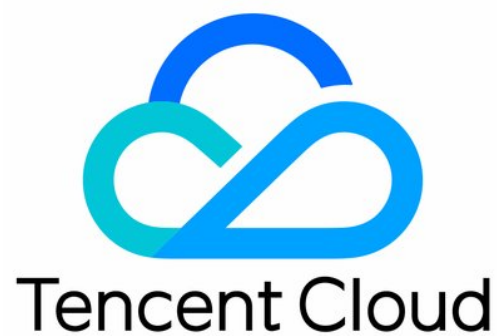


# **Tencent Cloud Firewall**

## **API Documentation**

### **Product Documentation**



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# API Documentation

## History

Last updated : 2023-05-05 09:39:09

### Release 2

Release time: 2023-05-04 17:38:12

Release updates:

Improvement to existing documentation.

New APIs:

- [AddNatAcRule](#)
- [DescribeBlockIgnoreList](#)
- [DescribeNatAcRule](#)
- [ModifyEnterpriseSecurityDispatchStatus](#)
- [ModifyEnterpriseSecurityGroupRule](#)
- [ModifyNatAcRule](#)
- [ModifyNatSequenceRules](#)
- [ModifyStorageSetting](#)
- [RemoveNatAcRule](#)

Modified APIs:

- [CreateNatFwInstance](#)
  - New input parameters:FwCidrInfo
- [CreateNatFwInstanceWithDomain](#)
  - New input parameters:FwCidrInfo
- [ModifyNatFwReSelect](#)
  - New input parameters:FwCidrInfo

New data structures:

- [BetaInfoByACL](#)
- [BlockIgnoreRule](#)
- [CommonFilter](#)
- [CreateNatRuleItem](#)

- [DescAcItem](#)
- [FwCidrInfo](#)
- [FwVpcCidr](#)
- [RuleChangeltem](#)

Modified data structures:

- [NatInstanceInfo](#)
  - New members:RuleUsed, RuleMax

## Release 1

Release time: 2022-11-14 11:17:24

Release updates:

Improvement to existing documentation.

New APIs:

- [AddAcRule](#)
- [AddEnterpriseSecurityGroupRules](#)
- [CreateAcRules](#)
- [CreateNatFwInstance](#)
- [CreateNatFwInstanceWithDomain](#)
- [CreateSecurityGroupRules](#)
- [DeleteAcRule](#)
- [DeleteAllAccessControlRule](#)
- [DeleteResourceGroup](#)
- [DeleteSecurityGroupRule](#)
- [DeleteVpcInstance](#)
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- [AssetZone](#)
- [AssociatedInstanceInfo](#)
- [CfwNatDnatRule](#)
- [DnsVpcSwitch](#)
- [IPDefendStatus](#)
- [InstanceInfo](#)
- [locListData](#)
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- [StaticInfo](#)
- [SwitchListsData](#)
- [TLogInfo](#)
- [UnHandleEvent](#)
- [UnHandleEventDetail](#)
- [VpcDnsInfo](#)

# Introduction

Last updated : 2022-11-14 11:20:13

Cloud Firewall is a SaaS virtual firewall product, which provides cloud users with security capabilities such as access control, intrusion detection, and vulnerability protection for traffic going through the edge, NAT, and inter-VPC firewalls.

# API Category

Last updated : 2023-05-05 09:39:09

## Intrusion Defense APIs

API Name	Feature	Frequency Limit
<a href="#">DescribeDefenseSwitch</a>	Queries the list of firewall toggles with Intrusion Defense enabled	20
<a href="#">ModifyBlockIgnoreList</a>	Manages blocked/allowed IPs and domains.	20

## Access Control APIs

API Name	Feature	Frequency Limit
<a href="#">AddAcRule</a>	Adds edge firewall rules	20
<a href="#">CreateAcRules</a>	Creates access control rules.	10
<a href="#">DescribeAcLists</a>	Gets the access control list	20
<a href="#">DescribeNatFwInfoCount</a>	Gets the number of a user's subnets connected to NAT firewall and the number of NAT firewall instances	20
<a href="#">DescribeNatFwInstance</a>	Gets all NAT instances of a tenant	20
<a href="#">DescribeNatFwInstancesInfo</a>	Gets all NAT instance card information of a tenant.	20
<a href="#">DescribeNatFwVpcDnsLst</a>	Gets the VPC DNS status of NAT firewall instances	20
<a href="#">DescribeRuleOverview</a>	Gets the rule list overview	20
<a href="#">DescribeTableStatus</a>	Gets the rule list status	20
<a href="#">ExpandCfwVertical</a>	Increases the firewall bandwidth	20
<a href="#">ModifyAcRule</a>	Modifies rules	10
<a href="#">ModifyAllRuleStatus</a>	Enables or disables all rules	20

<a href="#">ModifySequenceRules</a>	Modifies rule priority	10
<a href="#">ModifyTableStatus</a>	Modifies rule list status	20
<a href="#">SetNatFwDnatRule</a>	Configures firewall DNAT rules	20
<a href="#">AddNatAcRule</a>	Adds NAT access control rules	20
<a href="#">DescribeNatAcRule</a>	Gets the NAT access control list	20
<a href="#">ModifyNatAcRule</a>	Modifies NAT access control rules	20
<a href="#">ModifyEnterpriseSecurityDispatchStatus</a>	Modifies the publishing status of an enterprise security group	20

## Other APIs

API Name	Feature	Frequency Limit
<a href="#">CreateNatFwInstance</a>	Creates a NAT firewall instance (The Region parameter is required)	20
<a href="#">CreateNatFwInstanceWithDomain</a>	Creates a firewall instance with domain name (The Region parameter is required)	20
<a href="#">DeleteResourceGroup</a>	Deletes asset groups in Asset Management	20
<a href="#">DeleteVpctlInstance</a>	Deletes firewall instance	20
<a href="#">DescribeBlockByIpTimesList</a>	Gets blocked IP data	20
<a href="#">DescribeBlockIgnoreList</a>	Gets allowlists or blocklists for intrusion prevention	20
<a href="#">DescribeBlockStaticList</a>	Gets the most frequent attacker	20
<a href="#">DescribeGuideScanInfo</a>	Gets the scan interface information in Get Started.	20
<a href="#">DescribeIPStatusList</a>	Gets the IP protection status	5
<a href="#">DescribeNatFwInstanceWithRegion</a>	Gets the NAT instance that can be maintained by the tenant	20
<a href="#">DescribeResourceGroupNew</a>	Gets the asset tree information in Asset Management	20
<a href="#">DescribeSourceAsset</a>	Gets all asset information of an asset group	20

<a href="#">DescribeTLogInfo</a>	Gets the current alert monitoring data	20
<a href="#">DescribeTLogIpList</a>	Gets the most frequent attacker IP	20
<a href="#">DescribeUnHandleEventTabList</a>	Gets unhandled security events	20
<a href="#">ModifyAssetScan</a>	Modifies asset scan settings	20
<a href="#">ModifyBlockTop</a>	Pins or unpins a blocking log	20
<a href="#">ModifyNatFwReSelect</a>	Gets the VPC or NAT list for changing associated firewall instances	20
<a href="#">ModifyNatFwSwitch</a>	Enables or disables a NAT firewall	20
<a href="#">ModifyResourceGroup</a>	Modifies the asset group information in Asset Management	20
<a href="#">ModifyStorageSetting</a>	Modifies log storage settings	20
<a href="#">SetNatFwEip</a>	Sets the firewall instance EIP	20
<a href="#">ModifyNatSequenceRules</a>	Change the sequence number of NAT firewall rules	20

## Enterprise Security Group APIs

API Name	Feature	Frequency Limit
<a href="#">AddEnterpriseSecurityGroupRules</a>	Creates enterprise security group rules (new)	20
<a href="#">CreateSecurityGroupRules</a>	Creates enterprise security group rules	20
<a href="#">DeleteSecurityGroupRule</a>	Deletes security group rules	20
<a href="#">DescribeAssociatedInstanceList</a>	Gets the list of instances associated with a security group	20
<a href="#">DescribeEnterpriseSecurityGroupRule</a>	Gets enterprise security group rules (new)	20
<a href="#">DescribeSecurityGroupList</a>	Gets the security group rule list	20
<a href="#">ModifyEnterpriseSecurityGroupRule</a>	Modifies a new enterprise security group rule.	20
<a href="#">ModifySecurityGroupItemRuleStatus</a>	Enables or disables an enterprise security group rule	20

<a href="#">ModifySecurityGroupSequenceRules</a>	Sorts enterprise security group rules	20
<a href="#">RemoveEnterpriseSecurityGroupRule</a>	Deletes enterprise security group rules (new)	20

## Firewall Status APIs

API Name	Feature	Frequency Limit
<a href="#">DeleteAcRule</a>	Deletes a rule	10
<a href="#">DeleteAllAccessControlRule</a>	Deletes all rules	20
<a href="#">DescribeSwitchLists</a>	Gets the firewall status list	20
<a href="#">ModifyAllPublicIPSwitchStatus</a>	Enables or disables one or multiple edge firewalls	20
<a href="#">ModifyAllVPCSwitchStatus</a>	Enables or disables one or multiple VPC firewalls	20
<a href="#">ModifyNatFwVpcDnsSwitch</a>	Modifies the VPC DNS status of NAT firewall instances	20
<a href="#">ModifyPublicIPSwitchStatus</a>	Enables or disables an edge firewall	20
<a href="#">ModifyRunSyncAsset</a>	Syncs assets - Internet & VPC (new)	20
<a href="#">RemoveAcRule</a>	Deletes edge firewall rules	20
<a href="#">StopSecurityGroupRuleDispatch</a>	Stops publishing security group rules	20
<a href="#">RemoveNatAcRule</a>	Deletes NAT access control rules	20

# Making API Requests

## Request Structure

Last updated : 2023-05-04 17:40:07

### 1. Service Address

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

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

## 2. Communications Protocol

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

## 3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

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

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

## 4. Character Encoding

Only UTF-8 encoding is used.



# Common Params

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

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

## Common parameters for Signature Algorithm v3

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

Parameter Name	Type	Required	Description
X-TC-Action	String	Yes	The name of the API for the desired operation. For the specific value, see description of common parameter <code>Action</code> in the input parameters in r documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to which the data y work with belongs. For values supported for an API, see the description c parameter <code>Region</code> in the input parameters in related API documentati parameter is not required for some APIs (which will be indicated in relatec documentation), and will not take effect even it is passed.
X-TC-Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request for example, 1529223702. Note: If the difference between the UNIX times server time is greater than 5 minutes, a signature expiration error may oc
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the c parameter <code>Version</code> in the API documentation. For example, the versi 2017-03-12.
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_requ SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as this value; - Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is UTC time, and this value must match the value of X-TC-Timestamp (a co

			<p>parameter) in UTC time format; service is the name of the product/service generally a domain name prefix. For example, a domain name cvm.tencent refers to the CVM product and the value would be cvm;</p> <ul style="list-style-type: none"> <li>- SignedHeaders: The headers that contains the authentication information type and host are the required headers;</li> <li>- Signature: Signature digest.</li> </ul>
X-TC-Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

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

Example of an HTTP GET request structure:

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

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

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

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

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

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

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

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

```
Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request,
SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b1316
2d9279b0855cfba6789a8edb4c
```

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

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

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

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

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

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

```
--58731222010402
```

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

```
0
```

```
--58731222010402
```

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

```
10
```

```
--58731222010402--
```

## Common parameters for Signature Algorithm v1

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

Parameter Name	Type	Required	Description
Action	String	Yes	The name of the API for the desired operation. For the specific value, see the description of common parameter <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 <a href="#">Cloud API Key</a> 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=37ac2f4fde00b0ac9bd9eadeb459b1bbec224158d66e7ae5fcadb70b2d181d02&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
```

# Signature v3

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

## Applying for Security Credentials

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

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

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

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

## Using the Resources for Developers

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

## TC3-HMAC-SHA256 Signature Algorithm

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

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

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

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

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

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

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

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

The signature calculation process is explained in detail below.

## 1. Concatenating the CanonicalRequest String

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

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

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

Field Name	Explanation
HTTPRequestMethod	HTTP request method (GET or POST). This example uses <code>POST</code> .
CanonicalURI	URI parameter. Slash ("/") is used for API 3.0.
CanonicalQueryString	<p>The query string in the URL of the originating HTTP request. This is always an empty string "" for POST requests, and is the string after the question mark (?) for GET requests. For example: <code>Limit=10&amp;Offset=0</code>.</p> <p>Note: <code>CanonicalQueryString</code> must be URL-encoded, referencing <a href="#">RFC3986</a>, the UTF8 character set. We recommend using the programming language library. All special characters must be encoded and capitalized.</p>
CanonicalHeaders	<p>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.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase with the leading and trailing spaces removed, so they are concatenated in the format of <code>key:value\n</code> format;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase).</li> </ol> <p>The calculation result in this example is <code>content-type:application/json; charset=utf-8\nhost:cvm.tencentcloudapi.com\n</code>.</p> <p>Note: <code>content-type</code> must match the actually sent content. In some programming languages, a charset value would be added even if it is not specified. In this case, the request sent is different from the one signed, and the server will return an error indicating signature verification failed.</p>
SignedHeaders	<p>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.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase) and separated by semicolons (;).</li> </ol> <p>The value in this example is <code>content-type;host</code></p>
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filter</code>



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

 in this example  
 The pseudocode for calculation is  
 Lowercase(HexEncode(Hash.SHA256(RequestPayload))) by SHA256 hashing the payload of the HTTP request, performing hexadecimal encoding, and finally converting the encoded string to lowercase letters. For GET requests, `RequestPayload` is always an empty string. The calculation result in this example is  
 99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907

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

**POST**

/

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

**host**:cvm.tencentcloudapi.com

**content-type;host**

99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907

## 2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

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

Field Name	Explanation
Algorithm	Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .
RequestTimestamp	Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.
CredentialScope	Scope of the credential in the format of <code>Date/service/tc3_request</code> , including date, requested service and termination string (tc3_request). <b>Date is a date in UTC time, whose value should match the UTC date converted by the common parameter X-TC-Timestamp</b> ; <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>20180525/cvm/tc3_request</code> .

HashedCanonicalRequest

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

```
2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3ad
```

Note:

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

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

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

### 3. Calculating the Signature

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

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

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

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

2. Calculate the signature with the following pseudocode:

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

#### 4. Concatenating the Authorization

The Authorization is concatenated as follows:

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

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

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

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

The following example shows a finished authorization header:

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

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

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

## 5. Signature Demo

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

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

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

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

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

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

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

## Java

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

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

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

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

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

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

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

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

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

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

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

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

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

```

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

```

## Python

```

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

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

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

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

```

```

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

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

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

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

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

```

## Golang



```
package main

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

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

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

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

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

```
canonicalQueryString,  
canonicalHeaders,  
signedHeaders,  
hashedRequestPayload)  
fmt.Println(canonicalRequest)  
  
// step 2: build string to sign  
date := time.Unix(timestamp, 0).UTC().Format("2006-01-02")  
credentialScope := fmt.Sprintf("%s/%s/tc3_request", date, service)  
hashedCanonicalRequest := sha256hex(canonicalRequest)  
string2sign := fmt.Sprintf("%s\n%d\n%s\n%s",  
algorithm,  
timestamp,  
credentialScope,  
hashedCanonicalRequest)  
fmt.Println(string2sign)  
  
// step 3: sign string  
secretDate := hmacsha256(date, "TC3"+secretKey)  
secretService := hmacsha256(service, secretDate)  
secretSigning := hmacsha256("tc3_request", secretService)  
signature := hex.EncodeToString([]byte(hmacsha256(string2sign, secretSigning)))  
fmt.Println(signature)  
  
// step 4: build authorization  
authorization := fmt.Sprintf("%s Credential=%s/%s, SignedHeaders=%s, Signature=%s",  
algorithm,  
secretId,  
credentialScope,  
signedHeaders,  
signature)  
fmt.Println(authorization)  
  
curl := fmt.Sprintf(`curl -X POST https://%s\  
-H "Authorization: %s"\  
-H "Content-Type: application/json; charset=utf-8"\  
-H "Host: %s" -H "X-TC-Action: %s"\  
-H "X-TC-Timestamp: %d"\  
-H "X-TC-Version: %s"\  
-H "X-TC-Region: %s"\  
-d '%s'`, host, authorization, host, action, timestamp, version, region, payload)  
fmt.Println(curl)  
}
```

## PHP

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

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

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

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

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

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

## Ruby

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

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

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

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

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

puts canonical_request

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

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

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

puts 'curl -X POST ' + endpoint \
```

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

## DotNet

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



## NodeJS

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

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

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

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

function main(){

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

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

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

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

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

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

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

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

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

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

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

## C++

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

using namespace std;

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

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

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

