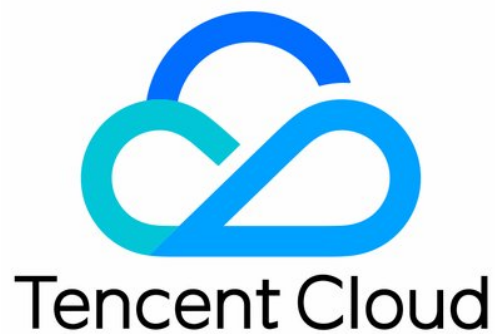


Cloud Access Management

API Documentation

Product Documentation



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History

Last updated : 2024-05-21 14:33:30

Release 21

Release time: 2024-05-21 14:33:17

Release updates:

Improvement to existing documentation.

Modified data structures:

- [LoginActionFlag](#)
 - New members:Mail, U2FToken

Release 20

Release time: 2023-03-15 10:21:40

Release updates:

Improvement to existing documentation.

Modified APIs:

- [GetUser](#)
 - New output parameters:RecentlyLoginIP, RecentlyLoginTime

Release 19

Release time: 2023-01-31 15:13:04

Release updates:

Improvement to existing documentation.

Modified data structures:

- [SecretIdLastUsed](#)

- New members:LastSecretUsedDate

Release 18

Release time: 2023-01-04 11:28:50

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateAccessKey](#)
- [DeleteAccessKey](#)
- [UpdateAccessKey](#)

New data structures:

- [AccessKeyDetail](#)

Release 17

Release time: 2022-06-08 11:21:28

Release updates:

Improvement to existing documentation.

New APIs:

- [TagRole](#)
- [UntagRole](#)

Release 16

Release time: 2022-06-01 16:52:11

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateRole](#)
 - New input parameters:Tags
- [CreateServiceLinkedRole](#)
 - New input parameters:Tags
- [DescribeRoleList](#)
 - New input parameters:Tags

New data structures:

- [RoleTags](#)

Modified data structures:

- [RoleInfo](#)
 - New members:Tags

Release 15

Release time: 2022-05-19 11:40:38

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateOIDCConfig](#)
- [DeleteOIDCConfig](#)
- [DescribeOIDCConfig](#)
- [UpdateOIDCConfig](#)

Release 14

Release time: 2022-04-07 10:23:21

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateUserOIDCConfig](#)

- [DescribeUserOIDCConfig](#)
- [DisableUserSSO](#)
- [UpdateUserOIDCConfig](#)

Deleted APIs:

- [DescribeSafeAuthFlag](#)

Release 13

Release time: 2022-03-14 09:51:33

Release updates:

Improvement to existing documentation.

New APIs:

- [GetUserAppld](#)

Modified data structures:

- [SubAccountInfo](#)
 - New members:NickName

Release 12

Release time: 2022-01-20 10:58:38

Release updates:

Improvement to existing documentation.

New APIs:

- [ListAttachedUserAllPolicies](#)

New data structures:

- [AttachedUserPolicy](#)
- [AttachedUserPolicyGroupInfo](#)

Release 11

Release time: 2021-12-09 16:01:43

Release updates:

Improvement to existing documentation.

Modified data structures:

- [GroupIdOfUidInfo](#)
 - New members: Uin
 - **Modified members:** Uid

Release 10

Release time: 2021-10-28 18:34:43

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateUserSAMLConfig](#)
- [DescribeUserSAMLConfig](#)
- [UpdateUserSAMLConfig](#)

Release 9

Release time: 2021-09-02 10:35:49

Release updates:

Improvement to existing documentation.

Modified APIs:

- [ListAttachedGroupPolicies](#)
 - New input parameters: Keyword
- [ListAttachedRolePolicies](#)
 - New input parameters: Keyword

Release 8

Release time: 2021-08-06 16:36:59

Release updates:

Improvement to existing documentation.

Modified data structures:

- [StrategyInfo](#)
 - New members: AttachEntityCount, AttachEntityBoundaryCount, UpdateTime

Release 7

Release time: 2021-07-20 17:25:12

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeSafeAuthFlagIntl](#)
- [GetAccountSummary](#)

New data structures:

- [LoginActionFlagIntl](#)

Release 6

Release time: 2021-07-08 16:06:37

Release updates:

Improvement to existing documentation.

New APIs:

- [GetSecurityLastUsed](#)

New data structures:

- [SecretIdLastUsed](#)

Release 5

Release time: 2021-04-19 11:30:23

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeSubAccounts](#)

New data structures:

- [SubAccountUser](#)

Release 4

Release time: 2021-01-26 14:16:26

Release updates:

Improvement to existing documentation.

Modified data structures:

- [SubAccountInfo](#)
 - New members:CreateTime

Release 3

Release time: 2020-09-24 18:08:37

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeSafeAuthFlagColl](#)

Modified data structures:

- [AttachEntityOfPolicy](#)
 - New members:AttachmentTime

Release 2

Release time: 2020-09-17 17:25:39

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeSafeAuthFlag](#)

New data structures:

- [LoginActionFlag](#)
- [OffsiteFlag](#)

Existing Release

Release time: 2020-08-13 23:29:21

Existing APIs/data structures are as follows:

Improvement to existing documentation.

Existing APIs:

- [AddUser](#)
- [AddUserToGroup](#)
- [AttachGroupPolicy](#)
- [AttachRolePolicy](#)
- [AttachUserPolicy](#)
- [ConsumeCustomMFAToken](#)
- [CreateGroup](#)
- [CreatePolicy](#)
- [CreatePolicyVersion](#)
- [CreateRole](#)
- [CreateSAMLProvider](#)
- [CreateServiceLinkedRole](#)
- [DeleteGroup](#)
- [DeletePolicy](#)
- [DeletePolicyVersion](#)

- [DeleteRole](#)
- [DeleteRolePermissionsBoundary](#)
- [DeleteSAMLProvider](#)
- [DeleteServiceLinkedRole](#)
- [DeleteUser](#)
- [DeleteUserPermissionsBoundary](#)
- [DescribeRoleList](#)
- [DetachGroupPolicy](#)
- [DetachRolePolicy](#)
- [DetachUserPolicy](#)
- [GetCustomMFATokenInfo](#)
- [GetGroup](#)
- [GetPolicy](#)
- [GetPolicyVersion](#)
- [GetRole](#)
- [GetSAMLProvider](#)
- [GetServiceLinkedRoleDeletionStatus](#)
- [GetUser](#)
- [ListAccessKeys](#)
- [ListAttachedGroupPolicies](#)
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- [ListCollaborators](#)
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- [ListPolicyVersions](#)
- [ListSAMLProviders](#)
- [ListUsers](#)
- [ListUsersForGroup](#)
- [PutRolePermissionsBoundary](#)
- [PutUserPermissionsBoundary](#)
- [RemoveUserFromGroup](#)
- [SetDefaultPolicyVersion](#)
- [SetMfaFlag](#)
- [UpdateAssumeRolePolicy](#)
- [UpdateGroup](#)

- [UpdatePolicy](#)
- [UpdateRoleConsoleLogin](#)
- [UpdateRoleDescription](#)
- [UpdateSAMLProvider](#)
- [UpdateUser](#)

Existing data structures:

- [AccessKey](#)
- [AttachEntityOfPolicy](#)
- [AttachPolicyInfo](#)
- [AttachedPolicyOfRole](#)
- [GroupIdOfUidInfo](#)
- [GroupInfo](#)
- [GroupMemberInfo](#)
- [LoginActionMfaFlag](#)
- [PolicyVersionDetail](#)
- [PolicyVersionItem](#)
- [RoleInfo](#)
- [SAMLProviderInfo](#)
- [StrategyInfo](#)
- [SubAccountInfo](#)

Introduction

Last updated : 2024-05-21 14:33:27

Thank you for choosing Cloud Access Management (CAM). You can control and manage the access to resources in your Tencent Cloud account by calling the APIs described in this document. Before using these APIs, make sure you fully understand what CAM is and how it works.

Notes:

- All CAM APIs described here have been upgraded to API 3.0 and all new CAM features will be updated here. We recommend that you use API 3.0.
- Legacy APIs remain available but will not be updated.

API Category

Last updated : 2024-05-21 14:33:28

User APIs

API Name	Feature	Frequency Limit (maximum requests per second)
AddUser	Creates a sub-user	20
AddUserToGroup	Adds users to a user group	20
ConsumeCustomMFAToken	Verifies a custom multi-factor Token	20
CreateAccessKey	Creates an access key	5
CreateGroup	Creates a user group	20
DeleteAccessKey	Deletes an access key	5
DeleteGroup	Deletes a user group	20
DeleteUser	Deletes a sub-user	20
DeleteUserPermissionsBoundary	Deletes user permission boundary	20
DescribeSubAccounts	Queries sub-users through sub-user UIN list	20
GetAccountSummary	Queries account summary	20
GetCustomMFATokenInfo	Gets information associated with a custom multi-factor Token	20
GetGroup	Queries user group details	20
GetSecurityLastUsed	Gets a key's recent usage details	20
GetUserAppId	Gets the user AppId	20
ListAccessKeys	Lists access keys	20
ListCollaborators	Gets collaborator list	20
ListGroup	This API is used to query the list of user	20

	groups.	
ListGroupForUser	Lists user groups associated with a user	20
ListUsers	Pulls sub-users	20
ListUsersForGroup	Queries the list of users associated with a user group	20
PutUserPermissionsBoundary	Sets user permission boundary	20
RemoveUserFromGroup	Deletes users from a user group	20
SetMfaFlag	Sets account verification for login and sensitive operations for sub-users.	20
UpdateAccessKey	Updates an access key	5
UpdateGroup	Updates a user group	20
UpdateUser	Updates a sub-user	20
DescribeSafeAuthFlagColl	Gets a sub-account's security settings	20
GetUser	Queries sub-users	20

Policy APIs

API Name	Feature	Frequency Limit (maximum requests per second)
AttachGroupPolicy	Associates a policy with a user group	10
AttachUserPolicy	Associates a policy with a user	10
CreatePolicy	Creates a policy	10
CreatePolicyVersion	Creates a policy version	10
DeletePolicy	Deletes a policy	10
DeletePolicyVersion	Deletes a policy version	20
DetachGroupPolicy	Unassociate a policy and a user group	10
DetachUserPolicy	Unassociates a policy and a user	10

GetPolicy	Views policy details	20
GetPolicyVersion	Queries policy version details	20
ListAttachedGroupPolicies	Queries policy list associated with a user group	20
ListAttachedUserAllPolicies	Lists policies associated with the user (including those inherited from the user group)	5
ListAttachedUserPolicies	Queries policy list associated with a sub-account	20
ListEntitiesForPolicy	Queries entity list associated with a policy	20
ListPolicies	Queries the list of policies	20
ListPolicyVersions	Gets a list of policy versions	20
SetDefaultPolicyVersion	Sets operative policy version	20
UpdatePolicy	Updates policy information	10

Role APIs

API Name	Feature	Frequency Limit (maximum requests per second)
AttachRolePolicy	Associates a permission policy with a role	3
CreateRole	Creates a role	2
CreateServiceLinkedRole	Creates a service-linked role	20
DeleteRole	Deletes a role	3
DeleteRolePermissionsBoundary	Deletes role permission boundary	20
DeleteServiceLinkedRole	Deletes a service-linked role	20
DescribeRoleList	Gets a role list	10
DescribeSafeAuthFlagIntl	Queries security settings	20
DetachRolePolicy	Unassociates a policy and a role	3
GetRole	Gets role details	20

GetServiceLinkedRoleDeletionStatus	Gets the status of the service-linked role deletion	20
ListAttachedRolePolicies	Gets the list of policies associated with a role	10
PutRolePermissionsBoundary	Sets role permission boundary	20
TagRole	Binds tags to a role	20
UntagRole	Unbinds tags from a role	20
UpdateAssumeRolePolicy	Modifies the trust policy of a role	3
UpdateRoleConsoleLogin	Modifies a role's login permissions	20
UpdateRoleDescription	Modifies the description of a role	3

Identity Provider APIs

API Name	Feature	Frequency Limit (maximum requests per second)
CreateOIDCConfig	Creates role OIDC configurations	20
CreateSAMLProvider	Creates a SAML identity provider	20
CreateUserOIDCConfig	Creates user OIDC configuration	20
CreateUserSAMLConfig	Creates user SAML configurations	20
DeleteOIDCConfig	Deletes OIDC IdPs	20
DeleteSAMLProvider	Deletes a SAML identity provider	20
DescribeOIDCConfig	Queries role OIDC configurations	20
DescribeUserOIDCConfig	Queries user OIDC configuration	20
DescribeUserSAMLConfig	Queries user SAML configurations	20
DisableUserSSO	Disables user SSO	20
GetSAMLProvider	Queries SAML Identity provider details	20

ListSAMLProviders	Queries the list of SAML identity providers	20
UpdateOIDCConfig	Modifies role OIDC configurations	20
UpdateSAMLProvider	Updates SAML identity provider information	20
UpdateUserOIDCConfig	Modifies user OIDC configuration	20
UpdateUserSAMLConfig	Modifies user SAML configurations	20

User APIs

DescribeSafeAuthFlagColl

Last updated : 2024-05-21 14:33:43

1. API Description

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

This API is used to get a sub-account's security 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	Common Params . The value used for this API: DescribeSafeAuthFlagColl.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
SubUin	Yes	Integer	Sub-account

3. Output Parameters

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

LoginFlag	LoginActionFlag	Login protection settings
ActionFlag	LoginActionFlag	Sensitive operation protection settings
OffsiteFlag	OffsiteFlag	Suspicious login location protection settings
RequestId	String	The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.

