", System.currentTimeMillis() / 1000);
    params.put("Timestamp", 1465185768); // Common parameter
    params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"); // Common parameter
    params.put("Action", "DescribeInstances"); // Common parameter
    params.put("Version", "2017-03-12"); // Common parameter
    params.put("Region", "ap-guangzhou"); // Common parameter
    params.put("Limit", 20); // Business parameter
    params.put("Offset", 0); // Business parameter
    params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
    params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpq86cd98joQYCN3*****", "HmacSH
    A1")); // Common parameter
    System.out.println(getUrl(params));
}
}

```

Python

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

```

# -*- coding: utf8 -*-
import base64
import hashlib
import hmac
import time
import requests
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
def get_string_to_sign(method, endpoint, params):
    s = method + endpoint + "/"
    query_str = "&".join("%s=%s" % (k, params[k]) for k in sorted(params))
    return s + query_str
def sign_str(key, s, method):
    hmac_str = hmac.new(key.encode("utf8"), s.encode("utf8"), method).digest()

```

```

return base64.b64encode(hmac_str)
if __name__ == '__main__':
    endpoint = "cvm.tencentcloudapi.com"
    data = {
        'Action': 'DescribeInstances',
        'InstanceIds.0': 'ins-09dx96dg',
        'Limit': 20,
        'Nonce': 11886,
        'Offset': 0,
        'Region': 'ap-guangzhou',
        'SecretId': secret_id,
        'Timestamp': 1465185768, # int(time.time())
        'Version': '2017-03-12'
    }
    s = get_string_to_sign("GET", endpoint, data)
    data["Signature"] = sign_str(secret_key, s, hashlib.sha1)
    print(data["Signature"])
    # An actual invocation would occur here, which may incur fees after success
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)

```

Golang

```

package main
import (
    "bytes"
    "crypto/hmac"
    "crypto/sha1"
    "encoding/base64"
    "fmt"
    "sort"
)
func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
    params := map[string]string{
        "Nonce": "11886",
        "Timestamp": "1465185768",
        "Region": "ap-guangzhou",
        "SecretId": secretId,
        "Version": "2017-03-12",
        "Action": "DescribeInstances",
        "InstanceIds.0": "ins-09dx96dg",
        "Limit": "20",
        "Offset": "0",
    }
    var buf bytes.Buffer

```

```

buf.WriteString("GET")
buf.WriteString("cvm.tencentcloudapi.com")
buf.WriteString("/")
buf.WriteString("?")
// sort keys by ascii asc order
keys := make([]string, 0, len(params))
for k, _ := range params {
    keys = append(keys, k)
}
sort.Strings(keys)
for i := range keys {
    k := keys[i]
    buf.WriteString(k)
    buf.WriteString("=")
    buf.WriteString(params[k])
    buf.WriteString("&")
}
buf.Truncate(buf.Len() - 1)
hashed := hmac.New(sha1.New, []byte(secretKey))
hashed.Write(buf.Bytes())
fmt.Println(base64.StdEncoding.EncodeToString(hashed.Sum(nil)))
}

```

PHP

```

<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$params["Nonce"] = 11886;//rand();
$params["Timestamp"] = 1465185768;//time();
$params["Region"] = "ap-guangzhou";
$params["SecretId"] = $secretId;
$params["Version"] = "2017-03-12";
$params["Action"] = "DescribeInstances";
$params["InstanceIds.0"] = "ins-09dx96dg";
$params["Limit"] = 20;
$params["Offset"] = 0;
ksort($params);
$signStr = "GETcvm.tencentcloudapi.com/?";
foreach ( $params as $key => $value ) {
    $signStr = $signStr . $key . "=" . $value . "&";
}
$signStr = substr($signStr, 0, -1);
$signature = base64_encode(hash_hmac("sha1", $signStr, $secretKey, true));
echo $signature.PHP_EOL;
// need to install and enable curl extension in php.ini
// $params["Signature"] = $signature;

```

```
// $url = "https://cvm.tencentcloudapi.com/?".http_build_query($param);
// echo $url.PHP_EOL;
// $ch = curl_init();
// curl_setopt($ch, CURLOPT_URL, $url);
// $output = curl_exec($ch);
// curl_close($ch);
// echo json_decode($output);
```

Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'time'
require 'openssl'
require 'base64'
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
method = 'GET'
endpoint = 'cvm.tencentcloudapi.com'
data = {
  'Action' => 'DescribeInstances',
  'InstanceIds.0' => 'ins-09dx96dg',
  'Limit' => 20,
  'Nonce' => 11886,
  'Offset' => 0,
  'Region' => 'ap-guangzhou',
  'SecretId' => secret_id,
  'Timestamp' => 1465185768, # Time.now.to_i
  'Version' => '2017-03-12',
}
sign = method + endpoint + '/?'
params = []
data.sort.each do |item|
  params << "#{item[0]}=#{item[1]}"
end
sign += params.join('&')
digest = OpenSSL::Digest.new('sha1')
data['Signature'] = Base64.encode64(OpenSSL::HMAC.digest(digest, secret_key, sign))
puts data['Signature']
# require 'net/http'
# uri = URI('https://' + endpoint)
# uri.query = URI.encode_www_form(data)
# p uri
# res = Net::HTTP.get_response(uri)
# puts res.body
```

DotNet

```
using System;
using System.Collections.Generic;
using System.Net;
using System.Security.Cryptography;
using System.Text;
public class Application {
    public static string Sign(string signKey, string secret)
    {
        string signRet = string.Empty;
        using (HMACSHA1 mac = new HMACSHA1(Encoding.UTF8.GetBytes(signKey)))
        {
            byte[] hash = mac.ComputeHash(Encoding.UTF8.GetBytes(secret));
            signRet = Convert.ToBase64String(hash);
        }
        return signRet;
    }
    public static string MakeSignPlainText(SortedDictionary<string, string> requestParams, string requestMethod, string requestHost, string requestPath)
    {
        string retStr = "";
        retStr += requestMethod;
        retStr += requestHost;
        retStr += requestPath;
        retStr += "?";
        string v = "";
        foreach (string key in requestParams.Keys)
        {
            v += string.Format("{0}={1}&", key, requestParams[key]);
        }
        retStr += v.TrimEnd('&');
        return retStr;
    }
    public static void Main(string[] args)
    {
        string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
        string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
        string endpoint = "cvm.tencentcloudapi.com";
        string region = "ap-guangzhou";
        string action = "DescribeInstances";
        string version = "2017-03-12";
        double RequestTimestamp = 1465185768;
        // long timestamp = ToTimestamp() / 1000;
        // string requestTimestamp = timestamp.ToString();
        Dictionary<string, string> param = new Dictionary<string, string>();
        param.Add("Limit", "20");
    }
}
```

```

param.Add("Offset", "0");
param.Add("InstanceIds.0", "ins-09dx96dg");
param.Add("Action", action);
param.Add("Nonce", "11886");
// param.Add("Nonce", Math.Abs(new Random().Next()).ToString());
param.Add("Timestamp", RequestTimestamp.ToString());
param.Add("Version", version);
param.Add("SecretId", SECRET_ID);
param.Add("Region", region);
SortedDictionary<string, string> headers = new SortedDictionary<string, string>(param, StringComparer.Ordinal);
string sigInParam = MakeSignPlainText(headers, "GET", endpoint, "/");
Console.WriteLine(sigInParam);
string sigOutParam = Sign(SECRET_KEY, sigInParam);
Console.WriteLine("GET https://cvm.tencentcloudapi.com");
foreach (KeyValuePair<string, string> kv in headers)
{
    Console.WriteLine(kv.Key + ": " + kv.Value);
}
Console.WriteLine("Signature" + ": " + WebUtility.UrlEncode(sigOutParam));
Console.WriteLine();
string result = "https://cvm.tencentcloudapi.com/?";
foreach (KeyValuePair<string, string> kv in headers)
{
    result += WebUtility.UrlEncode(kv.Key) + "=" + WebUtility.UrlEncode(kv.Value) + "&";
}
result += WebUtility.UrlEncode("Signature") + "=" + WebUtility.UrlEncode(sigOutParam);
Console.WriteLine("GET " + result);
}
}

```

NodeJS

```

const crypto = require('crypto');
function get_req_url(params, endpoint){
    params['Signature'] = escape(params['Signature']);
    const url_strParam = sort_params(params)
    return "https://" + endpoint + "/" + url_strParam.slice(1);
}
function formatSignString(reqMethod, endpoint, path, strParam){
    let strSign = reqMethod + endpoint + path + "?" + strParam.slice(1);
    return strSign;
}
function sha1(secretKey, strsign){
    let signMethodMap = {'HmacSHA1': "sha1"};
    let hmac = crypto.createHmac(signMethodMap['HmacSHA1'], secretKey || "");
    return hmac.update(Buffer.from(strsign, 'utf8')).digest('base64')
}

```



```
}  
  
function sort_params(params){  
  let strParam = "";  
  let keys = Object.keys(params);  
  keys.sort();  
  for (let k in keys) {  
    //k = k.replace(/_/g, '.');  
    strParam += ("&" + keys[k] + "=" + params[keys[k]]);  
  }  
  return strParam  
}  
  
function main(){  
  const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"  
  const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"  
  const endpoint = "cvm.tencentcloudapi.com"  
  const Region = "ap-guangzhou"  
  const Version = "2017-03-12"  
  const Action = "DescribeInstances"  
  const Timestamp = 1465185768  
  // const Timestamp = Math.round(Date.now() / 1000)  
  const Nonce = 11886  
  //const nonce = Math.round(Math.random() * 65535)  
  let params = {};  
  params['Action'] = Action;  
  params['InstanceIds.0'] = 'ins-09dx96dg';  
  params['Limit'] = 20;  
  params['Offset'] = 0;  
  params['Nonce'] = Nonce;  
  params['Region'] = Region;  
  params['SecretId'] = SECRET_ID;  
  params['Timestamp'] = Timestamp;  
  params['Version'] = Version;  
  strParam = sort_params(params)  
  const reqMethod = "GET";  
  const path = "/";  
  strSign = formatSignString(reqMethod, endpoint, path, strParam)  
  console.log(strSign)  
  console.log("-----")  
  params['Signature'] = sha1(SECRET_KEY, strSign)  
  console.log(params['Signature'])  
  console.log("-----")  
  const req_url = get_req_url(params, endpoint)  
  console.log(params['Signature'])  
  console.log("-----")  
  console.log(req_url)  
}  
main()
```

Responses

Last updated : 2020-07-03 09:29:02

Response for Successful Requests

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

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

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

Response for Failed Requests

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

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

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

Common Error Codes

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

Error Code	Description
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.