```
}
string HmacSha256(const string &key, const string &input)
{
    unsigned char hash[32];

    HMAC_CTX *h;
    #if OPENSSSL_VERSION_NUMBER < 0x10100000L
    HMAC_CTX hmac;
    HMAC_CTX_init(&hmac);
    h = &hmac;
    #else
    h = HMAC_CTX_new();
    #endif

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

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

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

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

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

```
return output;
}

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

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

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

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

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

```

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

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

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

```

## Signature Failure

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

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

# Signature

Last updated : 2022-11-14 11:20:14

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

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

## 1. Applying for Security Credentials

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

Security credentials consist of SecretId and SecretKey:

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

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

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

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

## 2. Generating a Signature

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

Assume that the SecretId and SecretKey are:

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

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

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

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

## 2.1. Sorting Parameters

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

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



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

## 2.2. Concatenating a Request String

This step generates a request string.

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

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

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

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

## 2.3. Concatenating the Signature Original String

This step generates a signature original string.

The signature original string consists of the following parameters:

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

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

The concatenation result of the example is:

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

## 2.4. Generating a Signature String

This step generates a signature string.

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

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

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

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

The final signature is:

```
zmmjn35mikh6pM3V7sUEuX4wyYM=
```

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

### 3. Encoding a Signature String

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

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

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

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

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

### 4. Signature Failure

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

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

## 5. Signature Demo

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

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

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

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

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

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

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

## Java

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

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

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

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

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

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

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

## Python

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

`install requests`.

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

import requests

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

```

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

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

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

```

## Golang

```

package main

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

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

```

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

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

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

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

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

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

## PHP

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

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

ksort($param);

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

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

## Ruby

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

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

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



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

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

## DotNet

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

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

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

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

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

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

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

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

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

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

## NodeJS

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

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

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

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

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

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

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

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

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

strParam = sort_params(params)

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

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

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



# Responses

Last updated : 2022-11-14 11:20:14

## Response for Successful Requests

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

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

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

## Response for Failed Requests

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

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

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

## Common Error Codes

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

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

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



# Access Control APIs

## AddNatAcRule

Last updated : 2023-05-04 17:40:20

### 1. API Description

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

This API is used to add NAT access control rules.

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

We recommend you to use API Explorer

[Try it](#)

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

### 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: AddNatAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Rules.N	Yes	Array of <a href="#">CreateNatRuleItem</a>	NAT access control rules to be added.
From	No	String	Source of the rules to be added. Generally, this parameter is not used. The value insert_rule indicates that rules in the specified location are inserted, and the value batch_import

indicates that rules are imported in batches. If the parameter is left empty, rules defined in the API request are added.

### 3. Output Parameters

Parameter Name	Type	Description
RuleUuid	Array of Integer	ID list of new rules.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Adding NAT access control rules

This example shows you how to add NAT access control rules.

#### Input Example

```
POST / HTTP/1.1
Host: cfw.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: AddNatAcRule
<Common Request Parameters>
```

```
{
  "Rules": [
    {
      "SourceContent": "xx",
      "SourceType": "xx",
      "TargetContent": "xx",
      "TargetType": "xx",
      "Protocol": "xx",
      "RuleAction": "xx",
      "Port": "xx",
      "Direction": 1,
      "OrderIndex": 0,
      "Uuid": 0,
      "Enable": "xx",
```

```
"Description": "xx"
}
],
"From": "xx"
}
```

### Output Example

```
{
  "Response": {
    "RuleUuid": [
      0
    ],
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeNatAcRule

Last updated : 2023-05-04 17:40:19

## 1. API Description

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

This API is used to get the NAT access control list.

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	<a href="#">Common Params</a> . The value used for this API: DescribeNatAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Limit	Yes	Integer	Number of entries per page.
Offset	Yes	Integer	Page offset.
Index	No	String	Index to be queried. This parameter is optional, and is used only in specific cases.
Filters.N	No	Array of <a href="#">CommonFilter</a>	Filter condition combination.
StartTime	No	String	Start time for search. This parameter is optional.

EndTime	No	String	End time for search. This parameter is optional.
Order	No	String	Valid values: desc: descending; asc: ascending. The returned results are sorted by the value of By. If this parameter is specified, By is also required.
By	No	String	Field by which the returned results are sorted.

### 3. Output Parameters

Parameter Name	Type	Description
Total	Integer	Total number of entries.
Data	Array of <a href="#">DescActItem</a>	NAT access control list data. Note: This field may return null, indicating that no valid values can be obtained.
AllTotal	Integer	Total number of entries returned without filtering.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the NAT access control list

This example shows you how to get the NAT access control list.

#### Input Example

```
POST / HTTP/1.1
Host: cfw.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeNatAcRule
<Common Request Parameters>

{
  "Index": "xx",
  "Filters": [
    {
      "Name": "xx",
```

```
"Values": [  
  "xx"  
],  
"OperatorType": 0  
}  
],  
"Limit": 1,  
"Offset": 1,  
"StartTime": "xx",  
"EndTime": "xx",  
"Order": "xx",  
"By": "xx"  
}
```

## Output Example

```
{  
  "Response": {  
    "Total": 1,  
    "Data": [  
      {  
        "SourceContent": "xx",  
        "TargetContent": "xx",  
        "Protocol": "xx",  
        "Port": "xx",  
        "RuleAction": "xx",  
        "Description": "xx",  
        "Count": 1,  
        "OrderIndex": 1,  
        "SourceType": "xx",  
        "TargetType": "xx",  
        "Uuid": 1,  
        "Invalid": 1,  
        "IsRegion": 1,  
        "CountryCode": 1,  
        "CityCode": 1,  
        "CountryName": "xx",  
        "CityName": "xx",  
        "CloudCode": "xx",  
        "IsCloud": 1,  
        "Enable": "xx",  
        "Direction": 1,  
        "InstanceName": "xx",  
        "InternalUuid": 0,  
        "Status": 1  
      }  
    ]  
  }  
}
```

```
],  
"AllTotal": 1,  
"RequestId": "xx"  
}  
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.



# ModifyNatAcRule

Last updated : 2023-05-04 17:40:17

## 1. API Description

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

This API is used to modify NAT access control rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyNatAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Rules.N	Yes	Array of <a href="#">CreateNatRuleItem</a>	Array of rules to be modified.

## 3. Output Parameters

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

Name		
RuleUuid	Array of Integer	ID list of new rules that have been successfully modified.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying NAT access control rules

This example shows you how to modify NAT access control rules.

#### Input Example

```
POST / HTTP/1.1
Host: cfw.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyNatAcRule
<Common Request Parameters>

{
  "Rules": [
    {
      "SourceContent": "xx",
      "SourceType": "xx",
      "TargetContent": "xx",
      "TargetType": "xx",
      "Protocol": "xx",
      "RuleAction": "xx",
      "Port": "xx",
      "Direction": 1,
      "OrderIndex": 0,
      "Uuid": 0,
      "Enable": "xx",
      "Description": "xx"
    }
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RuleUuid": [
      0
    ],
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.

---

UnauthorizedOperation	Unauthorized operation.
UnsupportedOperation	Unsupported operation.

# ModifyEnterpriseSecurityDispatchStatus

Last updated : 2023-05-05 09:39:10

## 1. API Description

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

This API is used to modify the publishing status of an enterprise security group.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyEnterpriseSecurityDispatchStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Status	Yes	Integer	Status. Values: <input type="radio"/> 0 (Publish now), <input type="radio"/> 1 (Stop publishing)

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	<input type="radio"/> 0 : Modified successfully; Others: Modification failed

		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 Modifying the publishing status of an enterprise security group

#### Input Example

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

{
  "Status": 0
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "RequestId": "b21d7f7c-3191-41a2-bd13-9a5f6d86ab44"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# ModifyTableStatus

Last updated : 2023-05-04 17:40:17

## 1. API Description

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

This API is used to modify rule list status.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyTableStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
EdgId	No	String	Edge ID between two VPCs
Status	No	Integer	Status value. 1: table locked; 2: table unlocked
Area	No	String	NAT region
Direction	No	Integer	0: outbound; 1: inbound

## 3. Output Parameters



Parameter Name	Type	Description
Status	Integer	0: normal; -1: abnormal Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying rule list status

#### Input Example

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

{
  "EdgeId": "",
  "Area": "",
  "Status": 2,
  "Direction": 1
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# ModifySequenceRules

Last updated : 2023-05-04 17:40:17

## 1. API Description

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

This API is used to modify rule priority.

A maximum of 10 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	<a href="#">Common Params</a> . The value used for this API: ModifySequenceRules.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
EdgId	No	String	Edge ID value
Data.N	No	Array of <a href="#">SequenceData</a>	Modifies data
Area	No	String	NAT region
Direction	No	Integer	Direction. 0: outbound; 1: inbound

### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	0: modified successfully; non-0: modification failed Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying rule priority

##### Input Example

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

{
  "Data": [
    {
      "Id": 36114,
      "OrderIndex": 8,
      "NewOrderIndex": 7
    },
    {
      "Id": 36068,
      "OrderIndex": 7,
      "NewOrderIndex": 8
    }
  ],
  "EdgeId": "",
  "Direction": 1,
  "Area": ""
}
```

##### Output Example

```
{
  "Response": {
    "Status": 0,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# ModifyAllRuleStatus

Last updated : 2023-05-04 17:40:18

## 1. API Description

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

This API is used to enable or disable all rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyAllRuleStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Status	Yes	Integer	Status. 0: all disabled; 1: all enabled
Direction	No	Integer	Direction. 0: outbound; 1: inbound
Edgeld	No	String	Edge ID value
Area	No	String	NAT region

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	0: modified successfully; non-0: modification failed Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Enabling or disabling all rules

#### Input Example

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

{
  "EdgeId": "",
  "Status": 1,
  "Direction": 1,
  "Area": ""
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "RequestId": "b21d7f7c-3191-41a2-bd13-9a5f6d86ab44"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.



# ModifyAcRule

Last updated : 2023-05-04 17:40:18

## 1. API Description

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

This API is used to modify rules.

A maximum of 10 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	<a href="#">Common Params</a> . The value used for this API: ModifyAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Data.N	Yes	Array of <a href="#">RuleInfoData</a>	Array of rules
Edgeld	No	String	Edgeld value
Enable	No	Integer	Access rule status
Area	No	String	NAT region

### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: operation successful; non-0: operation failed
Info	String	Returns redundant information Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying rules

##### Input Example

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

```
{
  "Data": [
    {
      "OrderIndex": 4,
      "Id": 36064,
      "SourceIp": "0.0.0.0/0",
      "TargetIp": "0.0.0.0/0",
      "Protocol": "TCP",
      "Port": "-1/-1",
      "Strategy": "0",
      "Detail": "333",
      "IsRegion": 0,
      "Country": 0,
      "City": 0,
      "CloudCode": "",
      "SourceType": 1,
      "TargetType": 1,
      "Direction": 1,
      "CityName": "",
    }
  ]
}
```

```
"CountryName": ""
}
],
"EdgeId": "",
"Enable": 1,
"Area": ""
}
```

### Output Example

```
{
  "Response": {
    "Status": 0,
    "Info": "",
    "RequestId": "5cdfff8d-bd3b-4411-91be-2117d4205f0f"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DescribeTableStatus

Last updated : 2023-05-04 17:40:18

## 1. API Description

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

This API is used to get the rule list status.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTableStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Edgeld	No	String	Edge ID between two VPCs, required for VPCs
Status	No	Integer	Status value. 0: the only default value
Area	No	String	NAT region, required for NAT
Direction	No	Integer	Direction. 0: outbound; 1: inbound. 0 by default

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	0: normal; non-0: abnormal Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the rule list status

#### Input Example

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

{
  "Status": 0,
  "Direction": 0,
  "EdgeId": "",
  "Area": ""
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DescribeRuleOverview

Last updated : 2023-05-04 17:40:18

## 1. API Description

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

This API is used to get the rule list overview.

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	<a href="#">Common Params</a> . The value used for this API: DescribeRuleOverview.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Direction	No	Integer	Direction. 0: outbound; 1: inbound

## 3. Output Parameters

Parameter Name	Type	Description
AllTotal	Integer	Total number of rules



		Note: This field may return <code>null</code> , indicating that no valid value was found.
StrategyNum	Integer	Number of blocking rules Note: This field may return <code>null</code> , indicating that no valid value was found.
StartRuleNum	Integer	Number of enabled rules Note: This field may return <code>null</code> , indicating that no valid value was found.
StopRuleNum	Integer	Number of disabled rules Note: This field may return <code>null</code> , indicating that no valid value was found.
RemainingNum	Integer	Remaining quota Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the rule list overview

#### Input Example

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

{
  "Direction": 0
}
```

#### Output Example

```
{
  "Response": {
    "AllTotal": 100,
    "StrategyNum": 70,
    "StartRuleNum": 70,
    "StopRuleNum": 30,
    "RemainingNum": 30,
    "RequestId": "cd0e1fdf-157d-438c-9bc8-75925e5d4e20"
  }
}
```

```
}  
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DescribeAcLists

Last updated : 2023-05-04 17:40:19

## 1. API Description

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

This API is used to get the access control list.

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	<a href="#">Common Params</a> . The value used for this API: DescribeAcLists.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Protocol	No	String	Protocol
Strategy	No	String	Policy
SearchValue	No	String	Search value
Limit	No	Integer	Number of entries per page
Offset	No	Integer	Offset
Direction	No	Integer	Indicates whether it is outbound or inbound. 1: inbound; 0: outbound
Edgeld	No	String	Edgeld value

Status	No	String	Indicates whether the rule is enabled. '0': disabled; '1': enabled. '0' by default
Area	No	String	Region
Instanceid	No	String	Instance ID

### 3. Output Parameters

Parameter Name	Type	Description
Total	Integer	Total entries
Data	Array of <a href="#">AcListsData</a>	Access control list data
AllTotal	Integer	Total entries excluding the filtered ones
Enable	Integer	All access control rules enabled/disabled Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the access control list

##### Input Example

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

{
  "EdgeId": "",
  "Protocol": "TCP",
  "Strategy": "",
  "SearchValue": "",
```

```
"Direction": 1,  
"Limit": 20,  
"Offset": 0,  
"Area": ""  
}
```

## Output Example

```
{  
  "Response": {  
    "AllTotal": 1,  
    "Total": 1,  
    "Data": [  
      {  
        "Count": 1,  
        "Protocol": "xx",  
        "Detail": "xx",  
        "Strategy": 1,  
        "LogId": "xx",  
        "OrderIndex": 1,  
        "TargetIp": "xx",  
        "Port": "xx",  
        "SourceIp": "xx",  
        "Id": 1  
      }  
    ],  
    "Enable": 1,  
    "RequestId": "xx"  
  }  
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# CreateAcRules

Last updated : 2023-05-04 17:40:20

## 1. API Description

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

This API is used to create access control rules.

A maximum of 10 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	<a href="#">Common Params</a> . The value used for this API: CreateAcRules.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Data.N	Yes	Array of <a href="#">RuleInfoData</a>	Creates rule data
Type	No	Integer	0: add (default); 1: insert
Edgeld	No	String	Edge ID
Enable	No	Integer	Access control rule status

Overwrite	No	Integer	0: add; 1: overwrite
InstanceId	No	String	NAT instance ID, required when the parameter Area exists
From	No	String	portScan: from port scanning; patchImport: from batch import
Area	No	String	NAT region

### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: operation successful
Info	String	Returns redundant information Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating rules

##### Input Example

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

{
  "Data": [
    {
      "OrderIndex": 17,
      "SourceIp": "0.0.0.0/0",
      "TargetIp": "0.0.0.0/0",
      "Protocol": "TCP",
      "Port": "-1/-1",
```



```
"Strategy": "0",
"Detail": "test",
"CloudCode": "",
"SourceType": 1,
"TargetType": 1,
"Direction": 1,
"IsRegion": 0,
"Country": 0,
"City": 0,
"CityName": "",
"CountryName": ""
}
],
"Type": 0,
"EdgeId": "",
"InstanceId": "",
"Area": "",
"Enable": 1
}
```

### Output Example

```
{
  "Response": {
    "Status": 0,
    "Info": "",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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](#)
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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	Invalid parameter.
LimitExceeded	The quota limit has been reached.

# SetNatFwDnatRule

Last updated : 2023-05-04 17:40:17

## 1. API Description

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

This API is used to configure firewall DNAT rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SetNatFwDnatRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Mode	Yes	Integer	0: Create new; 1: Use existing
OperationType	Yes	String	Operation type. Valid values: add, del, and modify.
CfwInstance	No	String	Firewall instance ID. This field is required.
AddOrDelDnatRules.N	No	Array of <a href="#">CfwNatDnatRule</a>	List of added/deleted DNAT rules

OriginDnat	No	<a href="#">CfwNatDnatRule</a>	Original DNAT rule before change
NewDnat	No	<a href="#">CfwNatDnatRule</a>	New DNAT rule after change

### 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 Configuring firewall DNAT rules

##### Input Example

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

{
  "Mode": 1,
  "CfwInstance": "cfwnat-d2afc817",
  "OperationType": "add",
  "AddOrDelDnatRules": [
    {
      "IpProtocol": "TCP",
      "PublicIpAddress": "119.45.163.54",
      "PublicPort": 80,
      "PrivateIpAddress": "10.206.22.4",
      "PrivatePort": 80,
      "Description": ""
    }
  ]
}
```

##### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for PHP](#)
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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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.

InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# ExpandCfwVertical

Last updated : 2023-05-04 17:40:18

## 1. API Description

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

This API is used to increase the firewall bandwidth.

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	<a href="#">Common Params</a> . The value used for this API: ExpandCfwVertical.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
FwType	Yes	String	nat: NAT firewall, ew: east-west firewall
Width	Yes	Integer	Bandwidth value
CfwInstance	No	String	Firewall instance ID

## 3. Output Parameters

--	--	--

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

## 4. Example

### Example1 Increasing the firewall instance bandwidth

#### Input Example

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

{
  "FwType": "nat",
  "Width": 200,
  "CfwInstance": "cfwnat-d2afc817"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.

---

ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeNatFwVpcDnsLst

Last updated : 2023-05-04 17:40:19

## 1. API Description

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

This API is used to get the VPC DNS status of NAT firewall instances.

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	<a href="#">Common Params</a> . The value used for this API: DescribeNatFwVpcDnsLst.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
NatFwInstId	Yes	String	NAT firewall instance ID
NatInstIdFilter	No	String	Content filtered by NAT firewall, separated with ","
Offset	No	Integer	Number of pages
Limit	No	Integer	Maximum entries per page

## 3. Output Parameters

Parameter Name	Type	Description
VpcDnsSwitchLst	Array of <a href="#">VpcDnsInfo</a>	VPC DNS info array of NAT firewall Note: This field may return <code>null</code> , indicating that no valid value was found.
ReturnMsg	String	Response parameter Note: This field may return <code>null</code> , indicating that no valid value was found.
Total	Integer	Total number of toggles Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the VPC DNS status of NAT firewall instances of a tenant

#### Input Example

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

{
  "NatFwInsId": "cfwnat-d1580b7b",
  "Offset": 0,
  "Limit": 10
}
```

#### Output Example

```
{
  "Response": {
    "VpcDnsSwitchLst": [
      {
        "SwitchStatus": 0,
        "NatInsId": "cfwnat-f3250045",
```

```
"DNSEip": "121.5.27.250",
"VpcIpv4Cidr": "10.115.0.0/16",
"FwMode": 1,
"VpcName": "wy",
"VpcId": "vpc-ilbrv877"
},
],
"Total": 1,
"ReturnMsg": "success",
"RequestId": "50e39f16-3b3a-4c66-b76e-1705449ba828"
}
}
```

## 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
AuthFailure	CAM signature/authentication error.

DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeNatFwInstancesInfo

Last updated : 2023-05-04 17:40:19

## 1. API Description

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

This API is used to get all NAT instances and instance card information of a tenant.

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	<a href="#">Common Params</a> . The value used for this API: DescribeNatFwInstancesInfo.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Filter.N	No	Array of <a href="#">NatFwFilter</a>	Gets filtering fields of instance list
Offset	No	Integer	Page number
Limit	No	Integer	Page length

## 3. Output Parameters

Parameter Name	Type	Description
NatinsLst	Array of <a href="#">NatInstanceInfo</a>	Instance card info array Note: This field may return <code>null</code> , indicating that no valid value was found.
Total	Integer	Number of NAT firewalls Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the list of all NAT firewalls

#### Input Example

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

{
  "Filter": [
    {
      "FilterType": "NatinsId",
      "FilterContent": "cfwnat-65d0d823,cfwnat-65d0d824"
    },
    {
      "FilterType": "NatinsName",
      "FilterContent": "wytest"
    },
    {
      "FilterType": "FwMode",
      "FilterContent": "1"
    },
    {
      "FilterType": "Region",
      "FilterContent": "ap-guangzhou"
    },
    {
```



```
"FilterType": "EipAddress",
"FilterContent": "1.13.19.217,1.13.16.20"
},
{
"FilterType": "VpcIp",
"FilterContent": "10.255.0.20,10.255.0.5"
}
],
"Offset": 0,
"Limit": 10
}
```

## Output Example

```
{
"Response": {
"NatinsLst": [
{
"BandWidth": 30,
"EipAddress": [
"1.117.4.229",
"121.5.27.250"
],
"FwMode": 0,
"InFlowMax": 4985,
"NatinsId": "cfwnat-f3250045",
"NatinsName": "yw",
"OutFlowMax": 14642,
"Region": "ap-shanghai",
"RegionZh": "Shanghai",
"Subnets": [
"subnet-cjxihpy1",
"subnet-1e34182d",
"subnet-5sx5vrcj",
"subnet-he9ba55f",
"subnet-0yd4fk0j",
"subnet-kdu0qj4t"
],
"VpcIp": [
"10.255.6.36",
"10.255.6.37",
"10.255.6.21",
"10.255.6.18",
"10.255.6.19",
"10.255.5.28",
"10.255.5.18",
```

```
"10.255.5.19"
],
"RegionDetail": "Southwest China"
}
],
"Total": 1,
"RequestId": "50e39f16-3b3a-4c66-b76e-1705449ba828"
}
}
```

## 5. Developer Resources

### SDK

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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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.

InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeNatFwInstance

Last updated : 2023-05-04 17:40:19

## 1. API Description

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

This API is used to get all NAT instances of a tenant.

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	<a href="#">Common Params</a> . The value used for this API: DescribeNatFwInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
NatinsLst	Array of <a href="#">NatFwInstance</a>	Instance array

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

## 4. Example

### Example1 Getting all NAT instances of a tenant

#### Input Example

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

{}
```

#### Output Example

```
{
  "Response": {
    "NatinsLst": [
      {
        "NatinsId": "cfwnat-9243de20",
        "NatinsName": "ywold",
        "Region": "ap-shanghai",
        "FwMode": 0,
        "Status": 0
      }
    ],
    "RequestId": "xx"
  }
}
```

## 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	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.

---

ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeNatFwInfoCount

Last updated : 2023-05-04 17:40:19

## 1. API Description

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

This API is used to get the number of a user's subnets connected to NAT firewall and the number of NAT firewall instances.

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	<a href="#">Common Params</a> . The value used for this API: DescribeNatFwInfoCount.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
ReturnMsg	String	Response parameter Note: This field may return <code>null</code> , indicating that no valid value was found.



NatFwInsCount	Integer	Number of NAT instances of the current tenant Note: This field may return <code>null</code> , indicating that no valid value was found.
SubnetCount	Integer	Number of subnets connected by the current tenant Note: This field may return <code>null</code> , indicating that no valid value was found.
OpenSwitchCount	Integer	Number of firewalls enabled Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the number of a user's subnets connected to NAT firewall and the number of NAT firewall instances

#### Input Example

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

{}
```

#### Output Example

```
{
  "Response": {
    "NatFwInsCount": 3,
    "SubnetCount": 3,
    "OpenSwitchCount": 3,
    "ReturnMsg": "success",
    "RequestId": "50e39f16-3b3a-4c66-b76e-1705449ba828"
  }
}
```

## 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	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.

---

ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# AddAcRule

Last updated : 2023-05-04 17:40:20

## 1. API Description

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

This API is used to add edge firewall rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: AddAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
OrderIndex	Yes	String	-1: lowest priority; 1: highest priority
RuleAction	Yes	String	The action that Cloud Firewall performs on the traffic. Valid values: accept: allow drop: deny log: observe
Direction	Yes	String	The traffic direction for access control rules. Valid values: in: incoming traffic access control out: outgoing traffic access control
Description	Yes	String	The description of access control rules.

SourceType	Yes	String	The type of source address in access control rules. Valid values: net: source IP or range (IP or CIDR) location: source region template: CFW address template instance: instance ID vendor: Cloud vendor
SourceContent	Yes	String	The source address in the access control policy. When <code>SourceType</code> is <code>net</code> , <code>SourceContent</code> is the source IP or CIDR block. For example: 1.1.1.0/24  When <code>SourceType</code> is <code>template</code> , <code>SourceContent</code> must be the source address template ID.  When <code>SourceType</code> is <code>location</code> , <code>SourceContent</code> is the source region. For example, ["BJ11", "ZB"]  When <code>SourceType</code> is <code>instance</code> , <code>SourceContent</code> is the public IP of the instance. For example, ins-xxxxx  When <code>SourceType</code> is <code>vendor</code> , <code>SourceContent</code> is the cloud service provider. Values: <code>aws</code> , <code>huawei</code> , <code>tencent</code> , <code>aliyun</code> , <code>azure</code> and <code>all</code> .
DestType	Yes	String	The type of destination address in access control rules. Valid values: net: destination IP or range (IP or CIDR) location: source region template: CFW address template instance: instance ID vendor: Cloud vendor domain: Domain name or IP.
DestContent	Yes	String	The destination address in the access control policy. When <code>DestType</code> is <code>net</code> , <code>DestContent</code> is the destination IP or CIDR block. For example: 1.1.1.0/24  When <code>DestType</code> is <code>template</code> , <code>DestContent</code> is the destination address template ID.

			<p>When <code>DestType</code> is <code>location</code> , <code>DestContent</code> is the destination region. For example, ["BJ11", "ZB"]</p> <p>When <code>DestType</code> is <code>instance</code> , <code>DestContent</code> is the public IP of the instance. For example, ins-xxxxx</p> <p>When <code>DestType</code> is <code>domain</code> , <code>DestContent</code> is the domain name associated with the instance. For example, *.qq.com</p> <p>When <code>DestType</code> , <code>DestContent</code> is the selected cloud service provider. Values: <code>aws</code> , <code>huawei</code> , <code>tencent</code> , <code>aliyun</code> , <code>azure</code> and <code>all</code> .</p>
Port	Yes	String	The port to apply access control rules. Valid values: -1/-1: all ports 80,443: 80 or 443
Protocol	No	String	The protocol type of traffic in access control rules. Valid value: TCP. Only TCP is supported for edge firewall rules. If this parameter is not specified, it defaults to TCP.
ApplicationName	No	String	The Layer 7 protocol. Valid values: HTTP/HTTPS TLS/SSL
Enable	No	String	Indicates whether to enable the rules. Default: enable. Valid values: true: enable; false: disable

### 3. Output Parameters

Parameter Name	Type	Description
RuleUuid	Integer	UUID of the new rule
ReturnCode	Integer	0: operation successful; -1: operation failed
ReturnMsg	String	success: operation successful; failed: operation failed
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for

locating a problem.

## 4. Example

### Example1 Adds edge firewall rules

#### Input Example

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

{
  "OrderIndex": "-1",
  "Description": "api test1",
  "SourceType": "location",
  "SourceContent": "cq50,sh31,tj12,bj11",
  "DestType": "net",
  "DestContent": "0.0.0.0/0",
  "Enable": "true",
  "Direction": "in",
  "RuleAction": "accept",
  "Port": "-1/-1",
  "Protocol": "tcp",
  "ApplicationName": ""
}
```

#### Output Example

```
{
  "Response": {
    "RuleUuid": 8888,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03",
    "ReturnCode": 0,
    "ReturnMsg": "success"
  }
}
```

## 5. Developer Resources

## SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.



---

ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# Enterprise Security Group APIs

## ModifyEnterpriseSecurityGroupRule

Last updated : 2023-05-04 17:40:15

### 1. API Description

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

This API is used to modify a new enterprise security group rule.

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	<a href="#">Common Params</a> . The value used for this API: ModifyEnterpriseSecurityGroupRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RuleUuid	Yes	Integer	UUID of the rule, which can be obtained by querying the rule list
ModifyType	Yes	Integer	Modification type. Values: <code>0</code> (Modify rule content), <code>1</code> (Toggle on/off a rule) and <code>2</code> (Toggle on/off all rules)
Data	No	<a href="#">SecurityGroupRule</a>	The new rule content you want. It's only required when you

			want to modify the rule content ( <code>ModifyType=0</code> )
Enable	No	Integer	<code>0</code> : Do not enable; <code>1</code> : Enable

### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. <code>0</code> : Edited successfully; Others: Failed to edit
NewRuleUuid	Integer	ID of new rule generated after the modification
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying a new enterprise security group rule

This example shows you how to modify an enterprise security group rule.

#### Input Example

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

{
  "RuleUuid": 1,
  "Data": {
    "OrderIndex": "xx",
    "Protocol": "xx",
    "SourceType": "xx",
    "SourceContent": "xx",
    "DestType": "xx",
    "ServiceTemplateId": "xx",
    "DestContent": "xx",
    "RuleAction": "xx",
    "Port": "xx",
    "Description": "xx"
  }
}
```

```
},  
"ModifyType": 0  
}
```

### Output Example

```
{  
  "Response": {  
    "RequestId": "",  
    "Status": 0,  
    "NewRuleUuid": 35641  
  }  
}
```

## 5. Developer Resources

### SDK

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

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

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description

---

FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
OperationDenied	Operation denied.
ResourceInUse	The resource is occupied.
ResourceNotFound	The resource does not exist.

# DescribeSecurityGroupList

Last updated : 2023-05-04 17:40:15

## 1. API Description

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

This API is used to get the security group rule list.

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	<a href="#">Common Params</a> . The value used for this API: DescribeSecurityGroupList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Direction	Yes	Integer	0: outbound rule; 1: inbound rule
Area	Yes	String	Region code (e.g. ap-guangzhou ). All Tencent Cloud regions are supported.
SearchValue	No	String	Search value
Limit	No	Integer	Number of entries per page. Default: 10
Offset	No	Integer	Offset. Default: 0

Status	No	String	Status. Null: all; '0': filter disabled rules; '1': filter enabled rules
Filter	No	Integer	0: not filter; 1: filter out normal rules to retain abnormal rules

### 3. Output Parameters

Parameter Name	Type	Description
Total	Integer	Total rules in the list
Data	Array of <a href="#">SecurityGroupListData</a>	Security group rule list data
AllTotal	Integer	Total entries excluding the filtered ones
Enable	Integer	All access control rules enabled/disabled Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the security group rule list

##### Input Example

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

{
  "SearchValue": "",
  "Direction": 1,
  "Limit": 20,
  "Offset": 0,
  "Filter": 0,
  "Status": ""
```

```
"Area": "ap-guangzhou"
}
```

## Output Example

```
{
  "Response": {
    "Total": 0,
    "AllTotal": 0,
    "Enable": 1,
    "Data": [
      {
        "Status": 1,
        "TargetType": 1,
        "VpcId": "vpc-khmhp1co1",
        "Protocol": "ANY",
        "SourceType": 1,
        "IsNew": 1,
        "SourceId": "ins-1kub1g5f",
        "Port": "-1/-1",
        "TargetId": "0.0.0.0/0",
        "Detail": "Add rule (test)",
        "PrivateIp": "172.27.0.17",
        "PublicIp": "119.27.187.24",
        "OrderIndex": 1,
        "SubnetId": "subnet-9qs6catf",
        "Cidr": "",
        "Strategy": 1,
        "InstanceName": "Chengdu agreements - Do not delete",
        "Id": 1,
        "BothWay": 1
      }
    ],
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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](#)
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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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DescribeAssociatedInstanceList

Last updated : 2023-05-04 17:40:16

## 1. API Description

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

This API is used to get the list of instances associated with a security group.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeAssociatedInstanceList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Offset	Yes	Integer	List offset
Limit	Yes	Integer	Number of records per page
Area	Yes	String	Region code (e.g. ap-guangzhou). All Tencent Cloud regions are supported.
SearchValue	No	String	Additional search criteria (JSON string)
By	No	String	Sorting field

Order	No	String	Sort order. asc: ascending; desc: descending
SecurityGroupId	No	String	Security group ID
Type	No	String	Instance type. '3': CVM instance; '4': CLB instance; '5': ENI instance; '6': Cloud database

### 3. Output Parameters

Parameter Name	Type	Description
Total	Integer	Number of instances Note: This field may return <code>null</code> , indicating that no valid value was found.
Data	Array of <a href="#">AssociatedInstanceInfo</a>	Instance list Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the list of instances associated with a security group