4. Example

Example1 Getting a sub-account's security settings

This example shows you how to get a sub-account's security settings.

Input Example

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

{
  "SubUin": "1234567"
}
```

Output Example

```
{
  "Response": {
    "LoginFlag": {
      "Phone": 1,
      "Token": 0,
      "Stoken": 0,
      "Wechat": 0,
      "Custom": 0
    },
    "ActionFlag": {
      "Phone": 0,
      "Token": 0,
      "Stoken": 0,
      "Wechat": 0,

```

```
"Custom": 0
},
"OffsiteFlag": {
"VerifyFlag": 0,
"NotifyPhone": 1,
"NotifyEmail": 1,
"NotifyWechat": 1,
"Tips": 0
},
"RequestId": "9626da03-4645-4c54-ba90-74836284af0c"
}
```

5. Developer Resources

SDK

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

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.

InvalidParameter.ParamError	Invalid input parameter.
ResourceNotFound.UserNotExist	User does not exist.

CreateGroup

Last updated : 2023-03-15 10:24:59

1. API Description

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

This API is used to create a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
GroupName	Yes	String	User Group name
Remark	No	String	User Group description

3. Output Parameters

Parameter Name	Type	Description
GroupId	Integer	User Group ID

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

4. Example

Example1 Creating a user group

Input Example

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

{
  "GroupName": "test1",
  "Remark": "test2"
}
```

Output Example

```
{
  "Response": {
    "GroupId": 2020,
    "RequestId": "f36a5d34-0d51-4b91-b9fc-af5d02571656"
  }
}
```

5. Developer Resources

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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
InvalidParameter.GroupFull	Limit on number of user groups reached.
InvalidParameter.GroupNameInUse	User Group name repeated.
InvalidParameter.ParamError	Invalid input parameter.

UpdateUser

Last updated : 2023-03-15 10:24:53

1. API Description

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

This API is used to update a sub-user.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateUser.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	Sub-user username
Remark	No	String	Sub-user remarks
ConsoleLogin	No	Integer	Whether or not the sub-user is allowed to log in to the console. 0: No; 1: Yes.
Password	No	String	Sub-user's console login password. If no password rules have been set, the password must have a minimum of 8 characters containing uppercase letters, lowercase letters, digits, and special characters by default. This parameter will be valid only when the sub-user is allowed to log in to the console. If it is not specified and console login is allowed, the system will

			automatically generate a random 32-character password that contains uppercase letters, lowercase letters, digits, and special characters.
NeedResetPassword	No	Integer	If the sub-user needs to reset their password when they next log in to the console. 0: No; 1: Yes.
PhoneNum	No	String	Mobile number
CountryCode	No	String	Country/Area Code
Email	No	String	Email

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 Updating a sub-user

Input Example

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

{
  "Remark": "test",
  "Name": "test124",
  "CountryCode": "86",
  "NeedResetPassword": "0",
  "PhoneNum": "10086",
  "ConsoleLogin": "1",
  "Password": "test123456",
```

```
"Email": "123%40qq.com"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "b46d2afe-6893-4529-bc96-2c82d9214957"
  }
}
```

5. Developer Resources

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.

InvalidParameter.PasswordViolatedRules	Password incompatible with user safety settings.
InvalidParameter.UserNameIllegal	Invalid username.
ResourceNotFound.UserNotExist	User does not exist.

UpdateGroup

Last updated : 2023-03-15 10:24:53

1. API Description

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

This API is used to update a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
GroupId	Yes	Integer	User Group ID
GroupName	No	String	User Group name
Remark	No	String	User Group description

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 Updating a user group

Input Example

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

{
  &GroupName=2020test
  "GroupId": "2020"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "1fadd33e-6f57-4404-a912-bc00680b89d2"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for 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.GroupNameInUse	User Group name repeated.
InvalidParameter.GroupNotExist	User Group does not exist.
InvalidParameter.ParamError	Invalid input parameter.
ResourceNotFound.GroupNotExist	User group does not exist.

RemoveUserFromGroup

Last updated : 2023-03-15 10:24:54

1. API Description

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

This API is used to delete users from a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: RemoveUserFromGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Info.N	Yes	Array of GroupIdOfUidInfo	The user's UIN/UID to be deleted and the array corresponding to the user 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 a user from a user group

Input Example

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

{
  "Info": [
    {
      "Uid": "1001408",
      "GroupId": "2020"
    }
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "1fadd33e-6f57-4404-a912-bc00680b89d2"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for 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.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.
InvalidParameter.UserUinAndUinNotAllNull	A user's UIN and UID cannot be left empty at the same time.
ResourceNotFound.UserNotExist	User does not exist.

ListUsersForGroup

Last updated : 2023-03-15 10:24:55

1. API Description

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

This API is used to query the list of users associated with a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListUsersForGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
GroupId	Yes	Integer	User group ID
Page	No	Integer	Page number; default is 1
Rp	No	Integer	Number of entries per page; default is 20

3. Output Parameters

--	--	--

Parameter Name	Type	Description
TotalNum	Integer	Total number of users associated with the User Group
UserInfo	Array of GroupMemberInfo	Sub-user information
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 users associated with user group

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListUsersForGroup
&GroupId=2020
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "TotalNum": 1,
    "UserInfo": [
      {
        "Uid": 1001408,
        "Uin": 100000545998,
        "Name": "testName",
        "PhoneNum": "",
        "CountryCode": "86",
        "PhoneFlag": 0,
        "Email": "",
        "EmailFlag": 0,
        "UserType": 3,
        "CreateTime": "2018-04-24 15:36:26",
        "IsReceiverOwner": 0
      }
    ],
    "RequestId": "576e68f4-49cf-451b-b717-a584cb68910a"
  }
}
```


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
FailedOperation	Operation failed.
ResourceNotFound.GroupNotExist	User group does not exist.

ListUsers

Last updated : 2023-03-15 10:24:55

1. API Description

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

This API is used to pull sub-users.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListUsers.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
Data	Array of SubAccountInfo	Sub-user information
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Pulling the sub-users

Input Example

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

Output Example

```
{
  "Response": {
    "Data": [
      {
        "Uin": 100021969091,
        "Name": "cam001",
        "Uid": 11398137,
        "Remark": "",
        "ConsoleLogin": 1,
        "PhoneNum": "",
        "CountryCode": "86",
        "Email": "",
        "CreateTime": "2021-10-28 18:02:00"
      }
    ],
    "RequestId": "b2c7267c-8ee5-408b-9a88-ac359f13c8b1"
  }
}
```

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
FailedOperation	Operation failed.

ListGroupsForUser

Last updated : 2023-03-15 10:24:55

1. API Description

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

This API is used to list user groups associated with a user.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListGroupsForUser.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Uid	No	Integer	Sub-user UID
Rp	No	Integer	Number of entries per page; default is 20
Page	No	Integer	Page number; default is 1
SubUin	No	Integer	Sub-account UIN

3. Output Parameters

Parameter Name	Type	Description
TotalNum	Integer	Total number of User Groups to which the sub-user has been added
GroupInfo	Array of GroupInfo	User Group information
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Listing user groups associated with a user

Input Example

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

{
  "Uid": "1001408"
}
```

Output Example

```
{
  "Response": {
    "TotalNum": 1,
    "GroupInfo": [
      {
        "GroupId": 2020,
        "GroupName": "test1",
        "CreateTime": "2019-04-03 15:11:34",
        "Remark": "test2"
      }
    ],
    "RequestId": "a614c392-3079-4dab-b819-0ab0563a32f0"
  }
}
```

5. Developer Resources

SDK

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Command Line Interface

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6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.
ResourceNotFound.UserNotExist	User does not exist.

ListGroups

Last updated : 2023-03-15 10:24:56

1. API Description

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

This API is used to query the list of user groups.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListGroups.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Page	No	Integer	Page number; default is 1
Rp	No	Integer	Number of entries per page; default is 20
Keyword	No	String	Filter by User Group name

3. Output Parameters

Parameter Name	Type	Description

TotalNum	Integer	Total number of User Groups
GroupInfo	Array of GroupInfo	User group information array
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying user group list

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListGroups
&Page=1
&Rp=20
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "TotalNum": 2,
    "GroupInfo": [
      {
        "GroupId": 2021,
        "GroupName": "test2",
        "CreateTime": "2019-04-03 15:15:18",
        "Remark": "test2"
      },
      {
        "GroupId": 2020,
        "GroupName": "test1",
        "CreateTime": "2019-04-03 15:11:34",
        "Remark": "test2"
      }
    ],
    "RequestId": "dbb91d87-5e3f-42b4-8cc9-ad9f16600370"
  }
}
```

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
FailedOperation	Operation failed.

GetUser

Last updated : 2023-03-15 10:24:57

1. API Description

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

This API is used to query sub-users.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetUser.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	Sub-user username

3. Output Parameters

Parameter Name	Type	Description
Uin	Integer	Sub-user UIN
Name	String	Sub-user username
Uid	Integer	Sub-user UID

Remark	String	Sub-user remarks Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
ConsoleLogin	Integer	Whether the sub-user can log in to the console. <code>0</code> : No; <code>1</code> : Yes.
PhoneNum	String	Mobile number
CountryCode	String	Country/Area code
Email	String	Email
RecentlyLoginIP	String	Last login IP Note: This field may return null, indicating that no valid values can be obtained.
RecentlyLoginTime	String	Last login time Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying a sub-user

This example shows you how to query the sub-user information.

Input Example

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

{
  "Name": "test124"
}
```

Output Example

```
{
  "Response": {
    "Uin": 100000546533,
    "Name": "test124",
    "Uid": 1001774,
    "Remark": "test",
    "ConsoleLogin": 1,
    "PhoneNum": "10086",
    "CountryCode": "86",
    "Email": "123@qq.com",
    "RecentlyLoginIP": "1.1.1.1",
    "RecentlyLoginTime": "2023-02-27 14:59:08",
    "RequestId": "33674182-e53d-416b-b6ce-bd7e7536b5d6"
  }
}
```

5. Developer Resources

SDK

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Command Line Interface

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6. Error Code

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

--	--

Error Code	Description
AuthFailure.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.
ResourceNotFound.UserNotExist	User does not exist.

GetGroup

Last updated : 2023-03-15 10:24:57

1. API Description

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

This API is used to query user group details.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
GroupId	Yes	Integer	User Group ID

3. Output Parameters

Parameter Name	Type	Description
GroupId	Integer	User Group ID
GroupName	String	User Group name

GroupNum	Integer	Number of members in the User Group
Remark	String	User Group description
CreateTime	String	Time User Group created
UserInfo	Array of GroupMemberInfo	User Group member information
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying user group details

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetGroup
&GroupId=2020
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "GroupId": 2020,
    "GroupName": "test1",
    "GroupNum": 1,
    "Remark": "test2",
    "CreateTime": "2019-04-03 15:11:34",
    "UserInfo": [
      {
        "Uid": 1001408,
        "Uin": 100000545998,
        "Name": "testName",
        "PhoneNum": "",
        "CountryCode": "86",
        "PhoneFlag": 0,
        "Email": "",
        "EmailFlag": 0,
        "UserType": 3,
        "CreateTime": "2018-04-24 15:36:26",
        "IsReceiverOwner": 0
      }
    ]
  }
}
```



```
}  
],  
"RequestId": "4a00d281-862a-4699-9d71-387d9fc2c36a"  
}  
}
```

5. Developer Resources

SDK

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
ResourceNotFound.UserNotExist	User does not exist.

DeleteUser

Last updated : 2023-03-15 10:24:59

1. API Description

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

This API is used to delete a sub-user.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteUser.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	Sub-user username
Force	No	Integer	Whether to forcibly delete the sub-user. The default input parameter is <code>0</code> . <code>0</code> : do not delete the user if the user has undeleted API keys; <code>1</code> : first delete the API keys then delete the user if the user has undeleted API keys. To delete API keys, you need to have cam:DeleteApiKey permission, which enables you to delete both enabled and disabled API keys. If you do not have this permission, you will not be able to delete API keys and the user.

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 a sub-user

This example shows you how to delete a sub-user.