Error Code	Description
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.

Session APIs

UpdateGameServerSession

Last updated : 2021-05-11 10:58:55

1. API Description

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

This API is used to update a game server session.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: UpdateGameServerSession.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
GameServerSessionId	Yes	String	Game server session ID. It should contain 1 to 256 ASCII characters.
MaximumPlayerSessionCount	No	Integer	The maximum number of players, which cannot be less than 0.

Name	No	String	Name of the game server session. It should contain 1 to 1024 ASCII characters.
PlayerSessionCreationPolicy	No	String	Player session creation policy, which includes <code>ACCEPT_ALL</code> (allow all players) and <code>DENY_ALL</code> (reject all players).
ProtectionPolicy	No	String	Protection policy, which includes <code>NoProtection</code> (no protection), <code>TimeLimitProtection</code> (time-limited protection) and <code>FullProtection</code> (full protection)

3. Output Parameters

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

4. Example

Example1 Updating game session properties

This example shows you how to update the properties of a game session.

Input Example

```
https://gse.tencentcloudapi.com/?Action=UpdateGameServerSession
&GameServerSessionId=qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gsses
s-aaaa-llqsssu/PlacementId-124ddda-4e28-1111-222b-abcde
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSession": {
```

```
"AvailabilityStatus": "Enable",
"CreationTime": "2020-07-30T03:55:43Z",
"CreatorId": "",
"CurrentCustomCount": 0,
"CurrentPlayerSessionCount": 0,
"DnsName": "",
"FleetId": "fleet-qp33caaa-35555",
"GameProperties": [],
"GameServerSessionData": "",
"GameServerSessionId": "qcs::gse:ap-shanghai:uin/100000010000:gameserversession/fleet-qp33caaa-35555/gssess-qt2222-uuu",
"InstanceType": "S5.LARGE8",
"IpAddress": "127.0.0.1",
"MatchmakerData": "",
"MaxCustomCount": 0,
"MaximumPlayerSessionCount": 100,
"Name": "",
"PlayerSessionCreationPolicy": "ACCEPT_ALL",
"Port": 6000,
"Status": "ACTIVATING",
"StatusReason": "",
"TerminationTime": null,
"Weight": 5
},
"RequestId": "s15960816666663333"
}
```

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.
InvalidParameterValue	Incorrect parameter value.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

StopGameServerSessionPlacement

Last updated : 2021-05-11 10:58:56

1. API Description

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

This API is used to stop placing a game server session.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: StopGameServerSessionPlacement.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
PlacementId	Yes	String	Unique ID of game server session placement

3. Output Parameters

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

GameServerSessionPlacement	GameServerSessionPlacement	Game server session placement
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Stopping a game server session placement request

Input Example

```
https://gse.tencentcloudapi.com/?Action=StopGameServerSessionPlacement
&PlacementId=PlacementId-3a7d34cd-5240-11ea-b02a-3464sdfsfsdf13fe
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessionPlacement": {
      "DnsName": "",
      "EndTime": "2020-02-18T11:33:49Z",
      "GameProperties": [
        {
          "Key": "Key-8658b11f-5242-11ea-9c67-3464a435513fe",
          "Value": "Value-8658b120-5242-11ea-8527-34t4a91513fe"
        }
      ],
      "GameServerSessionData": "GameServerSessionData-8658b121-5242-11ea-af53-34644351513fe",
      "GameServerSessionId": "",
      "GameServerSessionName": "GameServerSessionName-8658b122-5242-11ea-9f8f-3464491513fe",
      "GameServerSessionQueueName": "PlacementTwo",
      "GameServerSessionRegion": "",
      "IpAddress": "",
      "MatchmakerData": "",
      "MaximumPlayerSessionCount": 100,
      "PlacedPlayerSessions": [],
      "PlacementId": "PlacementId-3a7d34cd-5240-11ea-b02a-3464sdfsfsdf13fe",
      "PlayerLatencies": [
        {
```

```
"LatencyInMilliseconds": 10000,
"PlayerId": "Player-8658b123-5242-11ea-9e2f-3464sf91513fe",
"RegionIdentifier": "ap-shanghai"
},
],
"Port": 0,
"StartTime": "2020-02-18T11:33:49Z",
"Status": "CANCELLED"
},
"RequestId": "2f631834-4c91-4c9b-a13a-2d5757582eb5f"
}
```

5. Developer Resources

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- [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.
ResourceNotFound	The resource does not exist.

UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

StartGameServerSessionPlacement

Last updated : 2021-05-11 10:58:56

1. API Description

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

This API is used to start placing a game server session.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The used for this API: StartGameServerSession
Version	Yes	String	Common parameter. The used for this API: 2019-1
Region	Yes	String	Common parameter. For information, please see t regions supported by the
PlacementId	Yes	String	The unique ID of the gam session placement. It shc contain up to 48 ASCII ch supporting [a-zA-Z0-9-]+
GameServerSessionQueueName	Yes	String	Game server session que

MaximumPlayerSessionCount	Yes	Integer	The maximum number of that can be connected simultaneously to the game session. It should have a value 1 to the maximum number of player sessions.
DesiredPlayerSessions.N	No	Array of DesiredPlayerSession	Player game session info
GameProperties.N	No	Array of GameProperty	Player game session attributes
GameServerSessionData	No	String	Data of game server session to 4096 ASCII characters allowed.
GameServerSessionName	No	String	Name of game server session to 4096 ASCII characters allowed.
PlayerLatencies.N	No	Array of PlayerLatency	Player latency

3. Output Parameters

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

4. Example

Example1 Starting a game server session placement request

Input Example

```
https://gse.tencentcloudapi.com/?Action=StartGameServerSessionPlacement
&PlacementId=PlacementId-3a7d34cd-5240-11ea-b02a-3464a91513fe
&GameServerSessionQueueName=PlacementTwo
&MaximumPlayerSessionCount=100
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessionPlacement": {
      "DnsName": "",
      "EndTime": null,
      "GameProperties": [],
      "GameServerSessionData": "",
      "GameServerSessionId": "",
      "GameServerSessionName": "",
      "GameServerSessionQueueName": "PlacementTwo",
      "GameServerSessionRegion": "",
      "IpAddress": "",
      "MatchmakerData": "",
      "MaximumPlayerSessionCount": 100,
      "PlacedPlayerSessions": [],
      "PlacementId": "PlacementId-3a7d34cd-5240-11ea-b02a-3464a91513fe",
      "PlayerLatencies": [],
      "Port": 0,
      "StartTime": "2020-02-18T11:17:23Z",
      "Status": "PENDING"
    },
    "RequestId": "84708eb1-0247-43f8-834e-c7edfdfsfdgd53"
  }
}
```

5. Developer Resources

SDK

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- [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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

JoinGameServerSessionBatch

Last updated : 2021-04-08 11:35:29

1. API Description

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

This API is used to join game server sessions in batch.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: JoinGameServerSessionBatch.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
GameServerSessionId	Yes	String	Game server session ID. It should contain 1 to 256 ASCII characters.
PlayerIds.N	Yes	Array of String	Player ID list. At least 1 ID and up to 25 IDs.
PlayerDataMap	No	PlayerDataMap	Player custom data

3. Output Parameters

Parameter Name	Type	Description
PlayerSessions	Array of PlayerSession	Player session list. Up to 25 sessions. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating a player session

This example shows you how to create a player session.

Input Example

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

{
  "PlayerIds": [
    "xx"
  ],
  "GameServerSessionId": "qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gssess-aaaa-ilqsssu/PlacementId-124ddda-4e28-1111-222b-abcde",
  "PlayerDataMap": {
    "Value": "xx",
    "Key": "xx"
  }
}
```

Output Example

```
{
  "Response": {
    "PlayerSessions": [
      {
        "CreationTime": "2019-12-06T11:33:19Z",
        "DnsName": "",
        "FleetId": "fleet-ptest40-f001",
        "GameServerSessionId": "qcs:gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gssess-aaaa-i lqsssu/PlacementId-124ddda-4e28-1111-222b-abcde",
        "IpAddress": "0000.0.0.0",
        "PlayerData": "TestPlayerData",
        "PlayerId": "",
        "PlayerSessionId": "psess-d44990-test5",
        "Port": 8000,
        "Status": "COMPLETED",
        "TerminationTime": "2019-12-06T11:33:18Z"
      }
    ],
    "RequestId": "0fffff4-oooo-4333d-9222-testaaa"
  }
}
```

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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnsupportedOperation	Unsupported operation.

GetGameServerSessionLogUrl

Last updated : 2021-05-11 10:58:57

1. API Description

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

This API is used to get the log URL of a game server session.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: GetGameServerSessionLogUrl.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
GameServerSessionId	Yes	String	Game server session ID. It should contain 1 to 48 ASCII characters.

3. Output Parameters

--	--	--

Parameter Name	Type	Description
PreSignedUrl	String	Log download URL. It should contain 1 to 1024 ASCII characters. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Getting the log URL of game session

This example shows you how to get the log URL of a game session.

Input Example