##### Input Example

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

{
  "Area": "xx",
  "SecurityGroupId": "xx",
  "SearchValue": "xx",
  "By": "xx",
  "Limit": 1,
  "Offset": 1,
```

```
"Type": "xx",  
"Order": "xx"  
}
```

## Output Example

```
{  
  "Response": {  
    "Data": [  
      {  
        "InstanceId": "eni-4ymwnaoe",  
        "InstanceName": "test-private",  
        "Type": 5,  
        "VpcId": "vpc-406waega",  
        "VpcName": "vpc---",  
        "PublicIp": "",  
        "Ip": "192.168.0.13,192.168.0.3",  
        "SecurityGroupCount": 1  
      },  
      {  
        "InstanceId": "eni-oskydbvm",  
        "InstanceName": "privat-test",  
        "Type": 5,  
        "VpcId": "vpc-dvc0qmmm",  
        "VpcName": "Dno",  
        "PublicIp": "",  
        "Ip": "172.21.0.12",  
        "SecurityGroupCount": 0  
      }  
    ],  
    "Total": 2,  
    "RequestId": "8f563b4d-8151-4db0-a822-9bde279d2079"  
  }  
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DeleteSecurityGroupRule

Last updated : 2023-05-04 17:40:16

## 1. API Description

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

This API is used to delete security group rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteSecurityGroupRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Id	Yes	Integer	ID of the rule to delete
Area	Yes	String	Tencent Cloud region (abbreviation)
Direction	Yes	Integer	Direction. 0: outbound; 1: inbound
IsDelReverse	No	Integer	Indicates whether to delete the reverse rule. 0: no; 1: yes

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: operation successful; non-0: operation failed
Info	String	Returns redundant information Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting security group rules

#### Input Example

```
POST / HTTP/1.1
Host: cfw.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteSecurityGroupRule
X-TC-Language: zh-CN
<Common request parameters>

{
  "Id": 1,
  "Area": "ap-guangzhou",
  "Direction": 0,
  "IsDelReverse": 0
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "Info": "",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
UnauthorizedOperation	Unauthorized operation.



# ModifySecurityGroupSequenceRules

Last updated : 2023-05-04 17:40:15

## 1. API Description

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

This API is used to sort enterprise security group rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifySecurityGroupSequenceRules.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Direction	Yes	Integer	Direction. 0: outbound; 1: inbound. 1 by default
Data.N	Yes	Array of <a href="#">SecurityGroupOrderIndexData</a>	Sorting data of enterprise security group rules

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: modified successfully; non-0: failed to modify
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Sorting enterprise security group rules

This example shows you how to sort enterprise security group rules.

#### Input Example

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

{
  "Direction": 1,
  "Data": [
    {
      "NewOrderIndex": 1,
      "OrderIndex": 2
    },
    {
      "NewOrderIndex": 2,
      "OrderIndex": 1
    }
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "",
    "Status": 0
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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
InternalError	Internal error.
InvalidParameter	Invalid parameter.
ResourceInUse	The resource is occupied.

# ModifySecurityGroupItemRuleStatus

Last updated : 2023-05-04 17:40:15

## 1. API Description

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

This API is used to enable or disable an enterprise security group rule.

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	<a href="#">Common Params</a> . The value used for this API: ModifySecurityGroupItemRuleStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Direction	Yes	Integer	Direction. 0: outbound; 1: inbound. 1 by default
Status	Yes	Integer	Toggle status. 0: off; 1: on
RuleSequence	Yes	Integer	Modified priority of enterprise security group rules

## 3. Output Parameters

--	--	--

Parameter Name	Type	Description
Status	Integer	Status value. 0: modified successfully; non-0: failed to modify
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Enabling or disabling an enterprise security group rule

This example shows you how to enable or disable an enterprise security group rule.

#### Input Example

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

{
  "RuleSequence": 5,
  "Direction": 1,
  "Status": 1
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "",
    "Status": 0
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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
InternalServerError	Internal error.
InvalidParameter	Invalid parameter.
ResourceInUse	The resource is occupied.
ResourceNotFound	The resource does not exist.

# CreateSecurityGroupRules

Last updated : 2023-05-04 17:40:16

## 1. API Description

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

This API is used to create enterprise security group rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateSecurityGroupRules.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Data.N	Yes	Array of <a href="#">SecurityGroupListData</a>	Added enterprise security group rule data
Direction	Yes	Integer	Direction. 0: outbound; 1: inbound. 1 by default
Type	No	Integer	0: at the end; 1: at the top; 2: in the middle. 0 by default
Enable	No	Integer	Indicates whether to enable rules after addition. 0: disable; 1: enable. 1 by default

### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: added successfully; non-0: failed to add
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating enterprise security group rules

This example shows you how to create enterprise security group rules.

#### Input Example

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

{
  "Data": [
    {
      "OrderIndex": 1,
      "SourceId": "ipm-dyodhpby",
      "TargetId": "subnet-fmo10koi",
      "Protocol": "ANY",
      "Port": "-1/-1",
      "ServiceTemplateId": "ppm-9olqf31c",
      "Strategy": "2",
      "Detail": "test 555",
      "VpcId": "vpc-8xuf8kf5",
      "SubnetId": "subnet-fmo10koi",
      "BothWay": 0,
      "BothWayInfo": "",
      "SourceType": 7,
      "TargetType": 2,
      "Direction": 1
    },
    {
```



```
"OrderIndex": 2,
"SourceId": "ipmg-43isdfuc",
"TargetId": "subnet-5cwgmy1i",
"Protocol": "ANY",
"Port": "-1/-1",
"ServiceTemplateId": "ppmg-jz17vpis",
"Strategy": "2",
"Detail": "test 555",
"VpcId": "vpc-aa6b04jr",
"SubnetId": "subnet-5cwgmy1i",
"BothWay": 0,
"BothWayInfo": "",
"SourceType": 7,
"TargetType": 2,
"Direction": 1
}
],
"Type": 0,
"Enable": 1,
"Direction": 1
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "",
    "Status": 0
  }
}
```

# 5. Developer Resources

## SDK

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

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

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

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
ResourceInUse	The resource is occupied.
UnsupportedOperation	Unsupported operation.

# RemoveEnterpriseSecurityGroupRule

Last updated : 2023-05-04 17:40:15

## 1. API Description

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

This API is used to delete enterprise security group rules (new).

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	<a href="#">Common Params</a> . The value used for this API: RemoveEnterpriseSecurityGroupRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RuleUuid	Yes	Integer	UUID of the rule, which can be obtained by querying the rule list
RemoveType	Yes	Integer	Type of deletion. 0: delete a single entry, and enter ID of the deleted rule for RuleUuid; 1: delete all, and enter 0 for RuleUuid

## 3. Output Parameters

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

Name		
RuleUuid	Integer	Returns the UUID of the deleted policy after the deletion is successful
Status	Integer	0: operation successful; -1: operation failed Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting enterprise security group rules (new)

#### Input Example

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

{
  "RemoveType": 0,
  "RuleUuid": 8888
}
```

#### Output Example

```
{
  "Response": {
    "RuleUuid": 8888,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03",
    "Status": 0
  }
}
```

## 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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.

---

ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeEnterpriseSecurityGroupRule

Last updated : 2023-05-04 17:40:16

## 1. API Description

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

This API is used to get enterprise security group rules (new).

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	<a href="#">Common Params</a> . The value used for this API: DescribeEnterpriseSecurityGroupRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
PageNo	Yes	String	Page number of the current page displayed for query by page number.  1 by default.
PageSize	Yes	String	Maximum number of entries per page displayed for query by page number.  Maximum value: 50.
SourceContent	No	String	Source example: net: IP/CIDR (192.168.0.2)

			<p>template: parameter template (ipm-dyodhpby)</p> <p>instance: asset instance (ins-123456)</p> <p>resourcegroup: asset group (/all groups/group 1/subgroup 1)</p> <p>tag: resource tag ({"Key":"tag key","Value":"tag value"})</p> <p>region: region (ap-gaungzhou)</p> <p>Wildcards are supported.</p>
DestContent	No	String	<p>Destination example:</p> <p>net: IP/CIDR (192.168.0.2)</p> <p>template: parameter template (ipm-dyodhpby)</p> <p>instance: asset instance (ins-123456)</p> <p>resourcegroup: asset group (/all groups/group 1/subgroup 1)</p> <p>tag: resource tag ({"Key":"tag key","Value":"tag value"})</p> <p>region: region (ap-gaungzhou)</p> <p>Wildcards are supported.</p>
Description	No	String	Rule description. Wildcards are supported.
RuleAction	No	String	<p>The action that Cloud Firewall performs on the traffic. Valid values:</p> <p>accept: allow</p> <p>drop: deny</p>
Enable	No	String	<p>Indicates whether to enable the rules. Default: enable. Valid values:</p> <p>true: enable; false: disable</p>
Port	No	String	<p>The port to apply access control rules. Valid values:</p> <p>-1/-1: all ports</p> <p>80: port 80</p>
Protocol	No	String	Protocol. TCP/UDP/ICMP/ANY
ServiceTemplateId	No	String	Parameter template ID of port and protocol type; mutually exclusive with Protocol and Port

### 3. Output Parameters

Parameter Name	Type	Description
PageNo	String	Page number of the current page displayed for query by page number.
PageSize	String	Maximum number of entries per page displayed for query by page number.



Rules	Array of <a href="#">SecurityGroupRule</a>	Access control rule list
TotalCount	String	Total number of access control rules
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying enterprise security group rules (new)

This example shows you how to query enterprise security group rules.

#### Input Example

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

{
  "Enable": "xx",
  "Protocol": "xx",
  "Description": "xx",
  "PageNo": "xx",
  "SourceContent": "xx",
  "ServiceTemplateId": "xx",
  "PageSize": "xx",
  "DestContent": "xx",
  "RuleAction": "xx",
  "Port": "xx"
}
```

#### Output Example

```
{
  "Response": {
    "Rules": [
      {
        "Id": "xxx-xxx",
        "OrderIndex": "xx",
        "Protocol": "xx",
```

```
"SourceType": "xx",
"SourceContent": "xx",
"DestType": "xx",
"ServiceTemplateId": "xx",
"DestContent": "xx",
"RuleAction": "xx",
"Port": "xx",
"Enable": "true",
"Description": "xx"
},
],
"TotalCount": "xx",
"PageSize": "xx",
"PageNo": "xx",
"RequestId": "xx"
}
}
```

## 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 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# AddEnterpriseSecurityGroupRules

Last updated : 2023-05-04 17:40:16

## 1. API Description

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

This API is used to create enterprise security group rules (new).

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	<a href="#">Common Params</a> . The value used for this API: AddEnterpriseSecurityGroupRules.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Data.N	Yes	Array of <a href="#">SecurityGroupRule</a>	Creates rule data
Type	No	Integer	Adding type. 0: add to the end; 1: add to the front; 2: insert. Default: 0
ClientToken	No	String	An identifier to ensure the idempotency of the request. The value of the ClientToken parameter is a unique string that

			is generated by your client and can contain up to 64 ASCII characters in length.
IsDelay	No	Integer	Indicates whether to delay publishing. 1: delay; other values: do not delay

### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: added successfully; non-0: failed to add
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating enterprise security group rules (new)

This example shows you how to create enterprise security group rules (new).

#### Input Example

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

{
  "Data": [
    {
      "OrderIndex": "1",
      "Protocol": "TCP",
      "SourceType": "net",
      "SourceContent": "192.168.0.1",
      "DestType": "net",
      "DestContent": "192.168.0.2",
      "RuleAction": "accept",
      "Port": "80",
      "Description": "Rule details"
    }
  ]
}
```

```
]
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "",
    "Status": 0
  }
}
```

## 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	Internal error.

---

InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
ResourceInUse	The resource is occupied.
UnsupportedOperation	Unsupported operation.

# Firewall Status APIs

## RemoveNatAcRule

Last updated : 2023-05-04 17:40:13

### 1. API Description

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

This API is used to delete NAT access control rules.

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

We recommend you to use API Explorer

[Try it](#)

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

### 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RemoveNatAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RuleUuid.N	Yes	Array of Integer	UUIDs of the rules to delete, which can be obtained by querying the rule list. Note: If [-1] is passed in, all rules are deleted.
Direction	No	Integer	Rule direction. Valid values: 1: inbound; 0: outbound.

### 3. Output Parameters



Parameter Name	Type	Description
RuleUuid	Array of Integer	UUID list of the deleted rules.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting NAT access control rules

This example shows you how to delete NAT access control rules.

#### Input Example

```
POST / HTTP/1.1
Host: cfw.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RemoveNatAcRule
<Common Request Parameters>

{
  "RuleUuid": [
    0
  ],
  "Direction": 1
}
```

#### Output Example

```
{
  "Response": {
    "RuleUuid": [
      0
    ],
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.

RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeSwitchLists

Last updated : 2023-05-04 17:40:14

## 1. API Description

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

This API is used to get the firewall status list.

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	<a href="#">Common Params</a> . The value used for this API: DescribeSwitchLists.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Status	No	Integer	Firewall status. 0: disabled; 1: enabled
Type	No	String	Asset type, e.g. CVM/NAT/VPN/CLB/others
Area	No	String	Region, e.g. Shanghai, Chongqing, Guangzhou, etc.
SearchValue	No	String	Search value, e.g. '{"common":"106.54.189.45"}'
Limit	No	Integer	Number of entries. Default: 10
Offset	No	Integer	Offset. Default: 0

Order	No	String	Sort order. desc: descending; asc: ascending
By	No	String	Sorting field. PortTimes (number of risky ports)

### 3. Output Parameters

Parameter Name	Type	Description
Total	Integer	Total entries
Data	Array of <a href="#">SwitchListsData</a>	List data
AreaLists	Array of String	Region list
OnNum	Integer	Number of enabled firewalls Note: This field may return <code>null</code> , indicating that no valid value was found.
OffNum	Integer	Number of disabled firewalls Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the firewall status list

##### Input Example

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

{
  "SearchValue": "",
  "Status": -1,
  "Type": "",
```

```
"Area": "",
"Limit": 10,
"Offset": 0,
"Order": "",
"By": ""
}
```

### Output Example

```
{
  "Response": {
    "Total": 110,
    "Data": [],
    "AreaLists": [],
    "OffNum": 10,
    "OnNum": 10,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.

# DeleteAllAccessControlRule

Last updated : 2023-05-04 17:40:14

## 1. API Description

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

This API is used to delete all rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteAllAccessControlRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Direction	No	Integer	Direction. 0: outbound; 1: inbound. 0 by default
Edgeld	No	String	Deletes all the access control rules for inter-VPC firewall toggles associated with the Edgeld. It is empty by default. Enter either Edgeld or Area.
Area	No	String	Deletes all the access control rules for NAT firewalls of this region. It is empty by default. Enter either Edgeld or Area.



### 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status of the task. <code>0</code> : Modified successfully; Others: Modification failed
Info	Integer	Number of access control rules deleted. Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Deleting all rules

##### Input Example

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

{
  "Area": "",
  "EdgeId": "",
  "Direction": "0"
}
```

##### Output Example

```
{
  "Response": {
    "Status": 0,
    "Info": 0,
    "RequestId": "b21d7f7c-3191-41a2-bd13-9a5f6d86ab44"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DeleteAcRule

Last updated : 2023-05-04 17:40:14

## 1. API Description

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

This API is used to delete a rule.

A maximum of 10 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	<a href="#">Common Params</a> . The value used for this API: DeleteAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Id	Yes	Integer	The ID of the rule to delete. It can be queried via the DescribeAcLists API.
Direction	Yes	Integer	Direction. 0: outbound; 1: inbound
Edgeld	No	String	Edge ID between two VPCs
Area	No	String	NAT region, e.g. ap-shanghai/ap-guangzhou/ap-chongqing

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Status value. 0: deleted successfully; !0: deletion failed
Info	String	Returns redundant information Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting rules

#### Input Example

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

{
  "Id": 36069,
  "Direction": 1,
  "EdgeId": "",
  "Area": ""
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "Info": "",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
UnauthorizedOperation	Unauthorized operation.

# StopSecurityGroupRuleDispatch

Last updated : 2023-05-04 17:40:13

## 1. API Description

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

This API is used to stop publishing security group rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: StopSecurityGroupRuleDispatch.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
StopType	No	Integer	Stops all if set to 1

## 3. Output Parameters

Parameter Name	Type	Description
Status	Boolean	true: operation successful; false: error

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

## 4. Example

### Example1 Enabling or disabling a firewall

#### Input Example

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

{
  "StopType": 0
}
```

#### Output Example

```
{
  "Response": {
    "Status": true,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 5. Developer Resources

### SDK

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

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

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

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.