Input Example

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

{
  "Name": "test124"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "b46d2afe-6893-4529-bc96-2c82d9214957"
  }
}
```

5. Developer Resources

SDK

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.
OperationDenied.HaveKeys	There are undeleted API keys.
RequestLimitExceeded.UinLimitExceeded	The user account limit has been reached.
ResourceNotFound.UserNotExist	User does not exist.
UnauthorizedOperation.DeleteApiKey	User do not have the authorization to delete API keys.

DeleteGroup

Last updated : 2023-03-15 10:24:59

1. API Description

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

This API is used to delete a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
GroupId	Yes	Integer	User 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 a user group

Input Example

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

{
  "GroupId": "2020"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "1fadd33e-6f57-4404-a912-bc00680b89d2"
  }
}
```

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
FailedOperation	Operation failed.
ResourceNotFound.UserNotExist	User does not exist.

AddUserToGroup

Last updated : 2023-03-15 10:25:00

1. API Description

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

This API is used to add users to a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: AddUserToGroup.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Info.N	Yes	Array of GroupIdOfUidInfo	The association between the user group ID and the sub-user UIN/UID.

3. Output Parameters

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

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

4. Example

Example1 Adding a user to a user group

Input Example

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

{
  "Info": [
    {
      "Uid": "1001408",
      "GroupId": "2020"
    }
  ]
}
```

Output Example

```
{
  "Response": {
    "RequestId": "47c4a570-17fa-44a3-8ff6-fe006170c104"
  }
}
```

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.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.
InvalidParameter.GroupNotExist	User Group does not exist.
InvalidParameter.GroupUserFull	Limit on number of sub-users in the user group reached.
InvalidParameter.UserGroupFull	Limit on number of user groups joined by a sub-user reached.
InvalidParameter.UserUinAndUinNotAllNull	A user's UIN and UID cannot be left empty at the same time.
ResourceNotFound.UserNotExist	User does not exist.

AddUser

Last updated : 2023-03-15 10:25:01

1. API Description

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

This API is used to create a sub-user.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: AddUser.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	Sub-user username
Remark	No	String	Sub-user remarks
ConsoleLogin	No	Integer	Whether or not the sub-user is allowed to log in to the console. 0: No; 1: Yes.
UseApi	No	Integer	Whether or not to generate keys for sub-users. 0: No; 1: Yes.
Password	No	String	Sub-user's console login password. If no password rules have been set, the password must have a minimum of 8 characters containing uppercase letters, lowercase letters, digits, and special characters by default. This parameter will be valid only

			when the sub-user is allowed to log in to the console. If it is not specified and console login is allowed, the system will automatically generate a random 32-character password that contains uppercase letters, lowercase letters, digits, and special characters.
NeedResetPassword	No	Integer	If the sub-user needs to reset their password when they next log in to the console. 0: No; 1: Yes.
PhoneNum	No	String	Mobile number
CountryCode	No	String	Country/Area Code
Email	No	String	Email

3. Output Parameters

Parameter Name	Type	Description
Uin	Integer	Sub-user UIN
Name	String	Sub-user username
Password	String	If the combination of input parameters indicates that a random password should be generated, the generated password is returned
SecretId	String	Sub-user's key ID
SecretKey	String	Sub-user's secret key
Uid	Integer	Sub-user UID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Adding a sub-user

Input Example

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

```
{
  "Remark": "test",
  "Name": "test124",
  "CountryCode": "86",
  "NeedResetPassword": "0",
  "PhoneNum": "10086",
  "UseApi": "1",
  "ConsoleLogin": "1",
  "Password": "test123456",
  "Email": "123%40qq.com"
}
```

Output Example

```
{
  "Response": {
    "Uid": 5648765,
    "Uin": 100000546533,
    "Name": "test124",
    "Password": "test123456",
    "SecretId": "faweffewagwaegawe",
    "SecretKey": "fawef23rjhiuaefhuaifhiuawef",
    "RequestId": "b46d2afe-6893-4529-bc96-2c82d9214957"
  }
}
```

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.UnauthorizedOperation	No permission.
FailedOperation	Operation failed.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PasswordViolatedRules	Password incompatible with user safety settings.
InvalidParameter.SubUserFull	Limit on number of sub-accounts reached.
InvalidParameter.SubUserNameInUse	Sub-user name repeated.
InvalidParameter.UserNameIllegal	Invalid username.
RequestLimitExceeded.CreateUser	The frequency limit of creating sub-users has been reached.

SetMfaFlag

Last updated : 2023-03-15 10:24:54

1. API Description

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

This API is used to set account verification for login and sensitive operations for sub-users.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: SetMfaFlag.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
OpUin	No	Integer	Sets user UIN
LoginFlag	No	LoginActionMfaFlag	Sets login protection
ActionFlag	No	LoginActionMfaFlag	Sets operation protection

3. Output Parameters

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

4. Example

Example1 Setting login protection method to WeChat verification

Input Example

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

{
  "OpUin": 123,
  "LoginFlag": {
    "Wechat": 1
  }
}
```

Output Example

```
{
  "Response": {
    "RequestId": "cf75531d-b72d-4dcb-b0ed-d1c029a37f38"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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.UserNotBindPhone	No mobile number is bound to the account
FailedOperation.UserNotBindWechat	No WeChat Account is bound to the account
FailedOperation.UserUnbindNoPermission	User does not have permission.
InvalidParameter.MFATokenError	Multi-factor Token verification failed.
InvalidParameter.UserNotExist	User object does not exist
ResourceNotFound.UserNotExist	User does not exist.

GetCustomMFATokenInfo

Last updated : 2023-03-15 10:24:57

1. API Description

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

This API is used to get information associated with a custom multi-factor Token

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetCustomMFATokenInfo.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
MFAToken	Yes	String	Custom multi-factor verification Token

3. Output Parameters

Parameter Name	Type	Description
Uin	Integer	Account ID corresponding to the custom multi-factor verification Token

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

4. Example

Example1 Getting information associated with custom multi-factor token

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetCustomMFATokenInfo
&MFAToken=abc123
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "Uin": 12345678,
    "RequestId": "f8914327-5a9f-4016-8b2e-00f8b8901121"
  }
}
```

5. Developer Resources

SDK

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
InvalidParameter.MFATokenError	Multi-factor Token verification failed.

ConsumeCustomMFAToken

Last updated : 2023-03-15 10:25:00

1. API Description

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

This API is used to verify a custom multi-factor Token.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ConsumeCustomMFAToken.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
MFAToken	Yes	String	Custom multi-factor verification Token

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 Verifying custom multi-factor token

Input Example

```
https://cam.tencentcloudapi.com/?Action=ConsumeCustomMFAToken
&MFAToken=abc123
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "f8914327-5a9f-4016-8b2e-00f8b8901121"
  }
}
```

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
InvalidParameter.MFATokenError	Multi-factor Token verification failed.

ListCollaborators

Last updated : 2023-03-15 10:24:56

1. API Description

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

This API is used to get the collaborator 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	Common Params . The value used for this API: ListCollaborators.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Limit	No	Integer	Number of entries per page. Default value: 20
Offset	No	Integer	Pagination start value. Default value: 0

3. Output Parameters

Parameter Name	Type	Description
TotalNum	Integer	Total number

Data	Array of SubAccountInfo	Collaborator information
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Getting the collaborator list

Input Example

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

Output Example

```
{
  "Response": {
    "TotalNum": 1,
    "Data": [
      {
        "Uin": 10000000001,
        "Name": "test",
        "Uid": 1000001,
        "Remark": "",
        "ConsoleLogin": 0,
        "PhoneNum": "16166666661",
        "CountryCode": "86",
        "Email": "",
        "CreateTime": "2021-11-11 19:38:01"
      }
    ],
    "RequestId": "93ea219e-7dbe-4b76-ad63-baef14b31a3a"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for 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.

ListAccessKeys

Last updated : 2023-03-15 10:24:56

1. API Description

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

This API is used to list the access keys associated with a specified CAM user.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListAccessKeys.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetUin	No	Integer	<code>UIN</code> of the specified user. If this parameter is left empty, access keys of the current user will be listed by default

3. Output Parameters

Parameter Name	Type	Description
AccessKeys	Array of	Access key list

	AccessKey	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 Listing access keys

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListAccessKeys
&TargetUin=123456
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "AccessKeys": [
      {
        "AccessKeyId": "AKID1Op***mQsJQWEaYK",
        "Status": "Active",
        "CreateTime": "2019-12-25 14:53:03"
      },
      {
        "AccessKeyId": "A2342hOv***QOHySnzb5P7dv8",
        "Status": "Active",
        "CreateTime": "2020-03-03 16:51:21"
      }
    ],
    "RequestId": "bbc4c6b1-ee32-416a-9135-68de318c54f2"
  }
}
```

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.UnauthorizedOperation	No permission.
FailedOperation.Accesskey	An error occurred while manipulating the access key.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.UserNotExist	User object does not exist
OperationDenied.AccessKeyOverLimit	Each account can have up to two <code>AccessKey</code> .
OperationDenied.SubUin	The sub-user is not allowed to use the root account key.
OperationDenied.UinNotMatch	The access key does not match the account.
ResourceNotFound.SecretNotExist	The key does not exist.

PutUserPermissionsBoundary

Last updated : 2023-03-15 10:24:55

1. API Description

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

This API is used to set a user permission boundary.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: PutUserPermissionsBoundary.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetUin	Yes	Integer	Sub-account <code>Uin</code>
PolicyId	Yes	Integer	Policy 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 Setting a user permissions boundary

Input Example

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

{
  "TargetUin": "1234567",
  "PolicyId": "1234567"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "4097a057-19c9-45bd-ad12-b4225a75c085"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for PHP](#)
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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
InternalError.SystemError	Internal error.
InvalidParameter.OperateEntitiesOverLimit	There were too many entities in one operation.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.ServiceLinkedPolicyCantInPermissionBoundary	Service policies cannot be used for permission boundaries.
InvalidParameter.UserNotExist	User object does not exist
UnauthorizedOperation	Unauthorized operation.

DeleteUserPermissionsBoundary

Last updated : 2023-03-15 10:24:58

1. API Description

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

This API is used to delete a user permission boundary.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteUserPermissionsBoundary.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetUin	Yes	Integer	Sub-account <code>Uin</code>

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 a user permissions boundary

Input Example

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

{
  "TargetUin": "1234567"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "4097a057-19c9-45bd-ad12-b4225a75c085"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for 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.SystemError	Internal error.
InvalidParameter.OperateEntitiesOverLimit	There were too many entities in one operation.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.UserNotExist	User object does not exist
UnauthorizedOperation	Unauthorized operation.

DescribeSubAccounts

Last updated : 2023-03-15 10:24:58

1. API Description

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

This API is used to query sub-users through the sub-user UIN 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	Common Params . The value used for this API: DescribeSubAccounts.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
FilterSubAccountUin.N	Yes	Array of Integer	List of sub-user UINs. Up to 50 UINs are supported.

3. Output Parameters

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

SubAccounts	Array of SubAccountUser	Sub-user list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying sub-users through sub-user UIN list

Input Example

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

{
  "FilterSubAccountUin": [
    "200000548558"
  ]
}
```

Output Example

```
{
  "Response": {
    "SubAccounts": [
      {
        "Remark": "xx",
        "Uid": 1,
        "Uin": 1,
        "UserType": 1,
        "CreateTime": "2020-09-22 00:00:00",
        "Name": "xx"
      },
      {
        "Remark": "xx",
        "Name": "xx",
        "Uin": 1,
        "UserType": 1,
        "CreateTime": "2020-09-22 00:00:00",

```

```
"Uid": 1
}
],
"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
FailedOperation	Operation failed.
InternalError.SystemError	Internal error.
InvalidParameter	Incorrect parameter.

GetSecurityLastUsed

Last updated : 2023-03-15 10:24:57

1. API Description

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

This API is used to get a key's recent usage details.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetSecurityLastUsed.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
SecretIdList.N	Yes	Array of String	Key ID list query. Up to 10 key IDs can be queried.

3. Output Parameters

Parameter Name	Type	Description
SecretIdLastUsedRows	Array of	List of key ID's recent usage records.