```
https://gse.tencentcloudapi.com/?Action=GetGameServerSessionLogUrl
&GameServerSessionId=qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gsses
s-aaaa-llqsssu/PlacementId-124ddda-4e28-1111-222b-abcde
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "PreSignedUrl": "http://test/url-001",
    "RequestId": "s1596161996478632139"
  }
}
```

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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

DescribePlayerSessions

Last updated : 2021-05-11 10:58:58

1. API Description

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

This API is used to get the list of player sessions.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribePlayerSessions.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
GameServerSessionId	No	String	Game server session ID. It should contain 1 to 48 ASCII characters.
Limit	No	Integer	Maximum number of entries in a single query
NextToken	No	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024

			ASCII characters.
PlayerId	No	String	Player ID. It should contain 1 to 1024 ASCII characters.
PlayerSessionId	No	String	Player session ID. It should contain 1 to 1024 ASCII characters.
PlayerSessionStatusFilter	No	String	Player session status. Valid values: RESERVED, ACTIVE, COMPLETED, TIMEDOUT

3. Output Parameters

Parameter Name	Type	Description
PlayerSessions	Array of PlayerSession	Player session list Note: this field may return null, indicating that no valid values can be obtained.
NextToken	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying player session list

This example shows you how to query the list of player sessions.

Input Example

```
https://gse.tencentcloudapi.com/?Action=DescribePlayerSessions
&GameServerSessionId=qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gsses
s-aaaa-llqsssu/PlacementId-124ddda-4e28-1111-222b-abcde
&Limit=5
&NextToken=nextToken-abc78-1122bc
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "NextToken": "nextToken-4hpp445-niuu789",
    "PlayerSessions": [
      {
        "CreationTime": "2019-12-06T11:33:19Z",
        "DnsName": "",
        "FleetId": "fleet-00test-a5testzz",
        "GameServerSessionId": "qcs:gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gssess-aaaa-i lqsssu/PlacementId-124ddda-4e28-1111-222b-abcde",
        "IpAddress": "0000.0.0.0",
        "PlayerData": "TestPlayerData",
        "PlayerId": "",
        "PlayerSessionId": "psess-d44990-test5",
        "Port": 8000,
        "Status": "COMPLETED",
        "TerminationTime": "2019-12-06T11:33:18Z"
      }
    ],
    "RequestId": "0ffff4-oooo-43333d-9222-testaaa"
  }
}
```

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.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

DescribeGameServerSessions

Last updated : 2021-05-11 10:58:58

1. API Description

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

This API is used to query the list of game server sessions.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribeGameServerSessions.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
AliasId	No	String	Alias ID
FleetId	No	String	Fleet ID
GameServerSessionId	No	String	Game server session ID. It should contain 1 to 48 ASCII characters.
Limit	No	Integer	Maximum number of entries in a single query

NextToken	No	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters.
StatusFilter	No	String	Game server session status. Valid values: ACTIVE, ACTIVATING, TERMINATED, TERMINATING, ERROR

3. Output Parameters

Parameter Name	Type	Description
GameServerSessions	Array of GameServerSession	Game server session list Note: this field may return null, indicating that no valid values can be obtained.
NextToken	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying game session list

This example shows you how to query the list of game sessions.

Input Example

```
https://gse.tencentcloudapi.com/?Action=DescribeGameServerSessions
&AliasId=a
&GameServerSessionId=qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gsses
s-aaaa-i lqsssu/PlacementId-124ddda-4e28-1111-222b-111222
&Limit=1
&NextToken=nextToken-4hpp445-niuu789
&StatusFilter=ACTIVATING
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessions": [
      {
        "AvailabilityStatus": "Enable",
        "CreationTime": "2020-07-30T03:55:43Z",
        "CreatorId": "",
        "CurrentCustomCount": 0,
        "CurrentPlayerSessionCount": 0,
        "DnsName": "",
        "FleetId": "fleet-qp33caaa-35555",
        "GameProperties": [],
        "GameServerSessionData": "",
        "GameServerSessionId": "qcs:gse:ap-shanghai:uin/100000010000:gameserversession/fleet-qp33caaa-35555/gssess-qtk2222-uuu",
        "InstanceType": "S5.LARGE8",
        "IpAddress": "127.0.0.1",
        "MatchmakerData": "",
        "MaxCustomCount": 0,
        "MaximumPlayerSessionCount": 100,
        "Name": "",
        "PlayerSessionCreationPolicy": "ACCEPT_ALL",
        "Port": 6000,
        "Status": "ACTIVATING",
        "StatusReason": "",
        "TerminationTime": null,
        "Weight": 5
      }
    ],
    "NextToken": "",
    "RequestId": "0ffff4-oooo-43333d-9222-testaaa"
  }
}
```

5. Developer Resources

SDK

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- [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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

DescribeGameServerSessionPlacement

Last updated : 2021-05-11 10:58:58

1. API Description

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

This API is used to query the placement of a game server session.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribeGameServerSessionPlacement.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
PlacementId	Yes	String	Unique ID of game server session placement

3. Output Parameters

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

GameServerSessionPlacement	GameServerSessionPlacement	Game server session placement
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying game server session placement

Input Example

```
https://gse.tencentcloudapi.com/?Action=DescribeGameServerSessionPlacement
&PlacementId=PlacementId-3a7d34cd-5240-11ea-b02a-3464sdf513fe
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessionPlacement": {
      "DnsName": "",
      "EndTime": "2020-02-18T11:27:23Z",
      "GameProperties": [
        {
          "Key": "Key-3a7d34d0-5240-11ea-a3b0-3464afff13fe",
          "Value": "Value-3a7d34d1-5240-11ea-9466-344654391513fe"
        }
      ],
      "GameServerSessionData": "GameServerSessionData-3a7d34d2-5240-11ea-8dd4-3464afdf1513fe",
      "GameServerSessionId": "",
      "GameServerSessionName": "GameServerSessionName-3a7d34d3-5240-11ea-8564-3464sd1513fe",
      "GameServerSessionQueueName": "PlacementTwo",
      "GameServerSessionRegion": "",
      "IpAddress": "",
      "MatchmakerData": "",
      "MaximumPlayerSessionCount": 100,
      "PlacedPlayerSessions": [],
      "PlacementId": "PlacementId-3a7d34cd-5240-11ea-b02a-3464sdf513fe",
      "PlayerLatencies": [
        {
```

```
"LatencyInMilliseconds": 10000,
"PlayerId": "Player-3a7d34d4-5240-11ea-a2ee-3464a91513fe",
"RegionIdentifier": "ap-shanghai"
},
],
"Port": 0,
"StartTime": "2020-02-18T11:17:23Z",
"Status": "TIMED_OUT"
}
}
}
```

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.
ResourceNotFound	The resource does not exist.

ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

DescribeGameServerSessionDetails

Last updated : 2021-05-11 10:58:59

1. API Description

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

This API is used to query the list of game server session details.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribeGameServerSessionDetails.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
AliasId	No	String	Alias ID
FleetId	No	String	Fleet ID
GameServerSessionId	No	String	Game server session ID. It should contain 1 to 48 ASCII characters.
Limit	No	Integer	Maximum number of entries in a single query

NextToken	No	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters.
StatusFilter	No	String	Game server session status. Valid values: ACTIVE, ACTIVATING, TERMINATED, TERMINATING, ERROR

3. Output Parameters

Parameter Name	Type	Description
GameServerSessionDetails	Array of GameServerSessionDetail	List of game server session details Note: this field may return null, indicating that no valid values can be obtained.
NextToken	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Getting the list of game session details

This example shows you how to get the list of game session details.

Input Example

```
https://gse.tencentcloudapi.com/?Action=DescribeGameServerSessionDetails
&FleetId=fleet-test00-1223
&Limit=5
&NextToken=nextToken-test01-tt
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessionDetails": [
      {
        "GameServerSession": {
          "AvailabilityStatus": "Enable",
          "CreationTime": "2020-07-30T03:55:43Z",
          "CreatorId": "",
          "CurrentCustomCount": 0,
          "CurrentPlayerSessionCount": 0,
          "DnsName": "",
          "FleetId": "fleet-qp33caaa-35555",
          "GameProperties": [],
          "GameServerSessionData": "",
          "GameServerSessionId": "qcs:gse:ap-shanghai:uin/100000010000:gameserversession/fleet-qp33caaa-35555/gssess-qtk2222-uuu",
          "InstanceType": "S5.LARGE8",
          "IpAddress": "127.0.0.1",
          "MatchmakerData": "",
          "MaxCustomCount": 0,
          "MaximumPlayerSessionCount": 100,
          "Name": "",
          "PlayerSessionCreationPolicy": "ACCEPT_ALL",
          "Port": 6000,
          "Status": "ACTIVATING",
          "StatusReason": "",
          "TerminationTime": null,
          "Weight": 5
        },
        "ProtectionPolicy": "TimeLimitProtection"
      }
    ],
    "NextToken": "",
    "RequestId": "0a6ce70b-ffc8-4b9a-9255-d1915test"
  }
}
```

5. Developer Resources

SDK

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- [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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

CreateGameServerSession

Last updated : 2021-05-11 10:58:59

1. API Description

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

This API is used to create a game server session.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: CreateGameServerSession.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
MaximumPlayerSessionCount	Yes	Integer	The maximum number of players, which cannot be less than 0.
AliasId	No	String	Alias ID. You need to specify an

			alias ID or fleet ID for each request. If both of them are specified, the fleet ID shall prevail.
CreatorId	No	String	Creator ID. Up to 1024 ASCII characters are allowed.
FleetId	No	String	Fleet ID. You need to specify an alias ID or fleet ID for each request. If both of them are specified, the fleet ID shall prevail.
GameProperties.N	No	Array of GameProperty	Game attributes. Up to 16 groups of attributes are allowed.
GameServerSessionData	No	String	The attribute details of game server session. Up to 4096 ASCII characters are allowed.
GameServerSessionId	No	String	The custom ID of game server session. Up to 4096 ASCII characters are allowed.
IdempotencyToken	No	String	Idempotency token. Up to 48 ASCII characters are allowed.
Name	No	String	The name of game server session. Up to 1024 ASCII characters are allowed.

3. Output Parameters

Parameter Name	Type	Description
GameServerSession	GameServerSession	Game server session 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 Creating game server session

This example shows you how to create a game server session.

Input Example