---

UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# ModifyNatFwVpcDnsSwitch

Last updated : 2023-05-04 17:40:14

## 1. API Description

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

This API is used to modify the VPC DNS status of NAT firewall instances.

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	<a href="#">Common Params</a> . The value used for this API: ModifyNatFwVpcDnsSwitch.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
NatFwInslId	Yes	String	NAT firewall ID
DnsVpcSwitchLst.N	Yes	Array of <a href="#">DnsVpcSwitch</a>	DNS toggle list

## 3. Output Parameters

--	--	--

Parameter Name	Type	Description
ReturnMsg	String	Modified successfully Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 SetNatFwVpcDnsSwitch Switching firewall VPC DNS toggles

#### Input Example

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

{
  "NatFwInsId": "cfwnat-d1580b7b",
  "DnsVpcSwitchLst": [
    {
      "VpcId": "vpc-ilbrv877",
      "Status": 0
    }
  ]
}
```

#### Output Example

```
{
  "Response": {
    "ReturnMsg": "success",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 5. Developer Resources

## SDK

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

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

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.

---

ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.

# ModifyAllVPCSwitchStatus

Last updated : 2023-05-04 17:40:14

## 1. API Description

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

This API is used to enable or disable one or multiple VPC firewalls.

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	<a href="#">Common Params</a> . The value used for this API: ModifyAllVPCSwitchStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Status	Yes	Integer	Status. 0: off; 1: on
FireWallVpcIds.N	No	Array of String	ID of the selected firewall toggle

## 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 Enabling or disabling one or multiple firewalls

#### Input Example

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

{
  "FireWallVpcIds": [],
  "Status": 0
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.



# ModifyAllPublicIPSwitchStatus

Last updated : 2023-05-04 17:40:14

## 1. API Description

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

This API is used to enable or disable one or multiple edge firewalls.

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	<a href="#">Common Params</a> . The value used for this API: ModifyAllPublicIPSwitchStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Status	Yes	Integer	Status. 0: off; 1: on
FireWallPublicIPs.N	No	Array of String	ID of the selected firewall toggle

## 3. Output Parameters

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

Name		
ReturnMsg	String	Return message Note: This field may return <code>null</code> , indicating that no valid value was found.
ReturnCode	Integer	Error code. 0: success; non-0: failed Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Enabling or disabling one or multiple edge firewalls

#### Input Example

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

{
  "Status": 0,
  "FireWallPublicIPs": [
    "xx"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "ReturnCode": 0,
    "ReturnMsg": "success",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.

# RemoveAcRule

Last updated : 2023-05-04 17:40:13

## 1. API Description

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

This API is used to delete edge firewall rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RemoveAcRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RuleUuid	Yes	Integer	UUID of the rule, which can be obtained by querying the rule list

## 3. Output Parameters

Parameter Name	Type	Description
RuleUuid	Integer	Returns the UUID of the deleted policy after the deletion is successful
ReturnCode	Integer	0: operation successful; -1: operation failed

		Note: This field may return <code>null</code> , indicating that no valid value was found.
ReturnMsg	String	success: operation successful; failed: operation failed Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting edge firewall rules

#### Input Example

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

{
  "RuleUuid": 8888
}
```

#### Output Example

```
{
  "Response": {
    "RuleUuid": 8888,
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03",
    "ReturnCode": 0,
    "ReturnMsg": "success"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.

---

ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# ModifyRunSyncAsset

Last updated : 2023-05-04 17:40:13

## 1. API Description

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

This API is used to sync assets - Internet & VPC (new).

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	<a href="#">Common Params</a> . The value used for this API: ModifyRunSyncAsset.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Type	No	Integer	0: edge firewall toggle; 1: VPC firewall toggle

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	0: synced successfully, 1: updating assets, 2: failed to sync by calling the API at the



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

## 4. Example

### Example1 Syncing assets - Edge firewalls and inter-VPC firewalls

#### Input Example

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

{
  "Type": "1"
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "RequestId": "b21d7f7c-3191-41a2-bd13-9a5f6d86ab44"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# Intrusion Defense APIs

## ModifyBlockIgnoreList

Last updated : 2023-05-04 17:40:12

### 1. API Description

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

This API is used to manage blocked/allowed IPs and domains.

Add IPs/domains to the blocked/allowed list

Remove IPs/domains from the blocked/allowed list

Modify events related with the IPs/domains in the blocked/allowed list

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	<a href="#">Common Params</a> . The value used for this API: ModifyBlockIgnoreList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RuleType	Yes	Integer	Type of the rule. Values: <input type="radio"/> 1 (Blocklist); <input type="radio"/> 2 (Allowlist)
IOC.N	Yes	Array of <a href="#">locListData</a>	Either IP or Domain is required

locAction	Yes	String	Optional values: delete, edit, and add
StartTime	No	String	Time format: yyyy-MM-dd HH:mm:ss. Required when locAction is edit or add
EndTime	No	String	End time of the period in the format of yyyy-MM-dd HH:mm:ss. It must be later than both the start time and the current time. It's required when <code>locAction</code> is <code>edit</code> or <code>add</code> .

### 3. Output Parameters

Parameter Name	Type	Description
ReturnMsg	String	Return message
ReturnCode	Integer	Error code. 0: success; non-0: failed
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying a block-/allowlist

##### Input Example

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

{
  "IOC": [
    {
      "IP": "192.168.1.1",
      "Direction": 1,
      "Domain": ""
    }
  ],
  "RuleType": 1,
}
```

```
"IocAction": "add",
"StartTime": "2021-04-16 18:01:09",
"EndTime": "3000-01-01 00:00:00"
}
```

### Output Example

```
{
  "Response": {
    "ReturnCode": 0,
    "ReturnMsg": "success",
    "RequestId": "cd0e1fdf-157d-438c-9bc8-75925e5d4e20"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.
UnauthorizedOperation	Unauthorized operation.

# DescribeDefenseSwitch

Last updated : 2023-05-04 17:40:12

## 1. API Description

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

This API is used to query the list of firewall toggles with Intrusion Defense enabled.

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	<a href="#">Common Params</a> . The value used for this API: DescribeDefenseSwitch.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
BasicRuleSwitch	Integer	Whether to enable the Basic Protection feature
BaselineAllSwitch	Integer	Whether to enable the Security Baseline feature

TiSwitch	Integer	Whether to enable the Treat Intelligence feature
VirtualPatchSwitch	Integer	Whether to enable the Virtual Patch feature
HistoryOpen	Integer	Whether it has been enabled before
ReturnCode	Integer	Status code. 0 : Succeeded. Others: Failed
ReturnMsg	String	Status message. success and fail.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the list of firewall toggles with Intrusion Defense enabled

#### Input Example

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

{}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "",
    "ReturnCode": 0,
    "ReturnMsg": "success",
    "BasicRuleSwitch": 1,
    "BaselineAllSwitch": 1,
    "VirtualPatchSwitch": 1,
    "TiSwitch": 1,
    "HistoryOpen": 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.

- [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
InternalServerError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.

# Other APIs

## DescribeBlockIgnoreList

Last updated : 2023-05-05 09:39:09

### 1. API Description

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

This API is used to get allowlists or blocklists for intrusion prevention.

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	<a href="#">Common Params</a> . The value used for this API: DescribeBlockIgnoreList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Limit	Yes	Integer	Number of entries per page.
Offset	Yes	Integer	Page offset.
Direction	Yes	String	Direction. Valid values: 1: inbound public access; 0: outbound public access; 3: private network access; empty string: all access.
RuleType	Yes	Integer	Rule type. Valid values: 1: block; 2: allow.

Order	Yes	String	Column by which rules are sorted. Valid values: EndTime: end time; StartTime: start time; MatchTimes: number of matching times.
By	Yes	String	Sort order. Valid values: desc: descending; asc: ascending.
SearchValue	No	String	Search keys, in a JSON string. Valid values: {}: empty; domain: domain name; level: threat level; ignore_reason: reason for allowing access; rule_source: source of a security event; address: geographical location; common: fuzzy search.

### 3. Output Parameters

Parameter Name	Type	Description
Data	Array of <a href="#">BlockIgnoreRule</a>	List data.
Total	Integer	Total number of results, which is used for pagination.
ReturnCode	Integer	Status code. Valid values: 0: successful; others: failed.
ReturnMsg	String	Status message. Valid values: success: successful query; fail: failed query.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the honeypot service list

This example shows you how to get the honeypot service list.

#### Input Example

```
POST / HTTP/1.1
Host: cfw.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeBlockIgnoreList
<Common Request Parameters>

{
  "Direction": "xx",
```

```
"SearchValue": "xx",
"RuleType": 1,
"By": "xx",
"Limit": 10,
"Offset": 0,
"Order": "xx"
}
```

## Output Example

```
{
  "Response": {
    "ReturnMsg": "xx",
    "ReturnCode": 0,
    "Data": [
      {
        "Domain": "xx",
        "Protocol": "xx",
        "UniqueId": "xx",
        "Level": "xx",
        "Country": "xx",
        "Direction": 0,
        "EventName": "xx",
        "Source": "xx",
        "MatchTimes": 0,
        "StartTime": "xx",
        "Address": "xx",
        "Action": 0,
        "EndTime": "xx",
        "Ioc": "xx",
        "IgnoreReason": "xx"
      }
    ],
    "RequestId": "xx",
    "Total": 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.

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

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.

# ModifyStorageSetting

Last updated : 2023-05-04 17:40:08

## 1. API Description

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

This API is used to modify the log retention period or to clear logs.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyStorageSetting.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

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

## 4. Example

### Example1 Modifying storage settings

This example shows you how to modify the log retention period (in days) or to clear logs.

To modify the log retention period, pass storagetime to StorageAction and set StorageDay to the desired number of days. Only certain options are provided for StorageDay. You can view the options in the corresponding drop-down list in the console.

To clear logs, pass storagecount to StorageAction. StorageDay is not required in this case.

#### Input Example

```
{
  "StorageDay": 90,
  "StorageAction": "storagetime"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "f5b034d5-da48-47a6-9d7c-5fb4a3cb7ea1"
  }
}
```

## 5. Developer Resources

### SDK

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

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

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# ModifyNatSequenceRules

Last updated : 2023-05-04 17:40:08

## 1. API Description

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

This API is used to change the sequence number of NAT firewall rules.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyNatSequenceRules.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
RuleChangeItems.N	Yes	Array of <a href="#">RuleChangeItem</a>	Rule sequence number. Values: <code>OrderIndex</code> (Original sequence number), <code>NewOrderIndex</code> (New sequence number)
Direction	Yes	Integer	Rule direction. Values: <code>1</code> (Inbound) and <code>0</code> (Outbound)

### 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 Changing the sequence number of NAT firewall rules

This example shows you how to change the sequence number of NAT firewall rules.

#### Input Example

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

{
  "RuleChangeItems": [
    {
      "OrderIndex": 0,
      "NewOrderIndex": 0
    }
  ],
  "Direction": 1
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.

RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeGuideScanInfo

Last updated : 2023-05-04 17:40:11

## 1. API Description

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

This API is used to get the scan interface information in Get Started.

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	<a href="#">Common Params</a> . The value used for this API: DescribeGuideScanInfo.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
Data	<a href="#">ScanInfo</a>	Scan information
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 use scanning APIs for getting started.

### Input Example

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

### Output Example

```
{
  "Response": {
    "Data": {
      "ScanTime": "xx",
      "ScanPercent": 0.0,
      "ScanResultInfo": {
        "LeakNum": 1,
        "IPNum": 1,
        "IdpStatus": true,
        "PortNum": 1,
        "BanStatus": true,
        "IPStatus": true
      },
      "ScanStatus": 0
    },
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

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

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.

---

ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# ModifyBlockTop

Last updated : 2023-05-04 17:40:09

## 1. API Description

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

This API is used to pin or unpin a blocking log.

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	<a href="#">Common Params</a> . The value used for this API: ModifyBlockTop.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Uniqueld	Yes	String	Record ID
OpeType	Yes	String	Operation type. 1: pin to top; 0: unpin

## 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 Pinning to top/Unpinning

#### Input Example

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

{
  "OpType": "xx",
  "UniqueId": "xx"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.

---

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

# DescribeUnHandleEventTabList

Last updated : 2023-05-04 17:40:09

## 1. API Description

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

This API is used to get unhandled security events.

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	<a href="#">Common Params</a> . The value used for this API: DescribeUnHandleEventTabList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
StartTime	Yes	String	Start time
EndTime	Yes	String	End time
AssetID	No	String	Gets example ID

## 3. Output Parameters

--	--	--

Parameter Name	Type	Description
Data	<a href="#">UnHandleEvent</a>	Gets unhandled security events Note: This field may return <code>null</code> , indicating that no valid value was found.
ReturnCode	Integer	Error code. 0: success; non-0: error
ReturnMsg	String	Return message: success
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 DescribeUnHandleEventTabList

#### Input Example

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

{
  "EndTime": "2021-05-206 23:59:59",
  "StartTime": "2021-05-20 00:00:00",
  "AssetID": "ins-xxx"
}
```

#### Output Example

```
{
  "Response": {
    "Data": {
      "EventTableListStruct": [
        {
          "EventName": "Server compromised",
          "Total": 3
        },
        {
          "EventName": "Security baseline (outbound)",

```

```
"Total": 2635
}
],
"BaseLineUser": 1,
"BaseLineInSwitch": 1,
"BaseLineOutSwitch": 1
},
"RequestId": "121233",
"ReturnCode": 0,
"ReturnMsg": "success"
}
}
```

## 5. Developer Resources

### SDK

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

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

DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# DescribeTLogIpList

Last updated : 2023-05-04 17:40:09

## 1. API Description

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

This API is used to get the most frequent attacker IP.

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	<a href="#">Common Params</a> . The value used for this API: DescribeTLogIpList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
StartTime	Yes	String	Start time
EndTime	Yes	String	End time
QueryType	Yes	String	Type. 1: alert; 2: block
Top	Yes	Integer	Number of top results returned
SearchValue	No	String	Search criteria

### 3. Output Parameters

Parameter Name	Type	Description
Data	Array of <a href="#">StaticInfo</a>	Data collection
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 DescribeTLogIpList

##### Input Example

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

{
  "Top": 0,
  "EndTime": "xx",
  "SearchValue": "xx",
  "QueryType": "xx",
  "StartTime": "xx"
}
```

##### Output Example

```
{
  "Response": {
    "Data": [
      {
        "InsID": "xx",
        "Ip": "xx",
        "InsName": "xx",
        "Num": 0,
        "Address": "xx",
        "Port": "xx"
      }
    ]
  }
}
```

```
}  
],  
"RequestId": "xx"  
}  
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.

InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeTLogInfo

Last updated : 2023-05-04 17:40:10

## 1. API Description

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

This API is used to get the current alert monitoring data.

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	<a href="#">Common Params</a> . The value used for this API: DescribeTLogInfo.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
StartTime	Yes	String	Start time
EndTime	Yes	String	End time
QueryType	Yes	String	Type. 1: alert; 2: block
SearchValue	No	String	Search criteria

## 3. Output Parameters

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

Name		
Data	TLogInfo	<p>NetworkNum : Number of detected network scans</p> <p>HandleNum : Number of pending processing events</p> <p>"BanNum":</p> <p>VulNum : Number of vulnerability exploits</p> <p>"OutNum": Number of compromised servers</p> <p>"BruteForceNum": 0</p>
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 DescribeTLogInfo

#### Input Example

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

{
  "EndTime": "2021-09-18 12:00:00",
  "SearchValue": "{country: 1, instance_id:instanceidtest, source:1}",
  "QueryType": "1",
  "StartTime": "2021-09-17 12:00:00"
}
```

#### Output Example

```
{
  "Response": {
    "Data": {
      "NetworkNum": 0,
      "HandleNum": 0,
      "BanNum": 0,
      "VulNum": 0,
      "OutNum": 0,
      "BruteForceNum": 0
    },
    "RequestId": "xx"
  }
}
```

```
}  
}
```

## 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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.

LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# DescribeBlockStaticList

Last updated : 2023-05-04 17:40:11

## 1. API Description

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

This API is used to get the most frequent attacker.