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

4. Example

Example1 Querying the last time when the key was accessed

Input Example

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

{
  "SecretIdList": [
    "***"
  ]
}
```

Output Example

```
{
  "Response": {
    "SecretIdLastUsedRows": [
      {
        "SecretId": "***",
        "LastUsedDate": "2022-12-19",
        "LastSecretUsedDate": 1671681023555
      }
    ],
    "RequestId": "b790d4ca-5692-42ae-8a8c-d15c6ed976db"
  }
}
```

5. Developer Resources

SDK

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

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InvalidParameter	Incorrect parameter.

GetAccountSummary

Last updated : 2023-03-15 10:24:58

1. API Description

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

This API is used to query account summary.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetAccountSummary.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
Policies	Integer	Number of policies
Roles	Integer	Number of roles

Idps	Integer	Number of identity providers
User	Integer	Number of sub-accounts
Group	Integer	Number of groups
Member	Integer	Total number of grouped users
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying account summary

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetAccountSummary  
&<common request parameters>
```

Output Example

```
{  
  "Response": {  
    "User": 1,  
    "Group": 1,  
    "Member": 1,  
    "Policies": 1,  
    "Roles": 1,  
    "Idps": 1,  
    "RequestId": "e2ad0281-794d-4ff1-a840-794bca5da890"  
  }  
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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.SystemError	Internal error.

GetUserAppld

Last updated : 2023-03-15 10:24:56

1. API Description

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

This API is used to get the user Appld.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetUserAppld.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
Uin	String	UIN of the current account.
OwnerUin	String	OwnerUin of the current account.
Appld	Integer	Appld of the current account.

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

4. Example

Example1 Getting the user AppId

Input Example

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

Output Example

```
{  
  "Response": {  
    "Uin": "12345678",  
    "OwnerUin": "12345678",  
    "AppId": 1250000000,  
    "RequestId": "6fd84cee-0df1-4003-88c9-029acc082ad1"  
  }  
}
```

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.SystemError	Internal error.

UpdateAccessKey

Last updated : 2023-03-15 10:24:54

1. API Description

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

This API is used to update an access key for a CAM user.

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	Common Params . The value used for this API: UpdateAccessKey.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
AccessKeyId	Yes	String	ID of the specified access key that needs to be updated
Status	Yes	String	Key status. Valid values: <code>Active</code> (activated), <code>Inactive</code> (not activated).
TargetUin	No	Integer	UIN of the specified user. If this parameter is left empty, the access key will be updated for the current user by default.

3. Output Parameters

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

4. Example

Example1 Updating an access key

Input Example

```
https://cam.tencentcloudapi.com/?Action=UpdateAccessKey
&TargetUin=123456
&AccessKeyId=AKIDtm****lqorp
&Status=Active
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "99d650e2-10fa-4c8f-819f-874578039641"
  }
}
```

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.UnauthorizedOperation	No permission.
FailedOperation.Accesskey	An error occurred while manipulating the access key.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.UserNotExist	User object does not exist
OperationDenied.AccessKeyOverLimit	Each account can have up to two <code>AccessKey</code> .
OperationDenied.SubUin	The sub-user is not allowed to use the root account key.
OperationDenied.UinNotMatch	The access key does not match the account.
ResourceNotFound.SecretNotExist	The key does not exist.

DeleteAccessKey

Last updated : 2023-03-15 10:24:59

1. API Description

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

This API is used to delete an access key for a CAM user.

Calling this API is a high-risk operation because the key cannot be recovered once deleted and Tencent Cloud will deny all requests that use this key. Proceed with caution.

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	Common Params . The value used for this API: DeleteAccessKey.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
AccessKeyId	Yes	String	ID of the specified access key that needs to be deleted
TargetUin	No	Integer	UIN of the specified user. If this parameter is left empty, the access key will be deleted for the current user by default.

3. Output Parameters

--	--	--

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

4. Example

Example1 Deleting an access key

Input Example

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

{
  "TargetUin": "123456",
  "AccessKeyId": "AKIDtm****lqorp"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "99d650e2-10fa-4c8f-819f-874578039641"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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.UnauthorizedOperation	No permission.
FailedOperation.Accesskey	An error occurred while manipulating the access key.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.UserNotExist	User object does not exist
OperationDenied.AccessKeyOverLimit	Each account can have up to two <code>AccessKey</code> .
OperationDenied.SubUin	The sub-user is not allowed to use the root account key.
OperationDenied.UinNotMatch	The access key does not match the account.

CreateAccessKey

Last updated : 2023-03-15 10:25:00

1. API Description

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

This API is used to create an access key for a CAM user.

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	Common Params . The value used for this API: CreateAccessKey.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetUin	No	Integer	UIN of the specified user. If this parameter is left empty, the access key will be created for the current user by default.

3. Output Parameters

Parameter Name	Type	Description
AccessKey	AccessKeyDetail	Access key

		Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating an access key

Input Example

```
https://cam.tencentcloudapi.com/?Action=CreateAccessKey
&TargetUin=123456
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "AccessKey": {
      "AccessKeyId": "AKID8GFED7s****QrFXkmb",
      "SecretAccessKey": "iDVjy****tNzX",
      "Status": "Active",
      "CreateTime": "2020-03-03 18:00:26"
    },
    "RequestId": "f8423e9b-a7da-488d-9539-333f1955ca78"
  }
}
```

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.UnauthorizedOperation	No permission.
FailedOperation.Accesskey	An error occurred while manipulating the access key.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.UserNotExist	User object does not exist
OperationDenied.AccessKeyOverLimit	Each account can have up to two <code>AccessKey</code> .
OperationDenied.SubUin	The sub-user is not allowed to use the root account key.
OperationDenied.UinNotMatch	The access key does not match the account.

Making API Requests

Request Structure

Last updated : 2024-05-21 14:33:28

1. Service Address

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

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

2. Communications Protocol

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

3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

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

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

4. Character Encoding

Only UTF-8 encoding is used.

Common Params

Last updated : 2024-05-21 14:33:28

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

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

Common parameters for Signature Algorithm v3

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

Parameter Name	Type	Required	Description
X-TC-Action	String	Yes	The name of the API for the desired operation. For the specific value, see description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to which the data you work with belongs. For values supported for an API, see the description of parameter <code>Region</code> in the input parameters in related API documentation. This parameter is not required for some APIs (which will be indicated in related documentation), and will not take effect even it is passed.
X-TC-Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request is sent, for example, 1529223702. Note: If the difference between the UNIX timestamp and server time is greater than 5 minutes, a signature expiration error may occur.
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the common parameter <code>Version</code> in the API documentation. For example, the version is 2017-03-12.

Parameter Name	Type	Required	Description
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_request, SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as this value; - Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is UTC time, and this value must match the value of X-TC-Timestamp (a co parameter) in UTC time format; service is the name of the product/service generally a domain name prefix. For example, a domain name cvm.tencentcloud.com refers to the CVM product and the value would be cvm; - SignedHeaders: The headers that contains the authentication information type and host are the required headers; - Signature: Signature digest.
X-TC-Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

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

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Limit=10&Offset=0
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
Content-Type: application/x-www-form-urlencoded
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1539084154
X-TC-Region: ap-guangzhou
```

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

```
https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
Content-Type: application/json
```

```
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1527672334
X-TC-Region: ap-guangzhou
{"Offset":0,"Limit":10}
```

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

```
https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request,
SignedHeaders=content-type;host, Signature=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> .

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

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

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbbee224158d66e7ae5fcadb70b2d181d02&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=37ac2f4fde00b0ac9bd9eadeb459b1bbbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

Signature v3

Last updated : 2024-05-21 14:33:29

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

Applying for Security Credentials

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

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

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

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

Using the Resources for Developers

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

TC3-HMAC-SHA256 Signature Algorithm

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

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

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

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

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

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

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

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

The signature calculation process is explained in detail below.

1. Concatenating the CanonicalRequest String

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

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

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

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

Field Name	Explanation
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filter": [{"Values": ["unnamed"], "Name": "instance-name"}]}</code> in this example). The pseudocode for calculation is <code>Lowercase(HexEncode(Hash.SHA256(RequestPayload)))</code> by SHA256 hashing the payload of the HTTP request, performing hexadecimal encoding, and finally converting the encoded string to lowercase letters. For GET requests, <code>RequestPayload</code> is always an empty string. The calculation result in this example is <code>99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907</code>.

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

```
POST
/
content-type:application/json; charset=utf-8
host:cvm.tencentcloudapi.com
content-type;host
99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907
```

2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

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

Field Name	Explanation
Algorithm	Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .
RequestTimestamp	Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.

Field Name	Explanation
CredentialScope	Scope of the credential in the format of <code>Date/service/tc3_request</code> , including date, requested service and termination string (tc3_request). Date is a date in UTC time, whose value should match the UTC date converted by the common parameter X-TC-Timestamp ; service is the product name, which should match the domain name of the product called. The calculation result in this example is <code>2019-02-25/cvm/tc3_request</code> .
HashedCanonicalRequest	Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is <code>Lowercase(HexEncode(Hash.SHA256(CanonicalRequest)))</code> . The calculation result in this example is <code>2815843035062ffffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3ad</code>

Note:

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

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

```
TC3-HMAC-SHA256
1551113065
2019-02-25/cvm/tc3_request
2815843035062ffffda5fd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

3. Calculating the Signature

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

```

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

```

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

2. Calculate the signature with the following pseudocode:

```

Signature = HexEncode(HMAC_SHA256(SecretSigning, StringToSign))

```

4. Concatenating the Authorization

The Authorization is concatenated as follows:

```

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

```

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

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

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

The following example shows a finished authorization header:

```
POST https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
Content-Type: application/json; charset=utf-8
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1551113065
X-TC-Region: ap-guangzhou
{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}
```

5. Signature Demo

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

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

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

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

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature

expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

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

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

Java

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

public class TencentCloudAPITC3Demo {
    private final static Charset UTF8 = StandardCharsets.UTF_8;
    private final static String SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    private final static String SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
    private final static String CT_JSON = "application/json; charset=utf-8";
    public static byte[] hmac256(byte[] key, String msg) throws Exception {
        Mac mac = Mac.getInstance("HmacSHA256");
        SecretKeySpec secretKeySpec = new SecretKeySpec(key, mac.getAlgorithm());
        mac.init(secretKeySpec);
        return mac.doFinal(msg.getBytes(UTF8));
    }

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

    public static void main(String[] args) throws Exception {
        String service = "cvm";
        String host = "cvm.tencentcloudapi.com";
        String region = "ap-guangzhou";
        String action = "DescribeInstances";
        String version = "2017-03-12";
        String algorithm = "TC3-HMAC-SHA256";
    }
}
```

```

String timestamp = "1551113065";
//String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
// Pay attention to the time zone; otherwise, errors may occur
sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));
// ***** Step 1: Concatenate the CanonicalRequest string *****
String httpRequestMethod = "POST";
String canonicalUri = "/";
String canonicalQueryString = "";
String canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + host + "\n";
String signedHeaders = "content-type;host";
String payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}";
String hashedRequestPayload = sha256Hex(payload);
String canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
System.out.println(canonicalRequest);
// ***** Step 2: Concatenate the string to sign *****
String credentialScope = date + "/" + service + "/" + "tc3_request";
String hashedCanonicalRequest = sha256Hex(canonicalRequest);
String stringToSign = algorithm + "\n" + timestamp + "\n" + credentialScope +
"\n" + hashedCanonicalRequest;
System.out.println(stringToSign);
// ***** Step 3: Calculate the signature *****
byte[] secretDate = hmac256(("TC3" + SECRET_KEY).getBytes(UTF8), date);
byte[] secretService = hmac256(secretDate, service);
byte[] secretSigning = hmac256(secretService, "tc3_request");
String signature = DatatypeConverter.printHexBinary(hmac256(secretSigning, stringToSign)).toLowerCase();
System.out.println(signature);
// ***** Step 4: Concatenate the Authorization *****
String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
System.out.println(authorization);
TreeMap<String, String> headers = new TreeMap<String, String>();
headers.put("Authorization", authorization);
headers.put("Content-Type", CT_JSON);
headers.put("Host", host);
headers.put("X-TC-Action", action);
headers.put("X-TC-Timestamp", timestamp);
headers.put("X-TC-Version", version);
headers.put("X-TC-Region", region);
StringBuilder sb = new StringBuilder();

```



```

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

```

Python

```

# -*- coding: utf-8 -*-
import hashlib, hmac, json, os, sys, time
from datetime import datetime
# Key Parameters
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
#timestamp = int(time.time())
timestamp = 1551113065
date = datetime.utcfromtimestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 1, "Filters": [{"Name": "instance-name", "Values": ["unnamed"]}]}
# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = "POST"
canonical_uri = "/"
canonical_querystring = ""
ct = "application/json; charset=utf-8"
payload = json.dumps(params)
canonical_headers = "content-type:%s\nhost:%s\n" % (ct, host)
signed_headers = "content-type;host"
hashed_request_payload = hashlib.sha256(payload.encode("utf-8")).hexdigest()
canonical_request = (http_request_method + "\n" +
canonical_uri + "\n" +
canonical_querystring + "\n" +
canonical_headers + "\n" +

```

```

signed_headers + "\n" +
hashed_request_payload)
print(canonical_request)
# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + "/" + service + "/" + "tc3_request"
hashed_canonical_request = hashlib.sha256(canonical_request.encode("utf-8")).hexdigest()
string_to_sign = (algorithm + "\n" +
str(timestamp) + "\n" +
credential_scope + "\n" +
hashed_canonical_request)
print(string_to_sign)
# ***** Step 3: Calculate the Signature *****
# Function for computing signature digest
def sign(key, msg):
return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()
secret_date = sign(("TC3" + secret_key).encode("utf-8"), date)
secret_service = sign(secret_date, service)
secret_signing = sign(secret_service, "tc3_request")
signature = hmac.new(secret_signing, string_to_sign.encode("utf-8"), hashlib.sha256).hexdigest()
print(signature)
# ***** Step 4: Concatenate the Authorization *****
authorization = (algorithm + " " +
"Credential=" + secret_id + "/" + credential_scope + ", " +
"SignedHeaders=" + signed_headers + ", " +
"Signature=" + signature)
print(authorization)
print('curl -X POST ' + endpoint
+ ' -H "Authorization: ' + authorization + '" '
+ ' -H "Content-Type: application/json; charset=utf-8" '
+ ' -H "Host: ' + host + '" '
+ ' -H "X-TC-Action: ' + action + '" '
+ ' -H "X-TC-Timestamp: ' + str(timestamp) + '" '
+ ' -H "X-TC-Version: ' + version + '" '
+ ' -H "X-TC-Region: ' + region + '" '
+ " -d '" + payload + "'")

```

Golang