```
https://gse.tencentcloudapi.com/?Action=CreateGameServerSession
&AliasId=alias-aatest-66bb
&MaximumPlayerSessionCount=10
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSession": {
      "AvailabilityStatus": "Enable",
      "CreationTime": "2020-07-30T03:55:43Z",
      "CreatorId": "",
      "CurrentCustomCount": 0,
      "CurrentPlayerSessionCount": 0,
      "DnsName": "",
      "FleetId": "fleet-qp33caaa-35555",
      "GameProperties": [],
      "GameServerSessionData": "",
      "GameServerSessionId": "qcs:gse:ap-shanghai:uin/100000010000:gameserversession/fleet-qp33caaa-35555/gssess-qt2222-uuu",
      "InstanceType": "S5.LARGE8",
      "IpAddress": "127.0.0.1",
      "MatchmakerData": "",
      "MaxCustomCount": 0,
      "MaximumPlayerSessionCount": 100,
      "Name": "",
      "PlayerSessionCreationPolicy": "ACCEPT_ALL",
      "Port": 6000,
      "Status": "ACTIVATING",
      "StatusReason": "",
      "TerminationTime": null,
      "Weight": 5
    },
    "RequestId": "s15960816666663333"
  }
}
```

5. Developer Resources

SDK

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- [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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.

UnauthorizedOperation.ServiceNotOpened	The service is not activated.
--	-------------------------------

SearchGameServerSessions

Last updated : 2021-05-11 10:58:56

1. API Description

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

This API is used to search in the list of game server sessions.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: SearchGameServerSessions.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
AliasId	No	String	Alias ID
FleetId	No	String	Fleet ID
Limit	No	Integer	Maximum number of entries in a single query
NextToken	No	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters.

FilterExpression	No	String	Search filter expression. Valid values: gameServerSessionName: game session name in <code>String</code> type gameServerSessionId: game session ID in <code>String</code> type maximumSessions: maximum number of player sessions in <code>Number</code> type creationTimeMillis: creation time in milliseconds in <code>Number</code> type playerSessionCount: current number of player sessions in <code>Number</code> type hasAvailablePlayerSessions: whether there is available player session in <code>String</code> type. Valid values: true, false gameServerSessionProperties: game session attributes in <code>String</code> type Expressions in <code>String</code> type support = and <> for judgment Expressions in <code>Number</code> type support =, <>, >, >=, <, and <= for judgment Example: If FilterExpression takes the value: playerSessionCount>=2 AND hasAvailablePlayerSessions=true" It means searching for game sessions that have at least two players and have player sessions available. If FilterExpression takes the value: gameServerSessionProperties.K1 = 'V1' AND gameServerSessionProperties.K2 = 'V2' OR gameServerSessionProperties.K3 = 'V3' it means searching for game sessions that meets the following game server session attributes <pre>{ "GameProperties":[{ "Key":"K1", "Value":"V1" }, { "Key":"K2", "Value":"V2" }] }</pre>
------------------	----	--------	--

			<pre> }, { "Key": "K3", "Value": "V3" }] } </pre>
SortExpression	No	String	Sorting keyword Valid values: gameServerSessionName: game session name in <code>String</code> type gameServerSessionId: game session ID in <code>String</code> type maximumSessions: maximum number of player sessions in <code>Number</code> type creationTimeMillis: creation time in milliseconds in <code>Number</code> type playerSessionCount: current number of player sessions in <code>Number</code> type

3. Output Parameters

Parameter Name	Type	Description
GameServerSessions	Array of GameServerSession	Game server session list Note: this field may return null, indicating that no valid values can be obtained.
NextToken	String	Pagination offset, which is used for querying the next page. It should contain 1 to 1024 ASCII characters. Note: this field may return <code>null</code>, indicating that no valid value is obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Searching for a game session by `creationTimeMillis`

This example shows you how to search for a game session by the creation time.

`creationTimeMillis` = 1575518668000, which is the game session creation time in milliseconds in UTC time.

Filter expression:

FilterExpression: `creationTimeMillis=1575518668000`

Input Example

```
https://gse.tencentcloudapi.com/?Action=SearchGameServerSessions
&FleetId=fleet-qp3g3caa-b1adh8hq
&Limit=1
&NextToken=nextToken-4hpp445-niuu789
&FilterExpression=creationTimeMillis%3d1575518668000
&SortExpression=creationTimeMillis+ASC
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessions": [
      {
        "CreationTime": "2019-12-05T12:04:28Z",
        "CreatorId": "c2",
        "CurrentPlayerSessionCount": "0",
        "DnsName": "",
        "FleetId": "fleet-00test-a5testzz",
        "GameProperties": [
          {
            "Key": "Key-2aa06131-7d54-11ea-b3e7-3464a91513fe",
            "Value": "Value-2aa06132-7d54-11ea-8199-3464a91513fe"
          },
          {
            "Key": "Key-2aa06133-7d54-11ea-aaac-3464a91513fe",
            "Value": "Value-2aa06134-7d54-11ea-8fa2-3464a91513fe"
          },
          {
            "Key": "Key-2aa06135-7d54-11ea-a9c1-3464a91513fe",
            "Value": "Value-2aa06136-7d54-11ea-b30b-3464a91513fe"
          }
        ],
        "GameServerSessionData": "",
        "GameServerSessionId": "qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gssess-aaaa-i lqsssu/PlacementId-124ddda-4e28-1111-222b-111222",
        "AvailabilityStatus": "ENABLE",
      }
    ]
  }
}
```



```

"InstanceType": "S5.SMALL2",
"IpAddress": "0000.0.0.0",
"MatchmakerData": "",
"MaximumPlayerSessionCount": "10",
"Name": "game-session-name",
"PlayerSessionCreationPolicy": "ACCEPT_ALL",
"Port": "8000",
"Status": "ACTIVE",
"StatusReason": "",
"TerminationTime": "2019-12-05T04:04:28Z",
"CurrentCustomCount": 0,
"MaxCustomCount": 10,
"Weight": 5
}
],
"NextToken": "",
"RequestId": "0ffff4-oooo-4333d-9222-testaaa"
}
}

```

Example2 Searching for a game session by GameProperties

This example shows you how to query the list of game sessions whose `GameProperties` includes a key-value pair of `Key-2aa06135-7d54-11ea-a9c1-3464a91513` and `Value-2aa06136-7d54-11ea-b30b-3464a91513fe`.

Filter expression:

FilterExpression: gameServerSessionProperties.Key-2aa06135-7d54-11ea-a9c1-3464a91513fe=Value-2aa06136-7d54-11ea-b30b-3464a91513fe

Input Example

```

https://gse.tencentcloudapi.com/?Action=SearchGameServerSessions
&FleetId=fleet-qp3g3caa-b1adh8hq
&Limit=1
&NextToken=nextToken-4hpp445-niuu789
&FilterExpression=gameServerSessionProperties.Key-2aa06135-7d54-11ea-a9c1-3464a91513fe%3dValue-2a
a06136-7d54-11ea-b30b-3464a91513fe
&SortExpression=creationTimeMillis+ASC
&<Common request parameters>

```

Output Example

```

{
  "Response": {
    "GameServerSessions": [

```

```
{
  "AvailabilityStatus": "Unknown",
  "CreationTime": "2020-04-13T06:58:27Z",
  "CreatorId": "",
  "CurrentCustomCount": 0,
  "CurrentPlayerSessionCount": 0,
  "DnsName": "",
  "FleetId": "fleet-qp3g3caa-b1adh8hq",
  "GameProperties": [
    {
      "Key": "Key-2aa06131-7d54-11ea-b3e7-3464a91513fe",
      "Value": "Value-2aa06132-7d54-11ea-8199-3464a91513fe"
    },
    {
      "Key": "Key-2aa06133-7d54-11ea-aaac-3464a91513fe",
      "Value": "Value-2aa06134-7d54-11ea-8fa2-3464a91513fe"
    },
    {
      "Key": "Key-2aa06135-7d54-11ea-a9c1-3464a91513fe",
      "Value": "Value-2aa06136-7d54-11ea-b30b-3464a91513fe"
    }
  ],
  "GameServerSessionData": "",
  "GameServerSessionId": "qcs:gse:ap-shanghai:uin/0:gameserversession/fleet-qp3g3caa-b1adh8hq/gsse
ss-k17ia36c-omi2numy",
  "InstanceType": "S5.SMALL2",
  "IpAddress": "200.0.0.1",
  "MatchmakerData": "",
  "MaxCustomCount": 0,
  "MaximumPlayerSessionCount": 78,
  "Name": "GameServerSessionName-2aa06130-7d54-11ea-9263-3464a91513fe",
  "PlayerSessionCreationPolicy": "ACCEPT_ALL",
  "Port": 59920,
  "Status": "ACTIVE",
  "StatusReason": "",
  "TerminationTime": null,
  "Weight": 0
},
  "NextToken": "ntoken-bldnitiu-4cnjt4c0",
  "RequestId": "s1587465032390722054"
}
```

Example3 Searching for a game session using complex expression

Filter expression:

FilterExpression:

(maximumSessions>=10 OR playerSessionCount=0) OR NOT (creationTimeMillis>1575518668000)
OR (maximumSessions>=10 AND hasAvailablePlayerSessions=true)

Input Example