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	<a href="#">Common Params</a> . The value used for this API: DescribeBlockStaticList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
StartTime	Yes	String	Start time
EndTime	Yes	String	End time
QueryType	Yes	String	List type. Valid values: port, address, or IP
Top	Yes	Integer	Number of top results returned
SearchValue	No	String	Search criteria

### 3. Output Parameters

Parameter Name	Type	Description
Data	Array of <a href="#">StaticInfo</a>	None
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 DescribeBlockStaticList

##### Input Example

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

{
  "Top": 10,
  "EndTime": "xx",
  "SearchValue": "xx",
  "QueryType": "xx",
  "StartTime": "xx"
}
```

##### Output Example

```
{
  "Response": {
    "Data": [
      {
        "InsID": "xx",
        "Ip": "xx",
        "InsName": "xx",
        "Num": 0,
        "Address": "xx",
        "Port": "xx"
      }
    ]
  }
}
```

```
}  
],  
"RequestId": "xx"  
}  
}
```

## 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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.

InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeBlockByIpTimesList

Last updated : 2023-05-04 17:40:11

## 1. API Description

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

This API is used to get blocked IP data.

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	<a href="#">Common Params</a> . The value used for this API: DescribeBlockByIpTimesList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
StartTime	Yes	String	Start time
EndTime	Yes	String	End time
Ip	Yes	String	IP search criteria
Zone	No	String	Region
Direction	No	String	Direction
Source	No	String	Source

EdgeId	No	String	Inter-VPC firewall toggle edge ID
LogSource	No	String	Log source. move: inter-VPC firewall

### 3. Output Parameters

Parameter Name	Type	Description
Data	Array of <a href="#">IpStatic</a>	Response data
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 DescribeBlockByIpTimesList

##### Input Example

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

{
  "Ip": "xx",
  "EndTime": "xx",
  "StartTime": "xx"
}
```

##### Output Example

```
{
  "Response": {
    "Data": [
      {
        "StatTime": "xx",
        "Num": 0
      }
    ]
  }
}
```

```
}  
],  
"RequestId": "xx"  
}  
}
```

## 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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.

InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# SetNatFwEip

Last updated : 2023-05-04 17:40:08

## 1. API Description

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

This API is used to set the firewall instance EIP. (Available for firewall instances in the "Create new" mode. only)

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	<a href="#">Common Params</a> . The value used for this API: SetNatFwEip.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
OperationType	Yes	String	bind: bind EIP; unbind: unbind EIP; newAdd: add firewall EIP
CfwInstance	Yes	String	Firewall instance ID
EipList.N	No	Array of String	This field is required when OperationType is "bind" or "unbind".

### 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 Binding a firewall instance EIP

Available for new firewall instances only.

##### Input Example

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

{
  "OperationType": "bind",
  "CfwInstance": "cfwnat-d2afc817",
  "EipList": [
    "1.2.3.8"
  ]
}
```

##### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

#### Example2 Adding a firewall instance EIP

Available for new firewall instances only.

##### Input Example

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

{
  "OperationType": "newAdd",
  "CfwInstance": "cfwnat-d2afc817"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# ModifyResourceGroup

Last updated : 2023-05-04 17:40:08

## 1. API Description

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

This API is used to modify the asset group information in Asset Management.

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	<a href="#">Common Params</a> . The value used for this API: ModifyResourceGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
GroupId	Yes	String	Group ID
GroupName	Yes	String	Group name
ParentId	Yes	String	Parent group ID

## 3. Output Parameters

--	--	--

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

## 4. Example

### Example1 Modifying the asset group information in Asset Management

#### Input Example

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

{
  "GroupName": "xx",
  "GroupId": "xx",
  "ParentId": "xx"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

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

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.

---

ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# ModifyNatFwSwitch

Last updated : 2023-05-04 17:40:08

## 1. API Description

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

This API is used to enable or disable a NAT firewall.

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	<a href="#">Common Params</a> . The value used for this API: ModifyNatFwSwitch.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Enable	Yes	Integer	Status. 0: off; 1: on
CfwInsIdList.N	No	Array of String	List of firewall instance IDs. Only one of CfwInsIdList, SubnetIdList, and RouteTableIdList can be passed.
SubnetIdList.N	No	Array of String	List of subnet IDs. Only one of CfwInsIdList, SubnetIdList, and RouteTableIdList can be passed.
RouteTableIdList.N	No	Array of	List of route table IDs. Only one of CfwInsIdList, SubnetIdList, and RouteTableIdList can be passed.

		String	
--	--	--------	--

### 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 Enabling firewalls for route tables

This example shows you how to enable firewalls for route tables.

#### Input Example

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

{
  "Enable": 1,
  "RouteTableIdList": [
    "rtb-9jbsa559",
    "rtb-dba9eo0f"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

#### Example2 Enabling a firewall for a subnet

This example shows you how to enable a firewall for a subnet.

### Input Example

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

{
  "Enable": 1,
  "SubnetIdList": [
    "subnet-cjxihpy1"
  ]
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 5. Developer Resources

### SDK

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- [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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# ModifyNatFwReSelect

Last updated : 2023-05-04 17:40:09

## 1. API Description

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

This API is used to get the VPC or NAT list for changing associated firewall instances.

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	<a href="#">Common Params</a> . The value used for this API: ModifyNatFwReSelect.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Mode	Yes	Integer	Mode. 1: use existing; 0: create new
CfwInstance	Yes	String	Firewall instance ID
NatGwList.N	No	Array of String	List of NAT gateways reconnected for the Using Existing mode. Only one of NatGwList and VpcList can be passed.
VpcList.N	No	Array of String	List of VPCs reconnected for the Create New mode. Only one of NatGwList and VpcList can be passed.
FwCidrInfo	No	<a href="#">FwCidrInfo</a>	IP range of the firewall

### 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 Getting the NAT list for changing associated firewall instances in the Use Existing mode

This example shows you how to apply the "Use existing" mode.

#### Input Example

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

{
  "Mode": 1,
  "CfwInstance": "cfwnat-d2afc817",
  "NatGwList": [
    "nat-14yv5rzx",
    "nat-14yv5rzx"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

#### Example2 Getting the VPC list for changing associated firewall instances in the Create New mode

This example shows you how to apply the "Create new" mode.

### Input Example

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

{
  "Mode": 0,
  "CfwInstance": "cfwnat-d2afc817",
  "VpcList": [
    "vpc-q98tz7hs",
    "vpc-x98tz7ha"
  ]
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 5. Developer Resources

### SDK

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- [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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# ModifyAssetScan

Last updated : 2023-05-04 17:40:09

## 1. API Description

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

This API is used to modify asset scan settings.

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	<a href="#">Common Params</a> . The value used for this API: ModifyAssetScan.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ScanRange	Yes	Integer	Scan range. 1: port; 2: port + vulnerability scan
ScanDeep	Yes	String	Scan mode: 'heavy', 'medium', 'light'
RangeType	Yes	Integer	Scan type. 1: scan now; 2: periodic scan
ScanPeriod	No	String	Scheduled task time, required when RangeType is 2
ScanFilterIp.N	No	Array of String	Scans this field now and passes the filtered IPs

ScanType	No	Integer	1: all; 2: single
----------	----	---------	-------------------

### 3. Output Parameters

Parameter Name	Type	Description
ReturnMsg	String	Return message Note: This field may return <code>null</code> , indicating that no valid value was found.
ReturnCode	Integer	Error code. 0: success; non-0: failed Note: This field may return <code>null</code> , indicating that no valid value was found.
Status	Integer	Status value. 0: success; 1: scanning; others: failed
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Scanning

##### Input Example

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

{
  "ScanRange": 1,
  "ScanDeep": "heavy",
  "RangeType": 2,
  "ScanPeriod": "Every Thursday/12:51:00",
  "ScanFilterIp": [
    "11",
    "22"
  ]
}
```

## Output Example

```
{
  "Response": {
    "Status": 0,
    "ReturnCode": 0,
    "ReturnMsg": "success",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.

LimitExceeded

The quota limit has been reached.

# DescribeSourceAsset

Last updated : 2023-05-04 17:40:10

## 1. API Description

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

This API is used to get all asset information of an asset group.

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

We recommend you to use API Explorer

[Try it](#)

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

## 2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeSourceAsset.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
FuzzySearch	No	String	Fuzzy search
InsType	No	String	Asset type. 1: public network; 2: private network
ChooseType	No	String	If ChooseType is 1, grouped assets are queried; if ChooseType is not 1, non-grouped assets are queried
Zone	No	String	Region
Limit	No	Integer	Maximum number of results returned per page. For example, if it is set to 10, 10 results will be returned at most.

Offset	No	Integer	Offset of search results
--------	----	---------	--------------------------

### 3. Output Parameters

Parameter Name	Type	Description
ZoneList	Array of <a href="#">AssetZone</a>	Region collection
Data	Array of <a href="#">InstanceInfo</a>	Data
Total	Integer	Total number of returned data
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting all asset information of an asset group

##### Input Example

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

{
  "InsType": "xx",
  "ChooseType": "xx",
  "FuzzySearch": "xx",
  "Zone": "xx"
}
```

##### Output Example

```
{
  "Response": {
    "Total": 2,
```

```
"Data": [  
  {  
    "LeakNum": "xx",  
    "InsSource": "xx",  
    "VpcId": "xx",  
    "PortNum": "xx",  
    "InstanceId": "xx",  
    "Region": "xx",  
    "ResourcePath": [  
      "xx"  
    ],  
    "PrivateIp": "xx",  
    "PublicIp": "xx",  
    "SubnetId": "xx",  
    "VPCName": "xx",  
    "AppId": "xx",  
    "InsType": 0,  
    "InstanceName": "xx"  
  },  
  {  
    "RequestId": "xx",  
    "ZoneList": [  
      {  
        "ZoneEng": "xx",  
        "Zone": "xx"  
      }  
    ]  
  }  
]
```

## 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	Invalid parameter.



# DescribeNatFwInstanceWithRegion

Last updated : 2023-05-04 17:40:10

## 1. API Description

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

This API is used to get the NAT instance with the region that is newly maintained by the tenant.

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	<a href="#">Common Params</a> . The value used for this API: DescribeNatFwInstanceWithRegion.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
NatinsLst	Array of <a href="#">NatFwInstance</a>	Instance array Note: This field may return <code>null</code> , indicating that no valid value was found.

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

## 4. Example

### Example1 Getting all NAT instances of a tenant

#### Input Example

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

{}
```

#### Output Example

```
{
  "Response": {
    "NatinsLst": [
      {
        "NatinsId": "cfwnat-fc7ae792",
        "NatinsName": "wy_yw_test",
        "Region": "ap-guangzhou"
      }
    ],
    "RequestId": "52fa6827-985f-49c7-a853-d86efbd547c3"
  }
}
```

## 5. Developer Resources

### SDK

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

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

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

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

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

Error Code	Description
AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.

---

ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DeleteVpcInstance

Last updated : 2023-05-04 17:40:11

## 1. API Description

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

This API is used to delete firewall instance.

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	<a href="#">Common Params</a> . The value used for this API: DeleteVpcInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 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 and selecting VPC

#### Input Example

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

{}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 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	Invalid parameter.
LimitExceeded	The quota limit has been reached.

# DeleteResourceGroup

Last updated : 2023-05-04 17:40:12

## 1. API Description

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

This API is used to delete asset groups in Asset Management.

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	<a href="#">Common Params</a> . The value used for this API: DeleteResourceGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
GroupId	Yes	String	Group ID

## 3. Output Parameters

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



locating a problem.

## 4. Example

### Example1 Deleting asset groups in Asset Management

#### Input Example

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

{
  "GroupId": "xx"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for 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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# CreateNatFwInstance

Last updated : 2023-05-04 17:40:12

## 1. API Description

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

This API is used to create a NAT firewall instance (The Region parameter is required).

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	<a href="#">Common Params</a> . The value used for this API: CreateNatFwInstance.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Name	Yes	String	Firewall instance name
Width	Yes	Integer	Bandwidth
Mode	Yes	Integer	Mode. 1: use existing; 0: create new
NewModelItems	No	<a href="#">NewModelItems</a>	Parameter passed for the Create New mode. Either NewModelItems or NatgwList is required.

NatGwList.N	No	Array of String	NAT gateway list for the Using Existing mode. Either NewModelItems or NatgwList is required.
Zone	No	String	Primary zone. The default zone is selected if it is empty.
ZoneBak	No	String	Secondary zone. The default zone is selected if it is empty.
CrossAZone	No	Integer	Remote disaster recovery. 1: enable; 0: disable; empty: disable by default
FwCidrInfo	No	<a href="#">FwCidrInfo</a>	IP range of the firewall

### 3. Output Parameters

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

### 4. Example

#### Example1 Creating firewall instance - Create New

This example shows you how to create a new instance.

#### Input Example

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

{
  "Name": "test",
  "Width": 20,
  "Mode": 1,
  "CrossAZone": 1,
  "NewModeItems": {
  "VpcList": [
```

```
"vpc-xxx"
],
"Eips": [
"xx.xx.xx.xx"
],
"AddCount": 1
},
"Zone": "ap-shanghai-4",
"ZoneBak": "ap-shanghai-3"
}
```

## Output Example

```
{
"Response": {
"CfwInsId": "xxx",
"RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
}
}
```

## Example2 Creating a NAT firewall instance (The Region parameter is required)

This example shows you how to create a NAT firewall instance (The Region parameter is required).

## Input Example

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

{
"Name": "test",
"Width": 20,
"Mode": 0,
"CrossAZone": 1,
"NatGwList": [
"nat-xxx",
"nat-xxx"
],
"Zone": "ap-shanghai-4",
"ZoneBak": "ap-shanghai-3"
}
```

## Output Example

```
{
  "Response": {
    "CfwInsId": "xxx",
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
  }
}
```

## 5. Developer Resources

### SDK

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- [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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.

InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# DescribeResourceGroupNew

Last updated : 2023-05-04 17:40:10

## 1. API Description

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

This API is used to get the asset tree information in Asset Management.

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	<a href="#">Common Params</a> . The value used for this API: DescribeResourceGroupNew.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
QueryType	Yes	String	Query type. Network-VPC; business recognition-resource; resource tag-tag
GroupId	No	String	Asset group ID, 0: all asset group IDs
ShowType	No	String	all: all, including subgroups; own: my asset groups only

## 3. Output Parameters



Parameter Name	Type	Description
Data	String	Returns a tree structure
UnResourceNum	Integer	Number of uncategoryzid instances
ReturnMsg	String	Response message
ReturnCode	Integer	Return code. 0: Request successful
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the asset tree information in Asset Management

#### Input Example

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

{
  "GroupId": "xx",
  "QueryType": "xx"
}
```

#### Output Example

```
{
  "Response": {
    "ReturnMsg": "xx",
    "UnResourceNum": 0,
    "ReturnCode": 0,
    "Data": "xx",
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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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.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.

RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.

# CreateNatFwInstanceWithDomain

Last updated : 2023-05-04 17:40:12

## 1. API Description

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

This API is used to create a firewall instance with domain name (The Region parameter is required).

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	<a href="#">Common Params</a> . The value used for this API: CreateNatFwInstanceWithDomain.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Name	Yes	String	Firewall instance name
Width	Yes	Integer	Bandwidth
Mode	Yes	Integer	Mode. 1: use existing; 0: create new
NewModelItems	No	<a href="#">NewModelItems</a>	Parameter passed for the Create New mode. Either NewModelItems or NatgwList is required.

NatGwList.N	No	Array of String	NAT gateway list for the Using Existing mode. Either NewModelItems or NatgwList is required.
Zone	No	String	Primary zone. The default zone is selected if it is empty.
ZoneBak	No	String	Secondary zone. The default zone is selected if it is empty.
CrossAZZone	No	Integer	Remote disaster recovery. 1: enable; 0: disable; empty: disable by default
IsCreateDomain	No	Integer	0: not create; 1: create
Domain	No	String	Required for creating a domain name
FwCidrInfo	No	<a href="#">FwCidrInfo</a>	IP range of the firewall

### 3. Output Parameters

Parameter Name	Type	Description
CfwInsId	String	NAT instance info Note: This field may return <code>null</code> , indicating that no valid value was found.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a firewall instance with domain name

This example shows you how to apply the "Use existing" mode.

#### Input Example

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

{
```

```
"Name": "test",
"Width": 20,
"Mode": 0,
"CrossAZone": 1,
"NatGwList": [
"nat-xxx",
"nat-xxx"
],
"Zone": "ap-shanghai-4",
"ZoneBak": "ap-shanghai-3"
}
```

## Output Example

```
{
"Response": {
"CfwInsId": "xxx",
"RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"
}
}
```

## Example2 CreateNatFwInstanceWithDomain

This example shows you how to apply the "Create New" mode.