```

package main
import (
"crypto/hmac"
"crypto/sha256"
"encoding/hex"
"fmt"

```

```

"time"
)
func sha256hex(s string) string {
b := sha256.Sum256([]byte(s))
return hex.EncodeToString(b[:])
}
func hmacsha256(s, key string) string {
hashed := hmac.New(sha256.New, []byte(key))
hashed.Write([]byte(s))
return string(hashed.Sum(nil))
}
func main() {
secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
host := "cvm.tencentcloudapi.com"
algorithm := "TC3-HMAC-SHA256"
service := "cvm"
version := "2017-03-12"
action := "DescribeInstances"
region := "ap-guangzhou"
//var timestamp int64 = time.Now().Unix()
var timestamp int64 = 1551113065
// step 1: build canonical request string
httpRequestMethod := "POST"
canonicalURI := "/"
canonicalQueryString := ""
canonicalHeaders := "content-type:application/json; charset=utf-8\n" + "host:" +
host + "\n"
signedHeaders := "content-type;host"
payload := `{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-na
me"}]}`
hashedRequestPayload := sha256hex(payload)
canonicalRequest := fmt.Sprintf("%s\n%s\n%s\n%s\n%s\n%s",
httpRequestMethod,
canonicalURI,
canonicalQueryString,
canonicalHeaders,
signedHeaders,
hashedRequestPayload)
fmt.Println(canonicalRequest)
// step 2: build string to sign
date := time.Unix(timestamp, 0).UTC().Format("2006-01-02")
credentialScope := fmt.Sprintf("%s/%s/tc3_request", date, service)
hashedCanonicalRequest := sha256hex(canonicalRequest)
string2sign := fmt.Sprintf("%s\n%d\n%s\n%s",
algorithm,
timestamp,

```

```

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

```

PHP

```

<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$host = "cvm.tencentcloudapi.com";
$service = "cvm";
$version = "2017-03-12";
$action = "DescribeInstances";
$region = "ap-guangzhou";
// $timestamp = time();
$timestamp = 1551113065;
$algorithm = "TC3-HMAC-SHA256";
// step 1: build canonical request string
$httpRequestMethod = "POST";
$canonicalUri = "/";
$canonicalQueryString = "";

```

```

$canonicalHeaders = "content-type:application/json; charset=utf-8\n"."host:".$host."\n";
$signedHeaders = "content-type;host";
$payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}';
$hashedRequestPayload = hash("SHA256", $payload);
$canonicalRequest = $httpRequestMethod."\n"
.$canonicalUri."\n"
.$canonicalQueryString."\n"
.$canonicalHeaders."\n"
.$signedHeaders."\n"
.$hashedRequestPayload;
echo $canonicalRequest.PHP_EOL;
// step 2: build string to sign
$date = gmdate("Y-m-d", $timestamp);
$credentialScope = $date."/".$service."/tc3_request";
$hashedCanonicalRequest = hash("SHA256", $canonicalRequest);
$stringToSign = $algorithm."\n"
.$timestamp."\n"
.$credentialScope."\n"
.$hashedCanonicalRequest;
echo $stringToSign.PHP_EOL;
// step 3: sign string
$secretDate = hash_hmac("SHA256", $date, "TC3".$secretKey, true);
$secretService = hash_hmac("SHA256", $service, $secretDate, true);
$secretSigning = hash_hmac("SHA256", "tc3_request", $secretService, true);
$signature = hash_hmac("SHA256", $stringToSign, $secretSigning);
echo $signature.PHP_EOL;
// step 4: build authorization
$authorization = $algorithm
." Credential=".$secretId."/".$credentialScope
.", SignedHeaders=content-type;host, Signature=".$signature;
echo $authorization.PHP_EOL;
$curl = "curl -X POST https://".$host
.' -H "Authorization: '.$authorization.'"
.' -H "Content-Type: application/json; charset=utf-8"
.' -H "Host: '.$host.'"
.' -H "X-TC-Action: '.$action.'"
.' -H "X-TC-Timestamp: '.$timestamp.'"
.' -H "X-TC-Version: '.$version.'"
.' -H "X-TC-Region: '.$region.'"
." -d '". $payload.'"';
echo $curl.PHP_EOL;

```

Ruby

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

# Key Parameters
secret_id = 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****'
secret_key = 'Gu5t9xGARNpq86cd98joQYCN3*****'
service = 'cvm'
host = 'cvm.tencentcloudapi.com'
endpoint = 'https://' + host
region = 'ap-guangzhou'
action = 'DescribeInstances'
version = '2017-03-12'
algorithm = 'TC3-HMAC-SHA256'
# timestamp = Time.now.to_i
timestamp = 1551113065
date = Time.at(timestamp).utc.strftime('%Y-%m-%d')
# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = 'POST'
canonical_uri = '/'
canonical_querystring = ''
canonical_headers = "content-type:application/json; charset=utf-8\nhost:#{host}\n"
signed_headers = 'content-type;host'
# params = { 'Limit' => 1, 'Filters' => [{ 'Name' => 'instance-name', 'Values' => ['unnamed'] }] }
# payload = JSON.generate(params, { 'ascii_only' => true, 'space' => ' ' })
# json will generate in random order, to get specified result in example, we hard-code it here.
payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
hashed_request_payload = Digest::SHA256.hexdigest(payload)
canonical_request = [
  http_request_method,
  canonical_uri,
  canonical_querystring,
  canonical_headers,
  signed_headers,
  hashed_request_payload,
].join("\n")
puts canonical_request
# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + '/' + service + '/' + 'tc3_request'
hashed_request_payload = Digest::SHA256.hexdigest(canonical_request)
```

```

string_to_sign = [
algorithm,
timestamp.to_s,
credential_scope,
hashed_request_payload,
].join("\n")
puts string_to_sign
# ***** Step 3: Calculate the Signature *****
digest = OpenSSL::Digest.new('sha256')
secret_date = OpenSSL::HMAC.digest(digest, 'TC3' + secret_key, date)
secret_service = OpenSSL::HMAC.digest(digest, secret_date, service)
secret_signing = OpenSSL::HMAC.digest(digest, secret_service, 'tc3_request')
signature = OpenSSL::HMAC.hexdigest(digest, secret_signing, string_to_sign)
puts signature
# ***** Step 4: Concatenate the Authorization *****
authorization = "#{algorithm} Credential=#{secret_id}/#{credential_scope}, 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, MidpointRounding.AwayFromZero) / 1000;
    // ***** Step 1: Concatenate the CanonicalRequest string *****
    string algorithm = "TC3-HMAC-SHA256";
    string httpRequestMethod = "POST";
    string canonicalUri = "/";
    string canonicalQueryString = "";
    string contentType = "application/json";
    string canonicalHeaders = "content-type:" + contentType + "; charset=utf-8\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" + credentialScope + "\n" + hashedCanonicalRequest;
    Console.WriteLine(stringToSign);
    Console.WriteLine("-----");
    // ***** Step 3: Calculate the signature *****
    byte[] tc3SecretKey = Encoding.UTF8.GetBytes("TC3" + secretkey);
    byte[] secretDate = HmacSHA256(tc3SecretKey, Encoding.UTF8.GetBytes(datestr));
    byte[] secretService = HmacSHA256(secretDate, Encoding.UTF8.GetBytes(service));

```



```
byte[] secretSigning = HmacSHA256(secretService, Encoding.UTF8.GetBytes("tc3_request"));
byte[] signatureBytes = HmacSHA256(secretSigning, Encoding.UTF8.GetBytes(stringToSign));
string signature = BitConverter.ToString(signatureBytes).Replace("-", "").ToLower();
Console.WriteLine(signature);
Console.WriteLine("-----");
// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " "
+ "Credential=" + secretid + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", "
+ "Signature=" + signature;
Console.WriteLine(authorization);
Console.WriteLine("-----");
Dictionary<string, string> headers = new Dictionary<string, string>();
headers.Add("Authorization", authorization);
headers.Add("Host", endpoint);
headers.Add("Content-Type", contentType + "; charset=utf-8");
headers.Add("X-TC-Timestamp", requestTimestamp.ToString());
headers.Add("X-TC-Version", version);
headers.Add("X-TC-Action", action);
headers.Add("X-TC-Region", region);
return headers;
}

public static void Main(string[] args)
{
    // SecretID and SecretKey
    string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
    string service = "cvm";
    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";
    // The timestamp `2019-02-26 00:44:25` used here is only for reference. In a project, use the 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" + "hos

```

```

t:" + endpoint + "\n"
const canonicalRequest = httpRequestMethod + "\n"
+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload
console.log(canonicalRequest)
console.log("-----")
// ***** Step 2: Concatenate the string to sign *****
const algorithm = "TC3-HMAC-SHA256"
const hashedCanonicalRequest = getHash(canonicalRequest);
const credentialScope = date + "/" + service + "/" + "tc3_request"
const stringToSign = algorithm + "\n" +
timestamp + "\n" +
credentialScope + "\n" +
hashedCanonicalRequest
console.log(stringToSign)
console.log("-----")
// ***** Step 3: Calculate the signature *****
const kDate = sha256(date, 'TC3' + SECRET_KEY)
const kService = sha256(service, kDate)
const kSigning = sha256('tc3_request', kService)
const signature = sha256(stringToSign, kSigning, 'hex')
console.log(signature)
console.log("-----")
// ***** Step 4: Concatenate the Authorization *****
const authorization = algorithm + " " +
"Credential=" + SECRET_ID + "/" + credentialScope + ", " +
"SignedHeaders=" + signedHeaders + ", " +
"Signature=" + signature
console.log(authorization)
console.log("-----")
const Call_Information = 'curl -X POST ' + "https://" + endpoint
+ ' -H "Authorization: ' + authorization + '"'
+ ' -H "Content-Type: application/json; charset=utf-8"'
+ ' -H "Host: ' + endpoint + '"'
+ ' -H "X-TC-Action: ' + action + '"'
+ ' -H "X-TC-Timestamp: ' + timestamp.toString() + '"'
+ ' -H "X-TC-Version: ' + version + '"'
+ ' -H "X-TC-Region: ' + region + '"'
+ " -d '" + payload + '"'
console.log(Call_Information)
}
main()

```

C++

```
#include <iostream>
#include <iomanip>
#include <sstream>
#include <string>
#include <stdio.h>
#include <time.h>
#include <openssl/sha.h>
#include <openssl/hmac.h>
using namespace std;
string get_data(int64_t xamp)
{
    string utcDate;
    char buff[20] = {0};
    // time_t timenow;
    struct tm sttime;
    sttime = *gmtime(&xamp);
    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, "%02x", hash[i]);
        NewString = NewString + buf;
    }
    return NewString;
}
string HmacSha256(const string &key, const string &input)
{
    unsigned char hash[32];
```

```
HMAC_CTX *h;
#ifdef 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);
#ifdef OPENSSSL_VERSION_NUMBER < 0x10100000L
HMAC_CTX_cleanup(h);
#else
HMAC_CTX_free(h);
#endif
std::stringstream ss;
ss << std::setfill('0');
for (int i = 0; i < len; i++)
{
ss << hash[i];
}
return (ss.str());
}
string HexEncode(const string &input)
{
static const char* const lut = "0123456789abcdef";
size_t len = input.length();
string output;
output.reserve(2 * len);
for (size_t i = 0; i < len; ++i)
{
const unsigned char c = input[i];
output.push_back(lut[c >> 4]);
output.push_back(lut[c & 15]);
}
return output;
}
int main()
{
string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
string service = "cvm";
string host = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
```

```

string version = "2017-03-12";
int64_t timestamp = 1551113065;
string date = get_data(timestamp);
// ***** Step 1: Concatenate the CanonicalRequest string *****
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string canonicalHeaders = "content-type:application/json; charset=utf-8\nhost:" +
host + "\n";
string signedHeaders = "content-type;host";
string payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
string hashedRequestPayload = sha256Hex(payload);
string canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
cout << canonicalRequest << endl;
cout << "-----" << endl;
// ***** Step 2: Concatenate the string to sign *****
string algorithm = "TC3-HMAC-SHA256";
string RequestTimestamp = int2str(timestamp);
string credentialScope = date + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = sha256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + RequestTimestamp + "\n" + credentialScope + "\n" + hashedCanonicalRequest;
cout << stringToSign << endl;
cout << "-----" << endl;
// ***** Step 3: Calculate the signature *****
string kKey = "TC3" + SECRET_KEY;
string kDate = HmacSha256(kKey, date);
string kService = HmacSha256(kDate, service);
string kSigning = HmacSha256(kService, "tc3_request");
string signature = HexEncode(HmacSha256(kSigning, stringToSign));
cout << signature << endl;
cout << "-----" << endl;
// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
cout << authorization << endl;
cout << "-----" << endl;
string headers = "curl -X POST https://" + host + "\n"
+ " -H \"Authorization: " + authorization + "\n"
+ " -H \"Content-Type: application/json; charset=utf-8\" + "\n"
+ " -H \"Host: " + host + "\n"
+ " -H \"X-TC-Action: " + action + "\n"
+ " -H \"X-TC-Timestamp: " + RequestTimestamp + "\n"

```

```
+ " -H \"X-TC-Version: \" + version + "\\n"
+ " -H \"X-TC-Region: \" + region + "\\n"
+ " -d \"" + payload;
cout << headers << endl;
return 0;
};
```

Signature Failure

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

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

Signature

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

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

1. Applying for Security Credentials

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

Security credentials consist of SecretId and SecretKey:

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

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

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

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

2. Generating a Signature

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

Assume that the SecretId and SecretKey are:

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

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

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

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

2.1. Sorting Parameters

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

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

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

2.2. Concatenating a Request String

This step generates a request string.