```
https://gse.tencentcloudapi.com/?Action=SearchGameServerSessions
&FleetId=fleet-qp3g3caa-b1adh8hq
&Limit=1
&NextToken=nextToken-4hpp445-niuu789
&FilterExpression=(maximumSessions%3e%3d10+OR+playerSessionCount%3d0)+OR+NOT+(creationTimeMillis%
3e1575518668000)+OR+(maximumSessions%3e%3d10+AND+hasAvailablePlayerSessions%3dtrue)
&SortExpression=creationTimeMillis+ASC
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GameServerSessions": [
      {
        "AvailabilityStatus": "Unknown",
        "CreationTime": "2020-04-13T06:58:07Z",
        "CreatorId": "",
        "MaxCustomCount": 0,
        "CurrentCustomCount": 0,
        "CurrentPlayerSessionCount": 0,
        "DnsName": "",
        "FleetId": "fleet-qp3g3caa-b1adh8hq",
        "GameProperties": [
          {
            "Key": "Key-1ea66e9e-7d54-11ea-a4aa-3464a91513fe",
            "Value": "Value-1ea66e9f-7d54-11ea-a71e-3464a91513fe"
          },
          {
            "Key": "Key-1ea66ea0-7d54-11ea-9afd-3464a91513fe",
            "Value": "Value-1ea66ea1-7d54-11ea-a5f2-3464a91513fe"
          },
          {
            "Key": "Key-1ea66ea2-7d54-11ea-b184-3464a91513fe",
            "Value": "Value-1ea66ea3-7d54-11ea-b355-3464a91513fe"
          }
        ],
        "GameServerSessionData": "",
        "GameServerSessionId": "qcs::gse:ap-shanghai:uin/0:gameserversession/fleet-qp3g3caa-b1adh8hq/gsse"
```

```

ss-k17ia36c-2hs38yc0",
"InstanceType": "S5.SMALL2",
"IpAddress": "200.0.0.2",
"MatchmakerData": "",
"MaximumPlayerSessionCount": 181,
"Name": "GameServerSessionName-1ea66e9d-7d54-11ea-b041-3464a91513fe",
"PlayerSessionCreationPolicy": "ACCEPT_ALL",
"Port": 59106,
"Status": "ACTIVE",
"StatusReason": "",
"TerminationTime": null,
"Weight": 0
},
{
"AvailabilityStatus": "Unknown",
"CreationTime": "2020-04-13T07:49:16Z",
"CreatorId": "",
"CurrentCustomCount": 0,
"CurrentPlayerSessionCount": 0,
"DnsName": "",
"FleetId": "fleet-qp3g3caa-b1adh8hq",
"GameProperties": [],
"GameServerSessionData": "",
"GameServerSessionId": "qcs:gse:ap-shanghai:uin/0:gameserversession/fleet-qp3g3caa-b1adh8hq/gsse
ss-k17ia36c-oik1x49i",
"InstanceType": "S5.SMALL2",
"IpAddress": "200.0.0.1",
"MatchmakerData": "",
"MaxCustomCount": 0,
"MaximumPlayerSessionCount": 200,
"Name": "GameServerSessionName-45bd031c-7d5b-11ea-acf8-52540024df83",
"PlayerSessionCreationPolicy": "ACCEPT_ALL",
"Port": 59110,
"Status": "ACTIVE",
"StatusReason": "",
"TerminationTime": null,
"Weight": 0
}
],
"NextToken": "ntoken-bldnitiu-4cnjt4c0",
"RequestId": "s1587466067806554523"
}
}

```

5. Developer Resources

SDK

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnsupportedOperation	Unsupported operation.

JoinGameServerSession

Last updated : 2021-05-11 10:58:57

1. API Description

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

This API is used to join a game server session.

A maximum of 1000 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: JoinGameServerSession.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
GameServerSessionId	Yes	String	Game server session ID. It should contain 1 to 256 ASCII characters.
PlayerId	Yes	String	Player ID. Up to 1024 ASCII characters are allowed.
PlayerData	No	String	Player custom data. Up to 2048 ASCII characters are allowed.

3. Output Parameters

Parameter Name	Type	Description
PlayerSession	PlayerSession	Player session 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 Creating one single player session

This example shows you how to create one single player session.

Input Example

```
https://gse.tencentcloudapi.com/?Action=JoinGameServerSession
&GameServerSessionId=qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gsses
s-aaaa-i lqsssu/PlacementId-124ddda-4e28-1111-222b-abcde
&PlayerData=testData
&PlayerId=testPlayer
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "PlayerSession": {
      "CreationTime": "2019-12-05T15:15:33Z",
      "DnsName": "",
      "FleetId": "fleet-sss-test01",
      "GameServerSessionId": "qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-p70zzzz/gs
sess-aaaa-i lqsssu/PlacementId-124ddda-4e28-1111-222b-abcde",
      "IpAddress": "0000.0.0.0",
      "PlayerData": "imangozhang",
      "PlayerId": "100",
      "PlayerSessionId": "psess-d44990-test5",
```

```
"Port": "8000",
"Status": "RESERVED",
"TerminationTime": null
},
"RequestId": "0ffff4-0000-4333d-9222-testaaa"
}
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.

ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnsupportedOperation	Unsupported operation.

EndGameServerSessionAndProcess

Last updated : 2021-06-23 17:07:03

1. API Description

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

This API is used to terminate the game server session and the corresponding process, which is applicable to time-limited protection and no protection.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: EndGameServerSessionAndProcess.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
GameServerSessionId	No	String	Game server session ID. If a game server session ID is passed in, its corresponding processes, game server sessions, and player sessions will be terminated.
IpAddress	No	String	The public IP of the CVM. You need to pass in

			IpAddress and Port at the same time to terminate the matched processes, game server sessions and player sessions (if any exists). It does not take effect in case only the IpAddress passed in.
Port	No	Integer	Port number. Value range: 1025 - 60000. You need to pass in IpAddress and Port at the same time to terminate the matched processes, game server sessions (if any exists) and player sessions (if any exists). It does not take effect in case only the IpAddress passed in.

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 Terminating the process of the game server session

Input Example

```
https://gse.tencentcloudapi.com/?Action=EndGameServerSessionAndProcess
&GameServerSessionId=qcs::gse:ap-shanghai:uin/1112222:gameserversession/fleet-qp3ga-pxxx/xxx
&IpAddress=0.0.0.0
&Port=8888
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "84708eb1-0247-43f8-834e-c7edfdfsfdgd53"
  }
}
```

5. Developer Resources

SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
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- [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.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.

Asset Package APIs

UpdateBucketCORSOpt

Last updated : 2021-05-26 17:44:11

1. API Description

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

This API (UpdateBucketCORSOpt) is used to configure CORS for COS.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: UpdateBucketCORSOpt.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
AllowedOrigins.N	Yes	Array of String	Allowed access source. For details, see COS Documentation .
AllowedMethods.N	Yes	Array of	Allowed HTTP method(s). Multiple methods are allowed, including PUT, GET, POST, and HEAD. For

		String	details, see COS Documentation .
AllowedHeaders.N	No	Array of String	Specifies the custom HTTP request headers that the browser is allowed to include in a CORS request. Wildcard (*) is supported, indicating allowing all headers (recommended). For details, see COS Documentation .
MaxAgeSeconds	No	Integer	Sets the validity duration for the CORS configuration (in second). For details, see COS Documentation .
ExposeHeaders.N	No	Array of String	CORS response header(s) that can be exposed to the browser, case-insensitive. If this parameter is not specified, the browser can access only simple response headers Cache-Control, Content-Type, Expires, and Last-Modified by default. For details, see COS Documentation .

3. Output Parameters

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

4. Example

Example1 Setting COS cross-origin request

This example shows you how to set COS cross-origin request.

Input Example

```
https://gse.tencentcloudapi.com/?Action=UpdateBucketCORSOpt
&AllowedOrigins.0=*
&AllowedMethods.0=GET
&AllowedHeaders.0=x-cos-meta-test
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "s1609831145190946000"
  }
}
```

5. Developer Resources

SDK

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
MissingParameter	Missing parameter.

OperationDenied	Operation denied
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

UpdateBucketAccelerateOpt

Last updated : 2021-05-11 10:59:01

1. API Description

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

This API (UpdateBucketAccelerateOpt) is used to enable COS global acceleration.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: UpdateBucketAccelerateOpt.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
Allowed	Yes	Boolean	<code>true</code> : enable global acceleration; <code>false</code> : disable global acceleration

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 This example shows you how to set COS global acceleration.

This example shows you how to configure COS global acceleration.

Input Example

```
https://gse.tencentcloudapi.com/?Action=UpdateBucketAccelerateOpt
&Allowed=true
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "s1609299213222354000"
  }
}
```

5. Developer Resources

SDK

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

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- [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.
InternalServerError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
OperationDenied	Operation denied
UnauthorizedOperation	The operation is unauthorized.

Server Fleet APIs

CopyFleet

Last updated : 2021-05-20 16:37:07

1. API Description

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

This API is used to replicate server fleet.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter used for the request.
Version	Yes	String	Common parameter used for the request.
Region	Yes	String	Common parameter for region information. See regions supported by the product.
FleetId	Yes	String	Server fleet ID.

Parameter Name	Required	Type	Description
CopyNumber	Yes	Integer	Replica number between 1 and 10, remaining obtained through Quota.
AssetId	No	String	Asset pack ID
Description	No	String	Description, 1-255 characters
InboundPermissions.N	No	Array of InboundPermission	Network configuration
InstanceType	No	String	Server type, through Official Instance Type
FleetType	No	String	Server fleet type, supports "on-demand" and "spot" now.
Name	No	String	Server fleet name, 1-50 characters
NewGameServerSessionProtectionPolicy	No	String	Protection policy, NoProtection, FullProtection, TimeLimitProtection
ResourceCreationLimitPolicy	No	ResourceCreationLimitPolicy	Limit policy
RuntimeConfiguration	No	RuntimeConfiguration	Progress configuration
GameServerSessionProtectionTimeLimit	No	Integer	Timeout period for protection, in minutes. Default is 10 minutes. Takes effect only when NewGameServerSessionProtectionPolicy is set as TimeLimitProtection.