## Input Example

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

{
"Name": "test",
"Width": 20,
"Mode": 1,
"CrossAZone": 1,
"NewModeItems": {
"VpcList": [
"vpc-xxx"
],
"Eips": [
"xx.xx.xx.xx"
],
"AddCount": 1
}
```

```
},  
"Zone": "ap-shanghai-4",  
"ZoneBak": "ap-shanghai-3"  
}
```

### Output Example

```
{  
  "Response": {  
    "CfwInsId": "xxx",  
    "RequestId": "3c140219-cfe9-470e-b241-907877d6fb03"  
  }  
}
```

## 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

AuthFailure	CAM signature/authentication error.
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Invalid parameter.
InvalidParameterValue	Invalid parameter value.
LimitExceeded	The quota limit has been reached.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	The resource is unavailable.
ResourcesSoldOut	The resources have been sold out.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter error.
UnsupportedOperation	Unsupported operation.



# DescribeIPStatusList

Last updated : 2023-05-04 17:40:10

## 1. API Description

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

This API is used to get the IP protection status.

A maximum of 5 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	<a href="#">Common Params</a> . The value used for this API: DescribeIPStatusList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2019-09-04.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
IPList.N	Yes	Array of String	Asset ID

## 3. Output Parameters

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

StatusList	Array of <a href="#">IPDefendStatus</a>	IP status information
ReturnCode	Integer	Status code
ReturnMsg	String	Status information
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 "Alert Management" -> "Asset Security Events" -> "Asset Details"

#### Input Example

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

{
  "IPList": [
    "1.2.3.4"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "StatusList": [
      {
        "Status": 0,
        "IP": "xx"
      }
    ],
    "ReturnCode": 0,
    "ReturnMsg": "Success",
    "RequestId": "xx"
  }
}
```

## 5. Developer Resources

### SDK

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

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

# Data Types

Last updated : 2023-05-04 17:40:20

## AcListsData

Access control list rule

Used by actions: DescribeAcLists.

Name	Type	Description
Id	Integer	Rule ID
SourceIp	String	Access source Note: This field may return <code>null</code> , indicating that no valid value was found.
TargetIp	String	Access destination Note: This field may return <code>null</code> , indicating that no valid value was found.
Protocol	String	Protocol Note: This field may return <code>null</code> , indicating that no valid value was found.
Port	String	Port Note: This field may return <code>null</code> , indicating that no valid value was found.
Strategy	Integer	Policy Note: This field may return <code>null</code> , indicating that no valid value was found.
Detail	String	Description Note: This field may return <code>null</code> , indicating that no valid value was found.
Count	Integer	Hit count
OrderIndex	Integer	Priority
LogId	String	Alert rule ID Note: This field may return <code>null</code> , indicating that no valid value was found.

## AssetZone

AssetZone

Used by actions: DescribeSourceAsset.

Name	Type	Description
Zone	String	Region
ZoneEng	String	Region

## AssociatedInstanceInfo

Instance associated with an enterprise security group

Used by actions: DescribeAssociatedInstanceList.

Name	Type	Required	Description
Instanceid	String	Yes	Instance ID Note: This field may return <code>null</code> , indicating that no valid value was found.
InstanceName	String	Yes	Instance name Note: This field may return <code>null</code> , indicating that no valid value was found.
Type	Integer	Yes	Instance type. 3: CVM instance; 4: CLB instance; 5: ENI instance; 6: Cloud database Note: This field may return <code>null</code> , indicating that no valid value was found.
VpcId	String	Yes	VPC ID Note: This field may return <code>null</code> , indicating that no valid value was found.
VpcName	String	Yes	VPC name Note: This field may return <code>null</code> , indicating that no valid value was found.
PublicIp	String	Yes	Public IP Note: This field may return <code>null</code> , indicating that no valid value was found.
Ip	String	Yes	Private IP Note: This field may return <code>null</code> , indicating that no valid value was found.

SecurityGroupCount	Integer	Yes	The number of associated security groups Note: This field may return <code>null</code> , indicating that no valid value was found.
--------------------	---------	-----	---

## BetaInfoByACL

Canary publish information of the rule

Used by actions: DescribeNatAcRule.

Name	Type	Description
TaskId	Integer	Task ID. Note: This field may return null, indicating that no valid values can be obtained.
TaskName	String	Task name. Note: This field may return null, indicating that no valid values can be obtained.
LastTime	String	Last execution time Note: This field may return null, indicating that no valid values can be obtained.

## BlockIgnoreRule

Allowlist or blocklist for intrusion prevention

Used by actions: DescribeBlockIgnoreList.

Name	Type	Description
Domain	String	Domain name. Note: This field may return null, indicating that no valid values can be obtained.
loc	String	Rule IP. Note: This field may return null, indicating that no valid values can be obtained.
Level	String	Threat level. Note: This field may return null, indicating that no valid values can be obtained.
EventName	String	Source event name. Note: This field may return null, indicating that no valid values can be obtained.
Direction	Integer	Direction. Valid values: 0: outbound; 1: inbound. Note: This field may return null, indicating that no valid values can be obtained.

Protocol	String	Protocol. Note: This field may return null, indicating that no valid values can be obtained.
Address	String	Address. Note: This field may return null, indicating that no valid values can be obtained.
Action	Integer	Rule type. Valid values: 1: block; 2: allow. Note: This field may return null, indicating that no valid values can be obtained.
StartTime	String	Time when a rule starts to take effect. Note: This field may return null, indicating that no valid values can be obtained.
EndTime	String	Time when a rule expires. Note: This field may return null, indicating that no valid values can be obtained.
IgnoreReason	String	Reason for ignoring. Note: This field may return null, indicating that no valid values can be obtained.
Source	String	Security event source. Note: This field may return null, indicating that no valid values can be obtained.
Uniqueld	String	Rule ID. Note: This field may return null, indicating that no valid values can be obtained.
MatchTimes	Integer	Number of rule matching times. Note: This field may return null, indicating that no valid values can be obtained.
Country	String	Country. Note: This field may return null, indicating that no valid values can be obtained.
Comment	String	

## CfwNatDnatRule

NAT firewall DNAT rules

Used by actions: SetNatFwDnatRule.

Name	Type	Required	Description
IpProtocol	String	Yes	Network protocol. Valid values: TCP or UDP.
PublicIpAddress	String	Yes	Elastic IP.
PublicPort	Integer	Yes	Public port.

PrivateIpAddress	String	Yes	Private address.
PrivatePort	Integer	Yes	Private port.
Description	String	Yes	The description of NAT firewall forwarding rules.

## CommonFilter

Common filters for search

Used by actions: DescribeNatAcRule.

Name	Type	Required	Description
Name	String	Yes	Search key.
Values	Array of String	Yes	Search values.
OperatorType	Integer	Yes	Enum of integers that represent relations between Name and Values. <pre>enum FilterOperatorType { // Invalid FILTER_OPERATOR_TYPE_INVALID = 0; // Equal to FILTER_OPERATOR_TYPE_EQUAL = 1; // Greater than FILTER_OPERATOR_TYPE_GREATER = 2; // Less than FILTER_OPERATOR_TYPE_LESS = 3; // Greater than or equal to FILTER_OPERATOR_TYPE_GREATER_EQ = 4; // Less than or equal to FILTER_OPERATOR_TYPE_LESS_EQ = 5; // Not equal to FILTER_OPERATOR_TYPE_NO_EQ = 6; // In (contained in the array) FILTER_OPERATOR_TYPE_IN = 7; // Not in FILTER_OPERATOR_TYPE_NOT_IN = 8; // Fuzzily matched FILTER_OPERATOR_TYPE_FUZZINESS = 9; // Existing FILTER_OPERATOR_TYPE_EXIST = 10; // Not existing</pre>



```

FILTER_OPERATOR_TYPE_NOT_EXIST = 11;
// Regular
FILTER_OPERATOR_TYPE_REGULAR = 12;
}

```

## CreateNatRuleItem

Parameters for creating an NAT access control rule

Used by actions: AddNatAcRule, ModifyNatAcRule.

Name	Type	Required	Description
SourceContent	String	Yes	Access source. Example: <code>net: IP/CIDR(192.168.0.2)</code>
SourceType	String	Yes	Access source type. Values for inbound rules: <code>ip</code> , <code>net</code> , <code>template</code> , and <code>location</code> . Values for outbound rules: <code>ip</code> , <code>net</code> , <code>template</code> , <code>instance</code> , <code>group</code> , and <code>tag</code> .
TargetContent	String	Yes	Access target. Example: <code>`net: IP/CIDR(192.168.0.2); domain: domain name rule, e.g., *.qq.com</code>
TargetType	String	Yes	Access target type. Values for inbound rules: <code>ip</code> , <code>net</code> , <code>template</code> , <code>instance</code> , <code>group</code> , and <code>tag</code> . Values for outbound rules: <code>ip</code> , <code>net</code> , <code>domain</code> , <code>template</code> , and <code>location</code> .
Protocol	String	Yes	Protocol. Values: <code>TCP</code> , <code>UDP</code> , <code>ICMP</code> , <code>ANY</code> , <code>HTTP</code> , <code>HTTPS</code> , <code>HTTP/HTTPS</code> , <code>SMTP</code> , <code>SMTPS</code> , <code>SMTP/SMTPS</code> , <code>FTP</code> , and <code>DNS</code> .
RuleAction	String	Yes	Specify how the CFW instance deals with the traffic hit the access control rule. Values: <code>accept</code> (allow), <code>drop</code> (reject), and <code>log</code> (observe).
Port	String	Yes	The port of the access control rule. Values: <code>-1/-1</code> (all ports) and <code>80</code> (Port 80)
Direction	Integer	Yes	Rule direction. Values: <code>1</code> (Inbound) and <code>0</code> (Outbound)
OrderIndex	Integer	Yes	Rule sequence number
Enable	String	Yes	Rule status. <code>true</code> (Enabled); <code>false</code> (Disabled)
Uuid	Integer	No	The unique ID of the rule, which is not required when you create a

			rule.
Description	String	No	Description

## DescAcItem

Item in the access control list. Each item represents an access control rule.

Used by actions: DescribeNatAcRule.

Name	Type	Description
SourceContent	String	Access source. Note: This field may return null, indicating that no valid values can be obtained.
TargetContent	String	Access destination. Note: This field may return null, indicating that no valid values can be obtained.
Protocol	String	Protocol. Note: This field may return null, indicating that no valid values can be obtained.
Port	String	Port. Note: This field may return null, indicating that no valid values can be obtained.
RuleAction	String	Action that Cloud Firewall performs on the traffic. Valid values: accept (allow), drop (reject), and log (monitor). Note: This field may return null, indicating that no valid values can be obtained.
Description	String	Description. Note: This field may return null, indicating that no valid values can be obtained.
Count	Integer	Number of rule matching times.
OrderIndex	Integer	Rule sequence number.
SourceType	String	Access source type. Valid values for an inbound rule: ip, net, template, and location; valid values for an outbound rule: ip, net, template, instance, group, and tag. Note: This field may return null, indicating that no valid values can be obtained.

TargetType	String	Access destination type. Valid values for an inbound rule: ip, net, template, instance, group, and tag; valid values for an outbound rule: ip, net, domain, template, and location. Note: This field may return null, indicating that no valid values can be obtained.
Uuid	Integer	Unique ID of the rule. Note: This field may return null, indicating that no valid values can be obtained.
Invalid	Integer	Rule validity. Note: This field may return null, indicating that no valid values can be obtained.
IsRegion	Integer	Valid values: 0: common rules; 1: regional rules. Note: This field may return null, indicating that no valid values can be obtained.
CountryCode	Integer	Country ID. Note: This field may return null, indicating that no valid values can be obtained.
CityCode	Integer	City ID. Note: This field may return null, indicating that no valid values can be obtained.
CountryName	String	Country name. Note: This field may return null, indicating that no valid values can be obtained.
CityName	String	City name. Note: This field may return null, indicating that no valid values can be obtained.
CloudCode	String	Cloud provider code. Note: This field may return null, indicating that no valid values can be obtained.
IsCloud	Integer	Valid values: 0: common rules; 1: cloud provider rules. Note: This field may return null, indicating that no valid values can be obtained.
Enable	String	Rule status. Valid values: true: enabled; false: disabled. Note: This field may return null, indicating that no valid values can be obtained.
Direction	Integer	Rule direction. Valid values: 1: inbound; 0: outbound.

		Note: This field may return null, indicating that no valid values can be obtained.
InstanceName	String	Instance name. Note: This field may return null, indicating that no valid values can be obtained.
InternalUuid	Integer	UUID for internal use. Generally, this field is not required. Note: This field may return null, indicating that no valid values can be obtained.
Status	Integer	Rule status. This field is valid when you query rule matching details. Valid values: 0: new; 1: deleted; 2: edited and deleted. Note: This field may return null, indicating that no valid values can be obtained.
BetaList	Array of <a href="#">BetaInfoByACL</a>	Details of associated tasks Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## DnsVpcSwitch

Sets the VPC DNS toggle of the NAT firewall

Used by actions: `ModifyNatFwVpcDnsSwitch`.

Name	Type	Required	Description
VpcId	String	Yes	VPC ID
Status	Integer	Yes	0: off; 1: on

## FwCidrInfo

Firewall IP range information

Used by actions: `CreateNatFwInstance`, `CreateNatFwInstanceWithDomain`, `ModifyNatFwReSelect`.

Name	Type	Required	Description
FwCidrType	String	Yes	The IP range type of the firewall. Values: <code>VpcSelf</code> (VPC IP range preferred); <code>Assis</code> (Secondary IP range preferred); <code>Custom</code> (Custom IP range)

FwCidrLst	Array of <a href="#">FwVpcCidr</a>	No	The IP segment assigned for each VPC.
ComFwCidr	String	No	The IP segment used by other firewalls. Specify this if you want to assign a dedicated segment for the firewall.

## FwVpcCidr

Firewall IP range of the VPC

Used by actions: CreateNatFwInstance, CreateNatFwInstanceWithDomain, ModifyNatFwReSelect.

Name	Type	Required	Description
VpcId	String	Yes	VPC ID
FwCidr	String	Yes	IP range of the firewall. The mask must be at least /24.

## IPDefendStatus

IP protection status

Used by actions: DescribeIPStatusList.

Name	Type	Description
IP	String	IP address
Status	Integer	Protection status. 1: enabled; -1: incorrect address; others: disabled

## InstanceInfo

// InstanceInfo instance details result

```
type InstanceInfo struct {
  AppID string  json:"AppId"  gorm:"column:appid"
  Region string  json:"Region" gorm:"column:region"
  VPCID string  json:"VpcId"  gorm:"column:vpc_id"
  SubNetID string  json:"SubnetId" gorm:"column:subnet_id"
  InstanceID string  json:"InstanceId" gorm:"column:instance_id"
```

```
InstanceName string `json:"InstanceName" gorm:"column:instance_name"
```

//InsType common.CVM 3 is CVM instance, 4 is CLB instance, 5 is ENI instance, 6 is MySQL, 7 is Redis, 8 is NAT, 9 is VPN, 10 is ES, 11 is MariaDB, and 12 is Kafka

```
InsType int `json:"InsType" gorm:"column:instance_type"
```

```
PublicIP string `json:"PublicIp" gorm:"column:public_ip"
```

```
PrivateIP string `json:"PrivateIp" gorm:"column:ip"
```

```
// It is not required for rule publishing and is used for frontend display
```

```
PortNum string `json:"PortNum" gorm:"column:port_num"`
```

```
LeakNum string `json:"LeakNum" gorm:"column:leak_num"`
```

```
ResourceGroupNum int `json:"ResourceGroupNum"`
```

```
VPCName string `json:"VPCName" gorm:"column:VPCName"`
```

```
}
```

Used by actions: DescribeSourceAsset.

Name	Type	Description
AppId	String	App ID
Region	String	Region
VpId	String	VPC ID
VPCName	String	VPC name
SubnetId	String	Subnet ID
InstanceId	String	Asset ID
InstanceName	String	Asset name
InsType	Integer	Asset type 3: CVM instance; 4: CLB instance; 5: ENI instance; 6: MySQL; 7: Redis; 8: NAT; 9: VPN; 10: ES; 11: MariaDB; 12: Kafka; 13: NATFW
PublicIp	String	Public IP
PrivateIp	String	Private IP
PortNum	String	Number of ports
LeakNum	String	Number of vulnerabilities
InsSource	String	1: public network; 2: private network

ResourcePath	Array of String	[a,b] Note: This field may return <code>null</code> , indicating that no valid value was found.
--------------	-----------------	--

## locListData

Blocklist, allowlist, IOC list

Used by actions: ModifyBlockIgnoreList.

Name	Type	Required	Description
IP	String	Yes	IP address to be handled. Either IP or Domain is required.
Direction	Integer	Yes	0 or 1. 0: outbound; 1: inbound
Domain	String	No	Domain name to be handled. Either IP or Domain is required.

## IpStatic

Statistical line graph general structure

Used by actions: DescribeBlockByIpTimesList.

Name	Type	Description
Num	Integer	Value
StatTime	String	Time shown on the x-axis of the line graph

## NatFwFilter

The filter list displayed by the NAT firewall instance

Used by actions: DescribeNatFwInstancesInfo.