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

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

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

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

2.3. Concatenating the Signature Original String

This step generates a signature original string.

The signature original string consists of the following parameters:

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

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

The concatenation result of the example is:

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

2.4. Generating a Signature String

This step generates a signature string.

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

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

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

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

The final signature is:

```
zmmjn35mikh6pM3V7sUEuX4wyYM=
```

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

3. Encoding a Signature String

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

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

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

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

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

4. Signature Failure

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

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

5. Signature Demo

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

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

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

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

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

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

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

Java

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

public class TencentCloudAPIDemo {
    private final static String CHARSET = "UTF-8";
    public static String sign(String s, String key, String method) throws Exception {
        Mac mac = Mac.getInstance(method);
        SecretKeySpec secretKeySpec = new SecretKeySpec(key.getBytes(CHARSET), mac.getAlgorithm());
        mac.init(secretKeySpec);
        byte[] hash = mac.doFinal(s.getBytes(CHARSET));
        return DatatypeConverter.printBase64Binary(hash);
    }

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

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

```

}
return url.toString().substring(0, url.length() - 1);
}
public static void main(String[] args) throws Exception {
    TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap enables automatic sorting
    // A random number should be used when actually calling, for example: params.put("Nonce", new Random().nextInt(Integer.MAX_VALUE));
    params.put("Nonce", 11886); // Common parameter
    // The current time of the system should be used when actually calling, for example: params.put("Timestamp", System.currentTimeMillis() / 1000);
    params.put("Timestamp", 1465185768); // Common parameter
    params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"); // Common parameter
    params.put("Action", "DescribeInstances"); // Common parameter
    params.put("Version", "2017-03-12"); // Common parameter
    params.put("Region", "ap-guangzhou"); // Common parameter
    params.put("Limit", 20); // Business parameter
    params.put("Offset", 0); // Business parameter
    params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
    params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpq86cd98joQYCN3*****", "HmacSHA1")); // Common parameter
    System.out.println(getUrl(params));
}
}

```

Python

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

```

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

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

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

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

```

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

Golang

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

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

PHP

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



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

Ruby

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

```
# res = Net::HTTP.get_response(uri)
# puts res.body
```

DotNet

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

```
// long timestamp = ToTimestamp() / 1000;
// string requestTimestamp = timestamp.ToString();
Dictionary<string, string> param = new Dictionary<string, string>();
param.Add("Limit", "20");
param.Add("Offset", "0");
param.Add("InstanceIds.0", "ins-09dx96dg");
param.Add("Action", action);
param.Add("Nonce", "11886");
// param.Add("Nonce", Math.Abs(new Random().Next()).ToString());
param.Add("Timestamp", RequestTimestamp.ToString());
param.Add("Version", version);
param.Add("SecretId", SECRET_ID);
param.Add("Region", region);
SortedDictionary<string, string> headers = new SortedDictionary<string, string>(param, StringComparer.Ordinal);
string sigInParam = MakeSignPlainText(headers, "GET", endpoint, "/");
Console.WriteLine(sigInParam);
string sigOutParam = Sign(SECRET_KEY, sigInParam);
Console.WriteLine("GET https://cvm.tencentcloudapi.com");
foreach (KeyValuePair<string, string> kv in headers)
{
    Console.WriteLine(kv.Key + ": " + kv.Value);
}
Console.WriteLine("Signature" + ": " + WebUtility.UrlEncode(sigOutParam));
Console.WriteLine();
string result = "https://cvm.tencentcloudapi.com/?";
foreach (KeyValuePair<string, string> kv in headers)
{
    result += WebUtility.UrlEncode(kv.Key) + "=" + WebUtility.UrlEncode(kv.Value) + "&";
}
result += WebUtility.UrlEncode("Signature") + "=" + WebUtility.UrlEncode(sigOutParam);
Console.WriteLine("GET " + result);
}
}
```

NodeJS

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

```
let strSign = reqMethod + endpoint + path + "?" + strParam.slice(1);
return strSign;
}
function sha1(secretKey, strsign){
let signMethodMap = {'HmacSHA1': "sha1"};
let hmac = crypto.createHmac(signMethodMap['HmacSHA1'], secretKey || "");
return hmac.update(Buffer.from(strsign, 'utf8')).digest('base64')
}
function sort_params(params) {
let strParam = "";
let keys = Object.keys(params);
keys.sort();
for (let k in keys) {
//k = k.replace(/_/g, '.');
strParam += ("&" + keys[k] + "=" + params[keys[k]]);
}
return strParam
}
function main() {
const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"
const endpoint = "cvm.tencentcloudapi.com"
const Region = "ap-guangzhou"
const Version = "2017-03-12"
const Action = "DescribeInstances"
const Timestamp = 1465185768
// const Timestamp = Math.round(Date.now() / 1000)
const Nonce = 11886
//const nonce = Math.round(Math.random() * 65535)
let params = {};
params['Action'] = Action;
params['InstanceIds.0'] = 'ins-09dx96dg';
params['Limit'] = 20;
params['Offset'] = 0;
params['Nonce'] = Nonce;
params['Region'] = Region;
params['SecretId'] = SECRET_ID;
params['Timestamp'] = Timestamp;
params['Version'] = Version;
strParam = sort_params(params)
const reqMethod = "GET";
const path = "/";
strSign = formatSignString(reqMethod, endpoint, path, strParam)
console.log(strSign)
console.log("-----")
params['Signature'] = sha1(SECRET_KEY, strSign)
console.log(params['Signature'])
```

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

Responses

Last updated : 2024-05-21 14:33:29

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.

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

Identity Provider APIs

UpdateSAMLProvider

Last updated : 2023-03-15 10:25:11

1. API Description

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

This API is used to update SAML identity provider information.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateSAMLProvider.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	SAML identity provider name
Description	No	String	SAML identity provider description
SAMLMetadataDocument	No	String	SAML identity provider metadata document (Base64)

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 Updating IdP

Input Example

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

{
  "SAMLMetadataDocument": "PD94bWwgdmVyc2lvbj0iMS4wIiBlbmNvZGluc20iVVRGLTgiPz48bWQ6
RW50aXR5RGVzY3JpcHRvciBlbnRpdHlJRD0iaHR0cDovL3d3dy5va3RhLmNvbS9leGsx3F4bWNqUW1HQ
URNeTM1NyIgeG1sbnM6bWQ9InVybjpvYXNpczpuYW1lc3p0YzptQU1MOjIuMDptZXRhZGF0YSI%2BPG1k
Ok1EUFNTT0Rlc2NyaXB0b3IgdGV2FudEF1dGhuUmVxdWVzdHNTaWduZWQ9ImZhbnNlIiBwcm90b2NvbFN1c
HBvcnRFbnVtZXJhdGlvdj0idXJuOm9hc2lzOm5hbWVzOnRjOlNBTUw6Mi4wOnB%3D%3D",
  "Name": "testName",
  "Description": "testProvider"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "1e44e8e5-7878-4aa0-8bd2-555dde56cddb"
  }
}
```

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
InvalidParameterValue.MetadataError	Identity provider metadata document error.
ResourceNotFound.IdentityNotExist	Identity provider does not exist.

ListSAMLProviders

Last updated : 2023-03-15 10:25:11

1. API Description

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

This API is used to query the list of SAML identity providers.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListSAMLProviders.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of SAML identity providers
SAMLProviderSet	Array of SAMLProviderInfo	List of SAML identity providers
RequestId	String	The unique request ID, which is returned for each request.

		RequestId is required for locating a problem.
--	--	---

4. Example

Example1 Querying IdP list

This example shows you how to query the list of IdPs.

Input Example

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

Output Example

```
{
  "Response": {
    "TotalCount": 6,
    "SAMLProviderSet": [
      {
        "Name": "saml-sdk",
        "Description": "sdk",
        "CreateTime": "2018-12-17 16:33:35",
        "ModifyTime": "2019-02-26 13:34:58"
      },
      {
        "Name": "TestSAML",
        "Description": "111",
        "CreateTime": "2018-11-08 19:27:27",
        "ModifyTime": "2019-04-30 11:23:12"
      },
      {
        "Name": "OneLogin",
        "Description": "ONeLogin",
        "CreateTime": "2018-11-04 20:36:41",
        "ModifyTime": "2018-11-23 23:56:09"
      },
      {
        "Name": "Azure_AD",
        "Description": "Azure AD",
        "CreateTime": "2018-11-04 16:44:25",
        "ModifyTime": "2019-02-14 10:38:27"
      },
      {
```

```
"Name": "api-test",
"Description": "API test",
"CreateTime": "2018-10-30 11:40:19",
"ModifyTime": "2018-10-30 11:40:19"
},
{
"Name": "okta",
"Description": "okta",
"CreateTime": "2018-09-17 17:18:03",
"ModifyTime": "2018-09-17 17:18:03"
}
],
"RequestId": "d644fa50-7e54-4448-84d8-64cb4dd9f737"
}
```

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

There is no error code related to the API business logic. For other error codes, please see [Common Error Codes](#).

GetSAMLProvider

Last updated : 2023-03-15 10:25:11

1. API Description

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

This API is used to query SAML identity provider details.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetSAMLProvider.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	SAML identity provider name

3. Output Parameters

Parameter Name	Type	Description
Name	String	SAML identity provider name
Description	String	SAML identity provider description

CreateTime	Timestamp	Time SAML identity provider created
ModifyTime	Timestamp	Time SAML identity provider last modified
SAMLMetadata	String	SAML identity provider metadata document
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying identity provider details

This example shows you how to query identity provider details.

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetSAMLProvider
&Name=okta
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "Name": "okta",
    "Description": "okta",
    "CreateTime": "2018-09-17 17:18:03",
    "ModifyTime": "2018-09-17 17:18:03",
    "SAMLMetadata": "U0FNTE1ldGFkYXRh",
    "RequestId": "fea0ebe5-3062-4b5a-b95e-8cce5a3b0512"
  }
}
```

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
ResourceNotFound.IdentityNotExist	Identity provider does not exist.
ResourceNotFound.NotFound	Resource does not exist.

DeleteSAMLProvider

Last updated : 2023-03-15 10:25:13

1. API Description

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

This API is used to delete a SAML identity provider.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteSAMLProvider.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	SAML identity provider name

3. Output Parameters

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

		locating a problem.
--	--	---------------------

4. Example

Example1 Deleting IdP

This example shows you how to delete an IdP.