Parameter Name	Required	Type	Description
SelectedScalingType	No	String	Whether to use scaling. Valid values: SCALING_UNASSOCIATE (unassociate); SCALING_ASSOCIATE (associate). Default value: SCALING_UNASSOCIATE.
SelectedCcnType	No	String	Whether to associate with a CCN. Valid values: CCN_UNSELECTED (unassociate); CCN_SELECTED (associate). Default value: CCN_UNSELECTED.
Tags.N	No	Array of Tag	Tag list. Up to 10 tags.
SystemDiskInfo	No	DiskInfo	System disk. (CLOUD_STORAGE_DISK_CAPACITY: capacity of Storage disk; CLOUD_STORAGE_DISK_INCREMENT: increment with 50-500 MB).
DataDiskInfo.N	No	Array of DiskInfo	Data disk. (CLOUD_STORAGE_DISK_CAPACITY: capacity of Storage disk; CLOUD_STORAGE_DISK_INCREMENT: increment with 10-32 GB).
SelectedTimerType	No	String	Whether to use timer policy. Valid values: TIMER_UNASSOCIATE (unassociate); TIMER_ASSOCIATE (associate). Default value is TIMER_UNASSOCIATE.
CcnInfos.N	No	Array of CcnInfo	Information including the CCN ID and the instance ID.
InternetMaxBandwidthOut	No	Integer	Maximum network bandwidth of the fleet. Value range: 0-100. Default value: 0.

3. Output Parameters

Parameter Name	Type	Description
FleetAttributes	Array of FleetAttributes	Server fleet attributes Note: this field may return <code>null</code> , indicating that no valid value is obtained.
TotalCount	Integer	The number of server fleets
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Replicating server fleet

Input Example

```
https://gse.tencentcloudapi.com/?Action=CopyFleet
&FleetId=fleet-qp3g3caa-2m6pzf4g
&AssetId=asset-qrdwl1a9
&Description=Human description
&InstanceType=S5.LARGE8
&FleetType=ON_DEMAND
&Name=testfleet
&NewGameServerSessionProtectionPolicy=TimeLimitProtection
&ResourceCreationLimitPolicy.NewGameServerSessionsPerCreator=2
&ResourceCreationLimitPolicy.PolicyPeriodInMinutes=0
&RuntimeConfiguration.GameServerSessionActivationTimeoutSeconds=5
&RuntimeConfiguration.MaxConcurrentGameServerSessionActivations=5
&RuntimeConfiguration.ServerProcesses.0.ConcurrentExecutions=10
&RuntimeConfiguration.ServerProcesses.0.LaunchPath=/local/game/GameLiftLinuxServer
&InboundPermissions.0.FromPort=1900
&InboundPermissions.0.IpRange=0.0.0.0/0
&InboundPermissions.0.Protocol=TCP
&InboundPermissions.0.ToPort=2900
&SelectedScalingType=SCALING_UNSELECTED
&SelectedCcnType=CCN_UNSELECTED
&SelectedTimerType=TIMER_UNSELECTED
&CopyNumber=1
&DataDiskInfo.0.DiskType=CLOUD_PREMIUM
&DataDiskInfo.0.DiskSize=50
```

```
&SystemDiskInfo.DiskType=CLOUD_PREMIUM
&SystemDiskInfo.DiskSize=50
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "FleetAttributes": [
      {
        "AssetId": "asset-qrdiw1a9",
        "BillingStatus": "BILLING_ACTIVATED",
        "CreationTime": "2020-11-18T04:01:03Z",
        "Description": "Human description test update",
        "FleetArn": "qcs:gse:ap-shanghai:uin/838831829:fleet/fleet-qp3g3caa-95z2gimq",
        "FleetId": "fleet-qp3g3caa-95z2gimq",
        "FleetType": "ON_DEMAND",
        "GameServerSessionProtectionTimeLimit": 60,
        "InstanceType": "S5.LARGE8",
        "Name": "frederickli-test-fleet",
        "NewGameServerSessionProtectionPolicy": "TimeLimitProtection",
        "OperatingSystem": "CentOS 7.16 64-bit",
        "ResourceCreationLimitPolicy": {
          "NewGameServerSessionsPerCreator": 2,
          "PolicyPeriodInMinutes": 3
        },
        "Status": "NEW",
        "StoppedActions": [],
        "TerminationTime": null,
        "DataDiskInfo": [
          {
            "DiskType": "CLOUD_PREMIUM",
            "DiskSize": 50
          }
        ],
        "SystemDiskInfo": {
          "DiskType": "CLOUD_PREMIUM",
          "DiskSize": 50
        }
      }
    ],
    "RequestId": "s1605672063311364390",
    "TotalCount": 1
  }
}
```


5. Developer Resources

SDK

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

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error
AuthFailure.UnauthorizedOperation	The resource is unauthorized.
FailedOperation	Operation failed.
InternalError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
LimitExceeded.FleetLimitExceeded	The number of server fleets exceeds the upper limit.
LimitExceeded.InstanceLimitExceeded	The number of servers exceeds the upper limit.

Error Code	Description
MissingParameter	Missing parameter.
OperationDenied	Operation denied
RequestLimitExceeded	Request exceeds the frequency limit.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnsupportedOperation	Unsupported operation.

Server Instance APIs

GetInstanceAccess

Last updated : 2021-05-11 10:59:00

1. API Description

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

This API is used to get the credentials required for instance login.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: GetInstanceAccess.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
FleetId	Yes	String	Server fleet ID
InstanceId	Yes	String	Instance ID

3. Output Parameters

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

4. Example

Example1 Getting credentials required for instance login

This example shows you how to get the credentials required for instance login.

Input Example

```
https://gse.tencentcloudapi.com/?Action=GetInstanceAccess
&FleetId=fleet-qp3g3caa-iectl8nb
&InstanceId=ins-gi2lxw
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "InstanceAccess": {
      "Credentials": {
        "Secret": "w4bksrwe3gdbqwernmlvjioqeniovmlni3289t0123n42lfn892sjdfqwionv823bnvh2ljkvs",
        "UserName": "root"
      },
      "FleetId": "fleet-qp3g3caa-iectl8nb",
      "InstanceId": "ins-gi2lxw",
      "IpAddress": "9.12.5.87",
      "OperatingSystem": "centos6.7"
    },
    "RequestId": "c7bfcad5-3f20-472f-9afc-13a66faebad8"
  }
}
```

5. Developer Resources

SDK

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- [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	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	The quota limit is exceeded.
MissingParameter	Missing parameter.
ResourceInUse	The resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.

ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnsupportedOperation	Unsupported operation.

DescribeInstanceTypes

Last updated : 2021-05-26 17:44:10

1. API Description

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

This API is used to obtain the list of CVM types in the specified region.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribeInstanceTypes.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.

3. Output Parameters

Parameter Name	Type	Description

InstanceTypeList	Array of InstanceTypeInfo	List of server types
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Obtaining the list of CVM types in the specified region

This example shows you how to obtain the list of CVM types in the specified region.

Input Example

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

Output Example

```
{
  "Response": {
    "InstanceTypeList": [
      {
        "TypeName": "Standard S3",
        "InstanceType": "S3.LARGE8",
        "Cpu": 4,
        "Memory": 8,
        "NetworkCard": 45
      }
    ],
    "RequestId": "c7bfcad5-3f20-472f-9afc-13a66faebad8"
  }
}
```

5. Developer Resources

SDK

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- [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.
ResourceUnavailable	The resource is unavailable.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnsupportedOperation	Unsupported operation.

SetServerReserved

Last updated : 2021-06-23 17:07:03

1. API Description

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

This API (SetServerReserved) is used to mark the exceptional instances as retained for troubleshooting.

ReserveValue : specifies whether to retain the instance. Valid values: `0` (do not retain), `1` (retain). Default value: `0`.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: SetServerReserved.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
FleetId	Yes	String	ID of the fleet to be bound with the policy
InstanceId	Yes	String	Instance ID

ReserveValue	No	Integer	Whether the instance is retained. Valid values: 1 (retained), 0 (not retained). Default value: 0.
--------------	----	---------	---

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 Marking an instance as a reserved instance for troubleshooting

Input Example

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

{
  "FleetId": "fleet-qp3g3caa-mg4w88ho",
  "InstanceId": "ins-3g57621x",
  "ReserveValue": 1
}
```

Output Example

```
{
  "Response": {
    "RequestId": "s1611068228708726332"
  }
}
```

5. Developer Resources

SDK

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

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	The resource is unauthorized.
InternalServerError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.
UnknownParameter	Unknown parameter error

DeleteTimerScalingPolicy

Last updated : 2021-04-08 11:35:34

1. API Description

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

This API (DeleteTimerScalingPolicy) is used to delete a scheduled scaling policy of a fleet.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DeleteTimerScalingPolicy.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
TimerId	No	String	Unique ID of the policy
FleetId	No	String	ID of the fleet to be bound with the policy
TimerName	No	String	Scheduled scaling policy name

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 the timer

Input Example

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

{
  "TimerId": "timerId-oc80v5zp",
  "FleetId": "fleet-qp3g3caa-mg4w88ho",
  "TimerName": "testDay"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "s1611558706853891353"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
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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.
InternalServerError	An internal error occurred.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

DescribeTimerScalingPolicies

Last updated : 2021-06-23 17:07:03

1. API Description

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

This API (DescribeTimerScalingPolicies) is used to query the scheduled scaling policies of a fleet. You can query the policies by `fleetID` or the fleet name. The returned results are paged.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribeTimerScalingPolicies.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
FleetId	No	String	ID of the fleet to be bound with the policy
TimerName	No	String	Scheduled scaling policy name
BeginTime	No	String	Start time of the scheduled scaling policy
EndTime	No	String	End time of the scheduled scaling policy

Offset	No	Integer	Pagination offset
Limit	No	Integer	Number of entries per page

3. Output Parameters

Parameter Name	Type	Description
TimerScalingPolicies	Array of TimerScalingPolicy	Configuration of the scheduled scaling policy Note: this field may return <code>null</code> , indicating that no valid value is obtained.
TotalCount	Integer	Total number of scheduled scaling policies Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying the timer list

Input Example

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

{
  "FleetId": "fleet-qp3g3caa-mg4w88ho",
  "Limit": 10,
  "Offset": 0
}
```

Output Example

```
{
  "Response": {
    "RequestId": "s1611556817860590511",
    "TimerScalingPolicies": [
      {
        "TimerId": "",
        "TimerStatus": 1,
        "TimerName": "11111111",
        "TimerFleetCapacity": {
          "FleetId": "fleet-qp3g3caa-mkur lvoa",
          "DesiredInstances": 1,
          "MinSize": 0,
          "MaxSize": 1,
          "ScalingInterval": 10,
          "ScalingType": "ScalingTypeAuto",
          "TargetConfiguration": {
            "TargetValue": 23
          }
        },
        "TimerConfiguration": {
          "TimerType": "TimerTypeDay",
          "TimerValue": {
            "Day": 1,
            "WeekDays": [],
            "FromDay": 0,
            "ToDay": 0
          },
          "BeginTime": "2021-01-14T14:04:29.496Z",
          "EndTime": "2022-01-14T14:04:29.496Z"
        }
      }
    ],
    "TotalCount": 0
  }
}
```

5. Developer Resources

SDK

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	The resource is unauthorized.
FailedOperation	Operation failed.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

PutTimerScalingPolicy

Last updated : 2021-05-11 10:59:01

1. API Description

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

This API (PutTimerScalingPolicy) is used to create or update a scheduled scaling policy for a fleet.