Name	Type	Required	Description
FilterType	String	Yes	Filter type, e.g., instance ID
FilterContent	String	Yes	Filtered content, separated with ","

## NatFwInstance

NAT instance type

Used by actions: DescribeNatFwInstance, DescribeNatFwInstanceWithRegion.

Name	Type	Description
NatinsId	String	NAT instance ID
NatinsName	String	NAT instance name
Region	String	Instance region Note: This field may return <code>null</code> , indicating that no valid value was found.
FwMode	Integer	0: create new; 1: use existing Note: This field may return <code>null</code> , indicating that no valid value was found.
Status	Integer	0: normal; 1: creating Note: This field may return <code>null</code> , indicating that no valid value was found.
NatIp	String	NAT public IP Note: This field may return <code>null</code> , indicating that no valid value was found.

## NatInstanceInfo

NAT instance card details

Used by actions: DescribeNatFwInstancesInfo.

Name	Type	Description
NatinsId	String	NAT instance ID
NatinsName	String	NAT instance name
Region	String	Instance region
FwMode	Integer	0: create new; 1: use existing
BandWidth	Integer	Instance bandwidth (Mbps)
InFlowMax	Integer	Inbound traffic peak bandwidth (bps)
OutFlowMax	Integer	Outbound traffic peak bandwidth (bps)



RegionZh	String	Chinese region information
EipAddress	Array of String	Public IP array Note: This field may return <code>null</code> , indicating that no valid value was found.
VpcIp	Array of String	Array of internal and external IPs Note: This field may return <code>null</code> , indicating that no valid value was found.
Subnets	Array of String	Array of subnets associated with an instance Note: This field may return <code>null</code> , indicating that no valid value was found.
Status	Integer	0: normal 1: initializing Note: This field may return <code>null</code> , indicating that no valid value was found.
RegionDetail	String	Region information Note: This field may return null, indicating that no valid values can be obtained.
ZoneZh	String	Availability zone of the instance Note: This field may return null, indicating that no valid values can be obtained.
ZoneZhBak	String	Availability zone of the instance Note: This field may return null, indicating that no valid values can be obtained.
RuleUsed	Integer	Number of used rules. Note: This field may return null, indicating that no valid values can be obtained.
RuleMax	Integer	The maximum number of rules allowed in the instance. Note: This field may return null, indicating that no valid values can be obtained.

## NewModelItems

Parameters passed for the Create New mode

Used by actions: CreateNatFwInstance, CreateNatFwInstanceWithDomain.

Name	Type	Required	Description
VpcList	Array of String	Yes	VPC list for the Create New mode
Eips	Array of	No	The list of egress public EIPs bound for the Create New mode. Either

	String		Eips or AddCount is required.
AddCount	Integer	No	The number of egress public EIPs newly bound for the Create New mode. Either Eips or AddCount is required.

## RuleChangeItem

Changes of the rule sequence number.

Used by actions: ModifyNatSequenceRules.

Name	Type	Required	Description
OrderIndex	Integer	Yes	Original sequence number
NewOrderIndex	Integer	Yes	New sequence number

## RuleInfoData

Rule input object

Used by actions: CreateAcRules, ModifyAcRule.

Name	Type	Required	Description
OrderIndex	Integer	Yes	Priority
SourceIp	String	Yes	Access source
TargetIp	String	Yes	Access destination
Protocol	String	Yes	Protocol
Strategy	String	Yes	Policy. 0: observe; 1: block; 2: allow
SourceType	Integer	Yes	Access source type. 1: IP; 3: domain name; 4: IP address template; 5: domain name address template
Direction	Integer	Yes	Direction. 0: outbound; 1: inbound
Detail	String	Yes	Description
TargetType	Integer	Yes	Access destination type. 1: IP, 3: domain name; 4: IP address template; 5: domain name address template

Port	String	No	Port
Id	Integer	No	ID value
LogId	String	No	Log ID, required when an alert log is created
City	Integer	No	City code
Country	Integer	No	Country code
CloudCode	String	No	Cloud vendor. Multiple vendors are supported and separated with commas. 1: Tencent Cloud (only in Hong Kong, China and overseas); 2: Alibaba Cloud; 3: Amazon Cloud; 4: Huawei Cloud; 5: Microsoft Cloud
IsRegion	Integer	No	Indicates whether it is a region
CityName	String	No	City name
CountryName	String	No	Country name

## ScanInfo

Getting started on scanning information

Used by actions: DescribeGuideScanInfo.

Name	Type	Description
ScanResultInfo	<a href="#">ScanResultInfo</a>	Scanning result information
ScanStatus	Integer	Scanning status. 0: scanning; 1: completed; 2: auto scanning unselected
ScanPercent	Float	Progress
ScanTime	String	Estimated completion time

## ScanResultInfo

Getting started on scanning result information PortNum int

LeakNum int

IPNum int

IPStatus bool

IdpStatus bool

BanStatus bool

Used by actions: DescribeGuideScanInfo.

Name	Type	Description
LeakNum	Integer	Number of vulnerability exploits
IPNum	Integer	Number of protected IPs
PortNum	Integer	Number of exposed ports
IPStatus	Boolean	Protection status
IdpStatus	Boolean	Attack blocking status
BanStatus	Boolean	Port blocking status

## SecurityGroupBothWayInfo

Two-way enterprise security group rules

Used by actions: CreateSecurityGroupRules, DescribeSecurityGroupList.

Name	Type	Required	Description
OrderIndex	Integer	Yes	Priority Note: This field may return <code>null</code> , indicating that no valid value was found.
SourceId	String	Yes	Access source Note: This field may return <code>null</code> , indicating that no valid value was found.
SourceType	Integer	Yes	Access source type. Default: 0. 0: IP; 1: VPC; 2: SUBNET; 3: CVM; 4: CLB; 5: ENI; 6: CDB; 7: Parameter template. 100: asset group Note: This field may return <code>null</code> , indicating that no valid value was found.
TargetId	String	Yes	Access destination Note: This field may return <code>null</code> , indicating that no valid value was found.
TargetType	Integer	Yes	Access destination type. Default: 0. 0: IP; 1: VPC; 2: SUBNET;

			3: CVM; 4: CLB; 5: ENI; 6: CDB; 7: Parameter template. 100: asset group Note: This field may return <code>null</code> , indicating that no valid value was found.
Protocol	String	Yes	Protocol Note: This field may return <code>null</code> , indicating that no valid value was found.
Port	String	Yes	Destination port Note: This field may return <code>null</code> , indicating that no valid value was found.
Strategy	Integer	Yes	Policy. 1: block; 2: allow Note: This field may return <code>null</code> , indicating that no valid value was found.
Direction	Integer	Yes	Direction. 0: outbound; 1: inbound. 1 by default Note: This field may return <code>null</code> , indicating that no valid value was found.
Region	String	Yes	Region
Detail	String	No	Description Note: This field may return <code>null</code> , indicating that no valid value was found.
Status	Integer	No	Toggle status. 0: off; 1: on Note: This field may return <code>null</code> , indicating that no valid value was found.
IsNew	Integer	No	Indicates whether the rule is normal. 0: normal; 1: abnormal Note: This field may return <code>null</code> , indicating that no valid value was found.
BothWay	Integer	No	One-way/two-way. 0: one-way; 1: two-way Note: This field may return <code>null</code> , indicating that no valid value was found.
VpcId	String	No	VPC ID Note: This field may return <code>null</code> , indicating that no valid value was found.
SubnetId	String	No	Subnet ID Note: This field may return <code>null</code> , indicating that no valid value was found.

InstanceName	String	No	Instance name Note: This field may return <code>null</code> , indicating that no valid value was found.
PublicIp	String	No	Public IP. Multiple IPs are separated by commas. Note: This field may return <code>null</code> , indicating that no valid value was found.
PrivateIp	String	No	Private IP. Multiple IPs are separated by commas. Note: This field may return <code>null</code> , indicating that no valid value was found.
Cidr	String	No	Masked address. Multiple addresses are separated by commas. Note: This field may return <code>null</code> , indicating that no valid value was found.
ServiceTemplateId	String	No	Port protocol template ID Note: This field may return <code>null</code> , indicating that no valid value was found.
ProtocolPortType	Integer	No	Indicates whether to use the port protocol template. 0: no; 1: yes

## SecurityGroupListData

Security group list data

Used by actions: CreateSecurityGroupRules, DescribeSecurityGroupList.

Name	Type	Required	Description
OrderIndex	Integer	Yes	Priority
SourceId	String	Yes	Access source
SourceType	Integer	Yes	Access source type. Default: 0. 1: VPC; 2: SUBNET; 3: CVM; 4: CLB; 5: ENI; 6: CDB; 7: Parameter template. 100: Resource group
TargetId	String	Yes	Access destination
TargetType	Integer	Yes	Access destination type. Default: 0. 1: VPC; 2: SUBNET; 3: CVM; 4: CLB; 5: ENI; 6: CDB; 7: Parameter template; 100: resource group

Protocol	String	Yes	Protocol
Port	String	Yes	Destination port
Strategy	Integer	Yes	Policy. 1: block; 2: allow
Detail	String	Yes	Description
BothWay	Integer	Yes	One-way/two-way. 0: one-way; 1: two-way
Id	Integer	No	Rule ID
Status	Integer	No	Toggle status. 0: off; 1: on
IsNew	Integer	No	Indicates whether the rule is normal. 0: normal; 1: abnormal
Vpclid	String	No	VPC ID Note: This field may return <code>null</code> , indicating that no valid value was found.
SubnetId	String	No	Subnet ID Note: This field may return <code>null</code> , indicating that no valid value was found.
InstanceName	String	No	Instance name Note: This field may return <code>null</code> , indicating that no valid value was found.
PublicIp	String	No	Public IP. Multiple IPs are separated by commas. Note: This field may return <code>null</code> , indicating that no valid value was found.
PrivateIp	String	No	Private IP. Multiple IPs are separated by commas. Note: This field may return <code>null</code> , indicating that no valid value was found.
Cidr	String	No	Masked address. Multiple addresses are separated by commas. Note: This field may return <code>null</code> , indicating that no valid value was found.
ServiceTemplateId	String	No	Port protocol template ID Note: This field may return <code>null</code> , indicating that no valid value was found.

BothWayInfo	Array of <a href="#">SecurityGroupBothWayInfo</a>	No	Two-way rules Note: This field may return <code>null</code> , indicating that no valid value was found.
Direction	Integer	No	Direction. 0: outbound; 1: inbound. 1 by default
ProtocolPortType	Integer	No	Indicates whether to use the port protocol template. 0: no; 1: yes

## SecurityGroupOrderIndexData

Change priority of enterprise security group rules

Used by actions: `ModifySecurityGroupSequenceRules`.

Name	Type	Required	Description
OrderIndex	Integer	Yes	Current priority of enterprise security group rules
NewOrderIndex	Integer	Yes	New priority of enterprise security group rules

## SecurityGroupRule

Security group rules

Used by actions: `AddEnterpriseSecurityGroupRules`, `DescribeEnterpriseSecurityGroupRule`, `ModifyEnterpriseSecurityGroupRule`.

Name	Type	Required	Description
SourceContent	String	Yes	Source example: net: IP/CIDR (192.168.0.2) template: parameter template (ipm-dyodhpby) instance: asset instance (ins-123456) resourcegroup: asset group (/all groups/group 1/subgroup 1) tag: resource tag ({"Key":"tag key","Value":"tag value"}) region: region (ap-gaungzhou)
SourceType	String	Yes	Access source type. Valid values: net template instance resourcegroup tag region
DestContent	String	Yes	Destination example:



			<p>net: IP/CIDR (192.168.0.2)</p> <p>template: parameter template (ipm-dyodhpby)</p> <p>instance: asset instance (ins-123456)</p> <p>resourcegroup: asset group (/all groups/group 1/subgroup 1)</p> <p>tag: resource tag ({"Key":"tag key","Value":"tag value"})</p> <p>region: region (ap-gaungzhou)</p>
DestType	String	Yes	Access destination type. Valid values: net template instance resourcegroup tag region
RuleAction	String	Yes	The action that Cloud Firewall performs on the traffic. Valid values: accept: allow drop: deny
Description	String	Yes	Description
OrderIndex	String	Yes	Rule priority. -1: lowest; 1: highest
Protocol	String	No	Protocol. TCP/UDP/ICMP/ANY Note: This field may return <code>null</code> , indicating that no valid value was found.
Port	String	No	The port to apply access control rules. Valid values: -1/-1: all ports 80: port 80 Note: This field may return <code>null</code> , indicating that no valid value was found.
ServiceTemplateId	String	No	Parameter template ID of port and protocol type; mutually exclusive with Protocol and Port Note: This field may return <code>null</code> , indicating that no valid value was found.
Id	String	No	The unique ID of the rule
Enable	String	No	Rule status. true: enabled; false: disabled

## SequenceData

### Priority

Used by actions: ModifySequenceRules.

Name	Type	Required	Description
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Id	Integer	Yes	Rule ID
OrderIndex	Integer	Yes	Rule priority before change
NewOrderIndex	Integer	Yes	Rule priority after change

## StaticInfo

Most frequent attacker statistics

Used by actions: DescribeBlockStaticList, DescribeTLogIpList.

Name	Type	Description
Num	Integer	Number
Port	String	Port
Ip	String	IP
Address	String	Address
InsID	String	Asset ID
InsName	String	Asset name

## SwitchListsData

Firewall status list

Used by actions: DescribeSwitchLists.

Name	Type	Description
PublicIp	String	Public IP Note: This field may return <code>null</code> , indicating that no valid value was found.
IntranetIp	String	Private IP Note: This field may return <code>null</code> , indicating that no valid value was found.
InstanceName	String	Instance name Note: This field may return <code>null</code> , indicating that no valid value was found.
InstanceId	String	Instance ID

		Note: This field may return <code>null</code> , indicating that no valid value was found.
AssetType	String	Asset type
Area	String	Region Note: This field may return <code>null</code> , indicating that no valid value was found.
Switch	Integer	Firewall toggle
Id	Integer	ID value
PublicIpType	Integer	Public IP type Note: This field may return <code>null</code> , indicating that no valid value was found.
PortTimes	Integer	Number of risky ports Note: This field may return <code>null</code> , indicating that no valid value was found.
LastTime	String	Last scan time Note: This field may return <code>null</code> , indicating that no valid value was found.
ScanMode	String	Scan mode Note: This field may return <code>null</code> , indicating that no valid value was found.
ScanStatus	Integer	Scan status Note: This field may return <code>null</code> , indicating that no valid value was found.

## TLogInfo

Alert monitoring data

Used by actions: DescribeTLogInfo.

Name	Type	Description
OutNum	Integer	Compromised servers
HandleNum	Integer	Unhandled alerts
VulNum	Integer	Vulnerability attacks
NetworkNum	Integer	Detected networks
BanNum	Integer	Blocklist
BruteForceNum	Integer	Brute force attacks

## UnHandleEvent

Unhandled event details

Used by actions: DescribeUnHandleEventTabList.

Name	Type	Description
EventTableListStruct	Array of <a href="#">UnHandleEventDetail</a>	Unhandled event type
BaseLineUser	Integer	1: yes; 0: no
BaseLineInSwitch	Integer	1: on; 0: off
BaseLineOutSwitch	Integer	1: on; 0: off
VpcFwCount	Integer	Number of inter-VPC firewall instances Note: This field may return <code>null</code> , indicating that no valid value was found.

## UnHandleEventDetail

Unhandled event statistics

Used by actions: DescribeUnHandleEventTabList.

Name	Type	Description
EventName	String	Security event name
Total	Integer	Number of unhandled events

## VpcDnsInfo

VPC DNS status of NAT firewall

Used by actions: DescribeNatFwVpcDnsLst.

Name	Type	Description
VpcId	String	VPC ID

VpcName	String	VPC name
FwMode	Integer	NAT firewall mode. 0: Create new; 1: Use existing
VpcIpv4Cidr	String	VPC IPv4 CIDR block (Classless Inter-Domain Routing)
DNSEip	String	Public EIP, which is the firewall DNS resolution address
NatInsId	String	NAT gateway ID Note: This field may return <code>null</code> , indicating that no valid value was found.
NatInsName	String	NAT gateway name Note: This field may return <code>null</code> , indicating that no valid value was found.
SwitchStatus	Integer	0: off; 1: on

# Error Codes

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## Feature Description

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

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

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

## Error Code List

### Common Error Codes

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

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

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

## Service Error Codes

Error Code	Description
AuthFailure	CAM signature/authentication error.
OperationDenied	Operation denied.
ResourcesSoldOut	The resources have been sold out.