Input Example

```
https://cam.tencentcloudapi.com/?Action=DeleteSAMLProvider
&Name=name
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "538a3409-bdbf-43d8-9847-6e2e9c411504"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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
ResourceNotFound.IdentityNotExist	Identity provider does not exist.
ResourceNotFound.NotFound	Resource does not exist.

CreateSAMLProvider

Last updated : 2023-03-15 10:25:14

1. API Description

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

This API is used to create a SAML identity provider.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateSAMLProvider.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	SAML identity provider name
Description	Yes	String	SAML identity provider description
SAMLMetadataDocument	Yes	String	SAML identity provider metadata document (Base64)

3. Output Parameters

Parameter Name	Type	Description
ProviderArn	String	SAML identity provider resource descriptor
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating an identity provider

Input Example

```
https://cam.tencentcloudapi.com/?Action=CreateSAMLProvider
&Name=testName
&Description=testProvider
&SAMLMetadataDocument=PD94bWwgdmVyc2lvdj0iMS4wIiBlbmNvZGluZz0iVVRGLTgiPz48bWQ6RW5
0aXR5RGVzY3JpcHRvciBlbnRpdHlJRd0iaHR0cDovL3d3dy5va3RhLmNvbS9leGsxa3F4bWNqUW1HQURN
eTM1NyIgeG1sbnM6bWQ9InVybjpvcyYXNpczpuYW1lc3p0YzptQU1MOjIuMDptZXRhZGF0YSI%2BPG1kOk1
EUFNTT0Rlc2NyaXB0b3IgaV2FudEF1dGhuUmVxdWVzdHNTaWduZWQ9ImZhbnHN1IiBwcm90b2NvbFN1cHBv
cnRFbnVtZXJhdGlvdj0idXJuOm9hc2lzOm5hbWVzOnRjOlNBTUw6Mi4wOnB%3D%3D
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "ProviderArn": "testProviderArn",
    "RequestId": "2a44e8e5-7438-4aa0-8bd2-584dde56caab"
  }
}
```

5. Developer Resources

SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
FailedOperation	Operation failed.
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameterValue.MetadataError	Identity provider metadata document error.
InvalidParameterValue.NameError	Identity provider name error.
LimitExceeded.IdentityFull	Limit on number of identity providers reached.

UpdateUserSAMLConfig

Last updated : 2023-03-15 10:25:10

1. API Description

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

This API is used to modify user SAML configurations.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateUserSAMLConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Operate	Yes	String	Type of the modification operation. <code>enable</code> : enable, <code>disable</code> : disable, <code>updateSAML</code> : modify metadata document.
SAMLMetadataDocument	No	String	Metadata document, which must be Base64 encoded. This parameter is required only when the value of <code>Operate</code> is <code>updateSAML</code> .

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 user SAML configurations

Input Example

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

{
  "Operate": "updateSAML",
  "SAMLMetadataDocument": "metadataDocumentDemo"
}
```

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.

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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
InvalidParameterValue.MetadataError	Identity provider metadata document error.
ResourceNotFound.IdentityNotExist	Identity provider does not exist.

DescribeUserSAMLConfig

Last updated : 2023-03-15 10:25:12

1. API Description

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

This API is used to query user SAML configurations.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeUserSAMLConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
SAMLMetadata	String	SAML metadata document.
Status	Integer	Status. <code>0</code> : not set, <code>1</code> : enabled, <code>2</code> : disabled.

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

4. Example

Example1 Querying user SAML configurations

Input Example

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

{ }
```

Output Example

```
{
  "Response": {
    "SAMLMetadata": "",
    "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.

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

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

There is no error code related to the API business logic. For other error codes, please see [Common Error Codes](#).

CreateUserSAMLConfig

Last updated : 2023-03-15 10:25:13

1. API Description

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

This API is used to create user SAML configurations.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateUserSAMLConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
SAMLMetadataDocument	Yes	String	SAML metadata document, which must be Base64 encoded.

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 user SAML configurations

Input Example

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

{
  "SAMLMetadataDocument": "metadataDocumentDemo"
}
```

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.

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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
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameterValue.MetadataError	Identity provider metadata document error.

UpdateUserOIDCConfig

Last updated : 2023-03-15 10:25:10

1. API Description

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

This API is used to modify the user OIDC configuration.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateUserOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
IdentityUrl	Yes	String	OpenID Connect IdP URL. It corresponds to the value of the <code>issuer</code> field in the <code>openid-configuration</code> provided by the enterprise IdP.
IdentityKey	Yes	String	Signature public key, which is used to verify the OpenID Connect IdP's ID token and must be Base64-encoded. For the security of your account, we recommend you rotate it regularly.
ClientId	Yes	String	Client ID registered with the OpenID Connect IdP.
AuthorizationEndpoint	Yes	String	OpenID Connect IdP authorization endpoint. It corresponds to

			the value of the <code>authorization_endpoint</code> field in the <code>openid-configuration</code> provided by the enterprise IdP.
ResponseType	Yes	String	Authorization response type, which is always <code>id_token</code> .
ResponseMode	Yes	String	Authorization response mode. Valid values: <code>form_post</code> (recommended); <code>fragment</code> .
MappingFiled	Yes	String	Mapping field name. It indicates which field in the <code>id_token</code> of the IdP is mapped to the username of a sub-user. It is usually the <code>sub</code> or <code>name</code> field
Scope.N	No	Array of String	Authorization information scope. Valid values: <code>openid</code> (default); <code>email</code> ; <code>profile</code> .
Description	No	String	Description

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 user OIDC configuration

Input Example

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

{
  "ResponseType": "id_token",
  "IdentityUrl": "https://tencent.auth**.com",
  "ResponseMode": "form_post",
```

```
"Description": "Description",
"IdentityKey": "key",
"ClientId": "cbaefefes9823***",
"MappingFiled": "sub",
"AuthorizationEndpoint": "https://tencent.auth**.com",
"Scope": [
  "email"
]
```

Output Example

```
{
  "Response": {
    "RequestId": "10a20884-070e-48a8-aa40-9ed295a33ea2"
  }
}
```

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
InvalidParameter	Incorrect parameter.
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameterValue.IdentityKeyError	The OIDC signature public key is incorrect.
InvalidParameterValue.IdentityUrlError	The IdP URL is incorrect.
InvalidParameterValue.MetadataError	Identity provider metadata document error.
LimitExceeded.IdentityFull	Limit on number of identity providers reached.
ResourceNotFound.IdentityNotExist	Identity provider does not exist.

DisableUserSSO

Last updated : 2023-03-15 10:25:12

1. API Description

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

This API is used to disable user SSO.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DisableUserSSO.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . 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 Disabling user SSO

Input Example

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

{ }
```

Output Example

```
{
  "Response": {
    "RequestId": "60debf2c-1bba-4cd9-bc6a-53a23b863c08"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
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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
InvalidParameterValue.MetadataError	Identity provider metadata document error.

DescribeUserOIDCConfig

Last updated : 2023-03-15 10:25:12

1. API Description

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

This API is used to query the user OIDC configuration.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeUserOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
ProviderType	Integer	IdP type. 12: user OIDC IdP
IdentityUrl	String	IdP URL

IdentityKey	String	Signature public key
ClientId	String	Client ID
Status	Integer	Status. 0: not set; 2: disabled; 11: enabled.
AuthorizationEndpoint	String	Authorization endpoint
Scope	Array of String	Authorization scope
ResponseType	String	Authorization response type
ResponseMode	String	Authorization response mode
MappingFiled	String	Mapping field name
Description	String	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Getting user OIDC configuration

Input Example

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

{}
```

Output Example

```
{
  "Response": {
    "Description": "Description",
    "ProviderType": 12,
    "IdentityUrl": "https://tencent.auth**.cn/",
    "IdentityKey": "ewogICAgImtleXMiOiBbC****",
    "ClientId": "61adcf00620c31e3d***",
```

```
"AuthorizationEndpoint": "https://tencent.auth*.cn",
"Scope": [
  "openid",
  "email"
],
"ResponseType": "id_token",
"ResponseMode": "form_post",
"MappingFiled": "sub",
"Status": 11,
"RequestId": "e00eaca1-57b4-49e7-978d-648c5f1b9bd3"
}
```

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
ResourceNotFound.IdentityNotExist	Identity provider does not exist.

CreateUserOIDCConfig

Last updated : 2023-03-15 10:25:14

1. API Description

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

This API is used to create a user OIDC configuration. Only one user OIDC IdP can be created, and the user SAML SSO IdP will be automatically disabled after it is created.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateUserOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
IdentityUrl	Yes	String	OpenID Connect IdP URL. It corresponds to the value of the <code>issuer</code> field in the <code>openid-configuration</code> provided by the enterprise IdP.
IdentityKey	Yes	String	Signature public key, which is used to verify the OpenID Connect IdP's ID token and must be Base64-encoded. For the security of your account, we recommend you rotate it regularly.
ClientId	Yes	String	Client ID registered with the OpenID Connect IdP.

AuthorizationEndpoint	Yes	String	OpenID Connect IdP authorization endpoint. It corresponds to the value of the <code>authorization_endpoint</code> field in the <code>openid-configuration</code> provided by the enterprise IdP.
ResponseType	Yes	String	Authorization response type, which is always <code>id_token</code> .
ResponseMode	Yes	String	Authorization response mode. Valid values: <code>form_post</code> (recommended); <code>fragment</code> .
MappingFiled	Yes	String	Mapping field name. It indicates which field in the <code>id_token</code> of the IdP is mapped to the username of a sub-user. It is usually the <code>sub</code> or <code>name</code> field
Scope.N	No	Array of String	Authorization information scope. Valid values: <code>openid</code> (default); <code>email</code> ; <code>profile</code> .
Description	No	String	Description

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 Adding user OIDC configuration

Input Example

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

{
  "ResponseType": "id_token",
  "IdentityUrl": "https://tencent.auth***.cn/",
```

```
"ResponseMode": "form_post",
"Description": "Test",
"IdentityKey": "ewogICAgImtleXMiOiBbCi*****",
"ClientId": "61adcf00620c31e3***",
"MappingFiled": "sub",
"AuthorizationEndpoint": "https://tencent.auth**.cn",
"Scope": [
  "openidScope.1"
]
```

Output Example

```
{
  "Response": {
    "RequestId": "8a70d447-3c04-43c0-94ca-db899d4d05ac"
  }
}
```

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
InvalidParameter	Incorrect parameter.
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameterValue.IdentityKeyError	The OIDC signature public key is incorrect.
InvalidParameterValue.IdentityUrlError	The IdP URL is incorrect.
InvalidParameterValue.MetadataError	Identity provider metadata document error.
InvalidParameterValue.NameError	Identity provider name error.
LimitExceeded.IdentityFull	Limit on number of identity providers reached.

UpdateOIDCConfig

Last updated : 2023-03-15 10:25:11

1. API Description

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

This API is used to modify role OIDC configurations.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
IdentityUrl	Yes	String	IdP URL.
IdentityKey	Yes	String	Public key for signature, which must be Base64-encoded.
ClientId.N	Yes	Array of String	Client ID.
Name	Yes	String	Name.
Description	No	String	Description.

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 role OIDC configurations

Input Example

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

{
  "IdentityKey": "ewogICAgImtleXMiOiBbCiAgICAgewogIC*****klJbUpsLV9jenYyT0kiCiAgICAgICAgfQogICAgXQp9",
  "IdentityUrl": "https://test.qq.cn/",
  "Name": "test-oidc",
  "ClientId": [
    "61adcf0*****9546"
  ],
  "Description": "Desc"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "59b8efa4-cdd3-46dd-b9e7-0925aa1bee74"
  }
}
```

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	Incorrect parameter.
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameterValue.IdentityUrlError	The IdP URL is incorrect.
InvalidParameterValue.MetadataError	Identity provider metadata document error.
InvalidParameterValue.NameError	Identity provider name error.
LimitExceeded.IdentityFull	Limit on number of identity providers reached.
ResourceNotFound.IdentityNotExist	Identity provider does not exist.

DescribeOIDCConfig

Last updated : 2023-03-15 10:25:13

1. API Description

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

This API is used to query role OIDC configurations.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DescribeOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	Name.

3. Output Parameters

Parameter Name	Type	Description
ProviderType	Integer	IdP type. 11: Role IdP.

IdentityUrl	String	IdP URL.
IdentityKey	String	Public key for signature.
ClientId	Array of String	Client ID.
Status	Integer	Status. 0: Not set; 2: Disabled; 11: Enabled.
Description	String	Description.
Name	String	Name.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Getting role OIDC configurations

Input Example

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

{
  "Name": "Name"
}
```

Output Example

```
{
  "Response": {
    "Description": "Desc",
    "ProviderType": 11,
    "IdentityUrl": "https://****.qq.cn/",
    "IdentityKey": "ewogICAgImtleXMiOiBbCiAgICAg*****jenYyT0kiCiAgICAgICAgfQogICAgXQp9",
    "ClientId": [
      "61adcf0*****bc9546"
    ],
  },
}
```

```
"Name": "Name",
"Status": 11,
"RequestId": "24366174-63dd-42ba-8073-bd6b0af0f241"
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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
InvalidParameter	Incorrect parameter.
InvalidParameterValue.NameError	Identity provider name error.
ResourceNotFound.IdentityNotExist	Identity provider does not exist.

DeleteOIDCConfig

Last updated : 2023-03-15 10:25:13

1. API Description

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

This API is used to delete OIDC IdPs.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Name	Yes	String	OIDC IdP name.

3. Output Parameters

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

4. Example

Example1 Deleting role OIDC configurations

Input Example

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

{
  "Name": "Name"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "7ed37b07-25aa-4861-b141-9b614d82bf69"
  }
}
```

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
ResourceNotFound.IdentityNotExist	Identity provider does not exist.
ResourceNotFound.NotFound	Resource does not exist.

CreateOIDCConfig

Last updated : 2023-03-15 10:25:14

1. API Description

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

This API is used to create role OIDC configurations.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateOIDCConfig.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
IdentityUrl	Yes	String	IdP URL.
IdentityKey	Yes	String	Public key for signature, which must be Base64-encoded.
ClientId.N	Yes	Array of String	Client ID.
Name	Yes	String	Name.
Description	No	String	Description.