If the field `timerID` is filled in, the specified policy will be updated, and if `timerID` is left empty, a new policy will be created.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: PutTimerScalingPolicy.
Version	Yes	String	Common parameter. The value used for this API: 2019-11-12.
Region	Yes	String	Common parameter. For more information, please see the list of regions supported by the product.
TimerScalingPolicy	No	TimerScalingPolicy	Configuration of the scheduled scaling policy

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 Creating or updating a timer

Input Example

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

{
  "TimerScalingPolicy": {
    "TimerId": "",
    "TimerStatus": 1,
    "TimerName": "11111111",
    "TimerFleetCapacity": {
      "FleetId": "fleet-qp3g3caa-mkurlvoa",
      "DesiredInstances": 1,
      "MinSize": 0,
      "MaxSize": 1,
      "ScalingInterval": 10,
      "ScalingType": "ScalingTypeAuto",
      "TargetConfiguration": {
        "TargetValue": 23
      }
    },
    "TimerConfiguration": {
      "TimerType": "TimerTypeDay",
      "TimerValue": {
        "Day": 1,
        "WeekDays": [],
        "FromDay": 0,
        "ToDay": 0
      }
    }
  }
}
```

```
"BeginTime": "2021-01-14T14:04:29.496Z",  
"EndTime": "2022-01-14T14:04:29.496Z"  
}  
}  
}
```

Output Example

```
{  
  "Response": {  
    "RequestId": "s1610633051302940772"  
  }  
}
```

5. Developer Resources

SDK

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

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- [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.

InvalidParameter	Incorrect parameter.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded.InstanceLimitExceeded	The number of servers exceeds the upper limit.
MissingParameter	Missing parameter.
ResourceNotFound	The resource does not exist.
UnauthorizedOperation	The operation is unauthorized.
UnauthorizedOperation.ServiceNotOpened	The service is not activated.

Data Types

Last updated : 2021-05-26 17:44:11

CcnInfo

CCN information

Used by actions: CopyFleet.

Name	Type	Required	Description
AccountId	String	Yes	Account of the CCN instance owner
CcnId	String	Yes	CCN ID

Credentials

Credentials required for instance access

Used by actions: GetInstanceAccess.

Name	Type	Description
Secret	String	SSH private key
UserName	String	Username

DesiredPlayerSession

Player game session information

Used by actions: StartGameServerSessionPlacement.

Name	Type	Required	Description
PlayerId	String	Yes	Unique player ID associated with player session
PlayerData	String	Yes	Developer-defined player data

DiskInfo

Disk storage information

Used by actions: CopyFleet.

Name	Type	Required	Description
DiskType	String	Yes	Disk type: Premium Cloud Storage (CLOUD_PREMIUM) or SSD (CLOUD_SSD)
DiskSize	Integer	Yes	System disk: the available disk capacity is 50-500 GB. Data disk: the available disk capacity is 100-32000 GB, and the value is a multiple of 10. When the disk type is SSD (CLOUD_SSD), the minimum capacity is 100 GB.

FleetAttributes

Service deployment attributes

Used by actions: CopyFleet.

Name	Type	Description
AssetId	String	Asset package ID
CreationTime	String	Server fleet creation time
Description	String	Description Note: this field may return <code>null</code> , indicating that no valid value is obtained.
FleetArn	String	Description of server fleet resource Note: this field may return <code>null</code> , indicating that no valid value is obtained.
FleetId	String	Server fleet ID

		Note: this field may return <code>null</code> , indicating that no valid value is obtained.
FleetType	String	Server fleet type, which only supports ON_DEMAND now. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
InstanceType	String	Server type, such as S5.LARGE8 Note: this field may return <code>null</code> , indicating that no valid value is obtained.
Name	String	Server fleet name
NewGameServerSessionProtectionPolicy	String	Game session protection policy Note: this field may return <code>null</code> , indicating that no valid value is obtained.
OperatingSystem	String	Operating system type Note: this field may return <code>null</code> , indicating that no valid value is obtained.
ResourceCreationLimitPolicy	ResourceCreationLimitPolicy	Limit policy of resource creation Note: this field may return <code>null</code> , indicating that no

		valid value is obtained.
Status	String	Statuses: "Create", "Downloading", "Verifying", "Generating", "Activating", "Active", "Exception", "Deleting", and "End". Note: this field may return <code>null</code>, indicating that no valid value is obtained.
StoppedActions	Array of String	The status of server fleet when it stopped. If this field is left empty, it means automatic scaling. Note: this field may return <code>null</code>, indicating that no valid value is obtained.
TerminationTime	String	Server fleet termination time Note: this field may return <code>null</code>, indicating that no valid value is obtained.
GameServerSessionProtectionTimeLimit	Integer	Timeout period of time-limited protection. Value range: 5-1440 minutes. Default value: 60 minutes. Note: this field may return <code>null</code>,

		indicating that no valid value is obtained.
BillingStatus	String	Billing status: Unactivated, Activated, Exception, Isolated due to arrears, Terminated, and Unfrozen. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
Tags	Array of Tag	Tag list. Up to 50 tags. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
DataDiskInfo	Array of DiskInfo	Data disk. It can be SSD disks (CLOUD_SSD) with 100-32000 GB capacity or Premium Cloud Storage disks (CLOUD_PREMIUM) with 10-32000 GB capacity. The increment is 10. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
SystemDiskInfo	DiskInfo	System disk. It can be a SSD (CLOUD_SSD) with 100-500 GB capacity or a Premium Cloud Storage disk

		(CLOUD_PREMIUM) with 50-500 GB capacity. The increment is 1. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
RelatedCcnInfos	Array of RelatedCcnInfo	CCN instance information Note: this field may return <code>null</code> , indicating that no valid value is obtained.
InternetMaxBandwidthOut	Integer	Maximum outbound public network bandwidth of the server fleet. Value range: 1 - 200 Mbps. Default value: 100 Mbps. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

GameProperty

Game attribute details

Used by actions: `CreateGameServerSession`, `DescribeGameServerSessionDetails`, `DescribeGameServerSessionPlacement`, `DescribeGameServerSessions`, `SearchGameServerSessions`, `StartGameServerSessionPlacement`, `StopGameServerSessionPlacement`, `UpdateGameServerSession`.

Name	Type	Description
Key	String	Attribute name. Up to 32 ASCII characters are allowed.
Value	String	Attribute value. Up to 96 ASCII characters are allowed.

GameServerSession

Game session details

Used by actions: CreateGameServerSession, DescribeGameServerSessionDetails, DescribeGameServerSessions, SearchGameServerSessions, UpdateGameServerSession.

Name	Type	Description
CreationTime	String	Game server session creation time
CreatorId	String	Creator ID. Up to 1024 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
CurrentPlayerSessionCount	Integer	The current number of players, which cannot be less than 0.
DnsName	String	CVM DNS ID Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
FleetId	String	Fleet ID
GameProperties	Array of GameProperty	Game attributes. Up to 16 groups of attributes are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
GameServerSessionData	String	The attribute details of game server session. Up to 4096 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
GameServerSessionId	String	Game server session ID. It should contain 1 to 48 ASCII characters.
IpAddress	String	CVM IP address
MatchmakerData	String	Battle progress details. Up to 400,000 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
MaximumPlayerSessionCount	Integer	The maximum number of players, which cannot be less than 0.

Name	String	The name of game server session. Up to 1024 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
PlayerSessionCreationPolicy	String	Player session creation policy. Valid values: ACCEPT_ALL, DENY_ALL Note: this field may return <code>null</code> , indicating that no valid value is obtained.
Port	Integer	Port number. It should be a value between 1 to 60000.
Status	String	Game server session status. Valid values: ACTIVE, ACTIVATING, TERMINATED, TERMINATING, ERROR
StatusReason	String	Additional information of game server session status Note: this field may return null, indicating that no valid values can be obtained.
TerminationTime	String	Termination time Note: this field may return null, indicating that no valid values can be obtained.
InstanceType	String	Instance type. Up to 128 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
CurrentCustomCount	Integer	Current custom count Note: this field may return null, indicating that no valid values can be obtained.
MaxCustomCount	Integer	Maximum custom count Note: this field may return null, indicating that no valid values can be obtained.
Weight	Integer	Weight Note: this field may return null, indicating that no valid values can be obtained.
AvailabilityStatus	String	Session availability status, i.e., whether it is blocked. Valid value: Enable, Disable Note: this field may return <code>null</code> , indicating that no valid value is obtained.

GameServerSessionDetail

Game server session details (GameServerSessionDetail)

Used by actions: DescribeGameServerSessionDetails.

Name	Type	Description
GameServerSession	GameServerSession	Game server session
ProtectionPolicy	String	Protection policy. Valid values: NoProtection, FullProtection Note: this field may return null, indicating that no valid values can be obtained.

GameServerSessionPlacement

Game session deployment object

Used by actions: DescribeGameServerSessionPlacement, StartGameServerSessionPlacement, StopGameServerSessionPlacement.

Name	Type	Description
PlacementId	String	Deployment ID
GameServerSessionQueueName	String	Service deployment group name
PlayerLatencies	Array of PlayerLatency	Player latency Note: this field may return null, indicating that no valid values can be obtained.
Status	String	Service deployment status
DnsName	String	DNS ID assigned to the instance where the game session is running Note: this field may return null, indicating that no valid values can be obtained.
GameServerSessionId	String	Game session ID Note: this field may return null,

		indicating that no valid values can be obtained.
GameServerSessionName	String	Game session name Note: this field may return null, indicating that no valid values can be obtained.
GameServerSessionRegion	String	Service deployment region Note: this field may return null, indicating that no valid values can be obtained.
GameProperties	Array of GameProperty	Game attributes Note: this field may return null, indicating that no valid values can be obtained.
MaximumPlayerSessionCount	Integer	The maximum number of players that can be connected simultaneously to the game session. It should a value between 1 to the maximum number of player sessions.
GameServerSessionData	String	Game session data Note: this field may return null, indicating that no valid values can be obtained.
IpAddress	String	IP address of the instance where the game session is running Note: this field may return null, indicating that no valid values can be obtained.
Port	Integer	Port number of the instance where the game session is running Note: this field may return null, indicating that no valid values can be obtained.
MatchmakerData	String	Game match data Note: this field may return null, indicating that no valid values can be obtained.

PlacedPlayerSessions	Array of PlacedPlayerSession	Deployed player game data Note: this field may return null, indicating that no valid values can be obtained.
StartTime	String	Start time
EndTime	String	End time Note: this field may return null, indicating that no valid values can be obtained.

InboundPermission

Allowed network range.

Used by actions: CopyFleet.

Name	Type	Required	Description
FromPort	Integer	No	Start port number. Minimum value: 1025.
IpRange	String	No	IP range. Valid range of the input IPv4 addresses in CIDR format; for example, 0.0.0.0/0.
Protocol	String	No	Protocol type: TCP or UDP.
ToPort	Integer	No	End port number. Maximum value: 60000.

InstanceAccess

Identity credentials for instance access

Used by actions: GetInstanceAccess.

Name	Type	Description
Credentials	Credentials	Credentials required for instance access
FleetId	String	Service deployment ID
InstanceId	String	Instance ID
IpAddress	String	Public IP of instance

OperatingSystem	String	OS
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InstanceTypeInfo

The server instance type information

Used by actions: DescribeInstanceTypes.

Name	Type	Description
TypeName	String	Name of the server type, such as <code>Standard SA1</code>
InstanceType	String	Specification of the server type, such as <code>SA1.SMALL1</code>
Cpu	Integer	CPU, in core
Memory	Integer	Memory, in GB
NetworkCard	Integer	The packet sending and receiving capability, in 10k PPS.

PlacedPlayerSession

Deployed player game session

Used by actions: DescribeGameServerSessionPlacement, StartGameServerSessionPlacement, StopGameServerSessionPlacement.

Name	Type	Description
PlayerId	String	Player ID
PlayerSessionId	String	Player session ID

PlayerDataMap

Player custom data

Used by actions: JoinGameServerSessionBatch.

Name	Type	Required	Description

Key	String	Yes	The key of player custom data. It should contain 1 to 1024 ASCII characters.
Value	String	Yes	The value of player custom data. It should contain 1 to 2048 ASCII characters.

PlayerLatency

Player latency information

Used by actions: DescribeGameServerSessionPlacement, StartGameServerSessionPlacement, StopGameServerSessionPlacement.

Name	Type	Required	Description
PlayerId	String	No	Player ID Note: this field may return null, indicating that no valid values can be obtained.
RegionIdentifier	String	No	Name of region corresponding to latency Note: this field may return null, indicating that no valid values can be obtained.
LatencyInMilliseconds	Integer	No	Latency in milliseconds

PlayerSession

Player session details

Used by actions: DescribePlayerSessions, JoinGameServerSession, JoinGameServerSessionBatch.

Name	Type	Description
CreationTime	String	Player session creation time
DnsName	String	ID of the DNS where the game server session is running Note: this field may return null, indicating that no valid values can be obtained.
FleetId	String	Fleet ID
GameServerSessionId	String	Game server session ID. It should contain 1 to 256 ASCII characters.

IpAddress	String	Address of the CVM instance where the game server session is running
PlayerData	String	Player custom data. Up to 2048 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
PlayerId	String	Player ID. Up to 1024 ASCII characters are allowed. Note: this field may return <code>null</code> , indicating that no valid value is obtained.
PlayerSessionId	String	Player session ID
Port	Integer	Port number. It should be a value between 1 to 60000.
Status	String	Player session status. Valid values: RESERVED = 1, ACTIVE = 2, COMPLETED =3, TIMEDOUT = 4
TerminationTime	String	Player session termination time Note: this field may return null, indicating that no valid values can be obtained.

RelatedCcnInfo

Information of the associated CCN instance

Used by actions: CopyFleet.

Name	Type	Description
AccountId	String	Account of the CCN instance owner
CcnId	String	CCN instance ID
AttachType	String	Status of associated CCN instance

ResourceCreationLimitPolicy

Resource creation policy

Used by actions: CopyFleet.

Name	Type	Required	Description
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NewGameServerSessionsPerCreator	Integer	No	Creation quantity. Minimum value: 1. Default value: 2.
PolicyPeriodInMinutes	Integer	No	Unit time. Minimum value: 1. Default value: 3. Unit: minute.

RuntimeConfiguration

Runtime configuration

Used by actions: CopyFleet.

Name	Type	Required	Description
GameServerSessionActivationTimeoutSeconds	Integer	No	Game session timeout. Value range: 1-600. Unit: second.
MaxConcurrentGameServerSessionActivations	Integer	No	Maximum number of game sessions. Value range: 1-2,147,483,647.
ServerProcesses	Array of ServerProcesse	No	Service process configuration. There must be at least one service configuration.

ServerProcesse

Game service process

Used by actions: CopyFleet.

Name	Type	Required	Description

ConcurrentExecutions	Integer	No	Number of concurrent processes. Value range of total concurrent processes: 1-50.
LaunchPath	String	No	Launch Path. Linux: /local/game/ or Windows: C:\game. The path length is 1-1024.
Parameters	String	No	Launch parameter. The length is 0-1024.

Tag

Tag structure

Used by actions: CopyFleet.

Name	Type	Required	Description
Key	String	Yes	Tag key. Up to 127 bytes are allowed.
Value	String	Yes	Tag value. Up to 255 bytes are allowed.

TargetConfiguration

Configuration of target tracking scaling

Used by actions: DescribeTimerScalingPolicies, PutTimerScalingPolicy.

Name	Type	Required	Description
TargetValue	Integer	No	Ratio of reserved server session resource Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

TimerConfiguration

The recurrence pattern of auto-scaling

Used by actions: DescribeTimerScalingPolicies, PutTimerScalingPolicy.

Name	Type	Required	Description
TimerType	Integer	No	The recurrence pattern of auto-scaling. <code>0</code> :

			undefined, 1 : once, 2 : daily, 3 : monthly, 4 : weekly Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TimerValue	TimerValue	No	Details of the recurrence pattern of auto-scaling Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
BeginTime	String	No	Start time of the scheduled scaling policy Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EndTime	String	No	End time of the scheduled scaling policy Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

TimerFleetCapacity

The capacity configurations of the scheduled scaling policy

Used by actions: DescribeTimerScalingPolicies, PutTimerScalingPolicy.

Name	Type	Required	Description
FleetId	String	No	ID of the fleet to be bound with the policy Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DesiredInstances	Integer	No	Desired number of instances Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
MinSize	Integer	No	Minimum number of instances Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
MaxSize	Integer	No	Maximum number of instances Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

ScalingInterval	Integer	No	Scaling cooldown period, in minutes Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ScalingType	Integer	No	Scaling type. <code>1</code> : manual, <code>2</code> : automatic, <code>0</code> : undefined Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TargetConfiguration	TargetConfiguration	No	Configuration of target tracking scaling Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

TimerScalingPolicy

Configurations of a scheduled scaling policy

Used by actions: DescribeTimerScalingPolicies, PutTimerScalingPolicy.

Name	Type	Required	Description
TimerId	String	No	Unique ID of the policy. When it's filled in, the policy will be updated. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TimerName	String	No	Scheduled scaling policy name Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TimerStatus	Integer	No	Scheduled scaling policy status. <code>0</code> : Undefined, <code>1</code> : Not started, <code>2</code> : Activated, <code>3</code> : Stopped, <code>4</code> : Expired Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TimerFleetCapacity	TimerFleetCapacity	No	The capacity configurations of the

			scheduled scaling policy Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TimerConfiguration	TimerConfiguration	No	The recurrence pattern of auto-scaling Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

TimerValue

Details of the recurrence pattern of the scheduled scaling policy

Used by actions: DescribeTimerScalingPolicies, PutTimerScalingPolicy.

Name	Type	Required	Description
Day	Integer	No	Execute once every X day(s) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
FromDay	Integer	No	Specify the first day to execute the scaling action in a month (execute once per day) Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ToDay	Integer	No	Specify the last day to execute the scaling action in a month Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
WeekDays	Array of Integer	No	Specify the week days to repeat the scaling action. Multiple values are supported. Valid values: <code>1</code> (Monday), <code>2</code> (Tuesday), <code>3</code> (Wednesday), <code>4</code> (Thursday), <code>5</code> (Friday), <code>6</code> (Saturday), <code>7</code> (Sunday). Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

Error Codes

Last updated : 2021-03-18 10:26:35

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.
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.
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.
ServiceUnavailable	Service is unavailable now.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.

UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTP(S) request protocol error; only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

Service Error Codes

Error Code	Description
AuthFailure	CAM signature/authentication error
LimitExceeded.FleetLimitExceeded	The number of server fleets exceeds the upper limit.
LimitExceeded.InstanceLimitExceeded	The number of servers exceeds the upper limit.
OperationDenied	Operation denied
UnauthorizedOperation.ServiceNotOpened	The service is not activated.