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 Adding role OIDC configurations

Input Example

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

{
  "IdentityKey": "ewogICAgImtleXMiOiBbCiAgIC*****V9jenYyT0kiCiAgICAgfQogICAgXQp9",
  "IdentityUrl": "https://*****.qq.cn/",
  "Name": "oidc",
  "ClientId": [
    "61adcf00*****ddbc9546"
  ],
  "Description": "Desc"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "0d8de866-7385-4230-8f28-060a92d723ee"
  }
}
```

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
InvalidParameter	Incorrect parameter.
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameterValue.IdentityUrlError	The IdP URL is incorrect.
InvalidParameterValue.MetadataError	Identity provider metadata document error.
InvalidParameterValue.NameError	Identity provider name error.
LimitExceeded.IdentityFull	Limit on number of identity providers reached.

Policy APIs

UpdatePolicy

Last updated : 2022-03-14 17:37:09

1. API Description

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

This API is used to update a policy.

This API will update the default version of an existing policy instead of creating a new one. If no policy exists, a default version will be created.

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](#).

This document describes the parameters for Signature V1. It's recommended to use the V3 signature, which provides higher security. Note that for Signature V3, the common parameters need to be placed in the HTTP Header. [See details](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: UpdatePolicy.
Version	Yes	String	Common parameter. The value used for this API: 2019-01-16.
Region	No	String	Common parameter. This parameter is not required for this API.
PolicyId	No	Integer	Policy ID. Either <code>PolicyId</code> or <code>PolicyName</code> must be entered
PolicyName	No	String	Policy name. Either <code>PolicyName</code> or <code>PolicyId</code> must be entered

Description	No	String	Policy description
PolicyDocument	No	String	Policy documentation, for example: <code>{"version": "2.0", "statement": [{"action": "name/sts:AssumeRole", "effect": "allow", "service": [{"cloudaudit.cloud.tencent.com", "cls.cloud.tencent"}]}</code> where <code>principal</code> is used to specify the service that is authorized. For more information about this parameter, see RoleInfo under Output in the GetRole .
Alias	No	String	Preset policy remark

3. Output Parameters

Parameter Name	Type	Description
PolicyId	Integer	Policy ID, which will be returned only if the input parameter is <code>PolicyName</code> . 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 Updating a policy

This example shows you how to update a policy to allow the user to access any COS resources with any COS API.

Input Example

```
https://cam.tencentcloudapi.com/?Action=UpdatePolicy
&PolicyId=17698703
&PolicyDocument=%7B%22version%22%3A%222.0%22%2C%22statement%22%3A%5B%7B%22effect%
22%3A%22allow%22%2C%22action%22%3A%5B%22name%2Fcos%3A%2A%22%5D%2C%22resource%22%3
A%5B%22%2A%22%5D%7D%5D%7D
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "PolicyId": 1,
    "RequestId": "60e60a86-af67-4bbe-8377-7024a0e1d4c7"
  }
}
```

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.PolicyNameInUse	The policy name specified by the <code>PolicyName</code> field already exists.
InternalError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.

InvalidParameter.ActionNotExist	The action in the policy syntax does not exist.
InvalidParameter.ActionServiceNotExist	The action service in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.
InvalidParameter.NotSupportProduct	CAM does not support the resource type specified in the policy document.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyDocumentError	<code>PolicyDocument</code> field invalid.
InvalidParameter.PolicyDocumentLengthOverLimit	<code>PolicyDocument</code> field exceeds length restriction.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.PrincipalQcsError	Incorrect <code>PrincipalQcs</code> .
InvalidParameter.PrincipalQcsNotExist	<code>PrincipalQcs</code> does not exist.
InvalidParameter.PrincipalServiceNotExist	<code>PrincipalService</code> does not exist.
InvalidParameter.ResourceContentError	The resource context in the policy syntax is incorrect.
InvalidParameter.ResourceError	<code>Resource</code> field of policy document invalid.
InvalidParameter.ResourceProjectError	The resource project in the policy syntax is incorrect.
InvalidParameter.ResourceQcsError	Incorrect resource <code>QCS</code> .

InvalidParameter.ResourceRegionError	The resource region in the policy syntax is incorrect.
InvalidParameter.ResourceServiceNotExist	The resource service in the policy syntax does not exist.
InvalidParameter.ResourceUinError	The resource root account in the policy syntax is incorrect.
InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.UserNotExist	User does not exist.

ListPolicies

Last updated : 2023-03-15 10:25:06

1. API Description

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

This API is used to query the policy 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	Common Params . The value used for this API: ListPolicies.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Rp	No	Integer	Number of entries per page: must be greater than 0 and no greater than 200. Default is 20
Page	No	Integer	Page number. Starts from 1 and cannot be greater than 200. Default is 1
Scope	No	String	Valid values: <code>All</code> , <code>QCS</code> , and <code>Local</code> . <code>All</code> means all policies will be returned; <code>QCS</code> means only preset policies will be returned; <code>Local</code> means only custom policies will be returned. <code>All</code> is the default value
Keyword	No	String	Filter by policy name

3. Output Parameters

Parameter Name	Type	Description
TotalNum	Integer	Total number of policies
List	Array of StrategyInfo	Policy array. Each array contains fields including <code>policyId</code> , <code>policyName</code> , <code>addTime</code> , <code>type</code> , <code>description</code> , and <code>createMode</code> . <code>policyId</code>: policy ID <code>policyName</code>: policy name <code>addTime</code>: policy creation time <code>type</code>: 1: custom policy, 2: preset policy <code>description</code>: policy description <code>createMode</code>: 1 indicates a policy created based on business permissions, while other values indicate that the policy syntax can be viewed and the policy can be updated using the policy syntax <code>Attachments</code>: number of associated users <code>ServiceType</code>: the product the policy is associated with <code>IsAttached</code>: this value should not be null when querying if a marked entity has been associated with a policy. 0 indicates that no policy has been associated, and 1 indicates that a policy has been associated
ServiceTypeList	Array of String	Reserved field Note: This field may return null, 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 policy list

Input Example

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

{
```

```
"Rp": "1",
"Page": "10"
}
```

Output Example

```
{
  "Response": {
    "ServiceTypeList": [
      "xx"
    ],
    "List": [
      {
        "PolicyId": 16313162,
        "PolicyName": "QcloudAccessForCDNRole",
        "AddTime": "2019-04-19 10:55:31",
        "Type": 2,
        "Description": "Tencent Cloud Content Delivery Network (CDN) permissions include CRUD operations for CLS logsets and log topics as well as searching for, downloading, and uploading logs.",
        "CreateMode": 2,
        "Attachments": 0,
        "ServiceType": "cooperator",
        "IsAttached": 1,
        "Deactivated": 1,
        "DeactivatedDetail": [
          "cvm"
        ],
        "IsServiceLinkedPolicy": 1,
        "UpdateTime": "2019-04-19 10:55:31",
        "AttachEntityCount": 0,
        "AttachEntityBoundaryCount": 0
      }
    ],
    "TotalNum": 239,
    "RequestId": "ae2bd2b7-1d55-4b0a-8154-e02407a2b390"
  }
}
```

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.SystemError	Internal error.
InvalidParameter.GroupIdError	<code>GroupId</code> field invalid.
InvalidParameter.KeywordError	<code>Keyword</code> field invalid.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.ScopeError	<code>Scope</code> field invalid.
InvalidParameter.SearchKeywordLengthError	An error occurred while querying the keyword length.
InvalidParameter.ServiceTypeError	<code>ServiceType</code> field invalid.
InvalidParameter.UinError	<code>Uin</code> field invalid.

ListEntitiesForPolicy

Last updated : 2023-03-15 10:25:07

1. API Description

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

This API (ListEntitiesForPolicy) is used to query the list of entities associated with a policy.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListEntitiesForPolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
Page	No	Integer	Page number, which starts from 1. Default is 1
Rp	No	Integer	Number of entries per page; 20 by default
EntityFilter	No	String	Valid values: <code>All</code> , <code>User</code> , <code>Group</code> , and <code>Role</code> . <code>All</code> means all entity types will be returned; <code>User</code> means only sub-accounts will be returned; <code>Group</code> means only User Groups will be returned; <code>Role</code> means only roles will be returned. <code>All</code> is the default value.

3. Output Parameters

Parameter Name	Type	Description
TotalNum	Integer	Number of entities Note: This field may return null, indicating that no valid value was found.
List	Array of AttachEntityOfPolicy	Entity list Note: This field may return null, 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 entities associated with a policy

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListEntitiesForPolicy
&PolicyId=524497
&Page=1
&Rp=10
&EntityFilter=All
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "List": [
      {
        "Id": "1133398",
        "RelatedType": 1,
        "Uin": 3449203261,
        "AttachmentTime": "2021-11-11 19:38:01",
        "Name": "test1"
      }
    ],
    "TotalNum": 1,
    "RequestId": "836d7034-9854-44f0-9d4a-ee57842f8644"
```

```
}  
}
```

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](#)
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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
InternalError.SystemError	Internal error.
InvalidParameter.EntityFilterError	<code>EntityFilter</code> field invalid.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.

ListAttachedUserPolicies

Last updated : 2023-03-15 10:25:07

1. API Description

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

This API (ListAttachedUserPolicies) is used to query the list of policies associated with a sub-account.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListAttachedUserPolicies.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetUin	Yes	Integer	Sub-account UIN
Page	No	Integer	Page number, which starts from 1. Default is 1
Rp	No	Integer	Number of entries per page; 20 by default

3. Output Parameters

--	--	--

Parameter Name	Type	Description
TotalNum	Integer	Total number of policies
List	Array of AttachPolicyInfo	Policy list
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 policies associated with a sub-account

This example shows you how to query the list of policies associated with a sub-account (ID: 3449203261).

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListAttachedUserPolicies
&TargetUin=3449203261
&Page=1
&Rp=10
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "List": [
      {
        "PolicyId": 109360057,
        "PolicyName": "test-0103",
        "AddTime": "2022-01-03 10:38:28",
        "CreateMode": 3,
        "Remark": "",
        "OperateOwnerUin": null,
        "OperateUin": null,
        "OperateUinType": null,
        "PolicyType": "",
        "Deactivated": 0,
        "DeactivatedDetail": []
      }
    ],
  }
```



```
"TotalNum": 1,  
"RequestId": "db1cdf3f-9b1a-47c5-88b3-c49089aaa811"  
}  
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.

ListAttachedGroupPolicies

Last updated : 2023-03-15 10:25:07

1. API Description

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

This API (ListAttachedGroupPolicies) is used to query the list of policies associated with a user group.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListAttachedGroupPolicies.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetGroupId	Yes	Integer	User group ID
Page	No	Integer	Page number, which starts from 1. Default is 1
Rp	No	Integer	Number of entries per page; 20 by default
Keyword	No	String	Search by keyword

3. Output Parameters

Parameter Name	Type	Description
TotalNum	Integer	Total number of policies
List	Array of AttachPolicyInfo	Policy list
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 policies associated with a user group

This example shows you how to query the list of policies associated with a user group (ID: 3349).

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListAttachedGroupPolicies
&TargetGroupId=3349
&Page=1
&Rp=10
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "List": [
      {
        "OperateOwnerUin": "xx",
        "PolicyName": "AdministratorAccess",
        "Remark": "xx",
        "OperateUinType": 1,
        "CreateMode": 1,
        "Deactivated": 1,
        "AddTime": "2020-09-22 00:00:00",
        "PolicyType": "User",
        "PolicyId": 1,
        "DeactivatedDetail": [
          "xx"
        ],
        "OperateUin": "xx"
      }
    ]
  }
}
```

```
}  
],  
"RequestId": "836d7034-9854-44f0-9d4a-ee57842f8644",  
"TotalNum": 1  
}  
}
```

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
InternalServerError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.

GetPolicy

Last updated : 2023-03-15 10:25:08

1. API Description

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

This API (GetPolicy) is used to query and view policy details.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetPolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID

3. Output Parameters

Parameter Name	Type	Description
PolicyName	String	Policy name Note: This field may return null, indicating that no valid value was found.

Description	String	Policy description Note: This field may return null, indicating that no valid value was found.
Type	Integer	1: Custom policy; 2: Preset policy Note: This field may return null, indicating that no valid value was found.
AddTime	Timestamp	Time created Note: This field may return null, indicating that no valid value was found.
UpdateTime	Timestamp	Time of latest update Note: This field may return null, indicating that no valid value was found.
PolicyDocument	String	Policy document Note: This field may return null, indicating that no valid value was found.
PresetAlias	String	Remarks Note: this field may return null, indicating that no valid values can be obtained.
IsServiceLinkedRolePolicy	Integer	Whether it is a service-linked policy Note: this field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying policy details

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetPolicy
&PolicyId=17698703
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "PolicyDocument": "{\\\"version\\\":\\\"2.0\\\",\\\"statement\\\":[{\\\"effect\\\":\\\"allow\\\",\\\"action\\\":[\\\"name\\\\/cos:*\\\"],\\\"resource\\\":[\\\"*\\\"]}]}",
    "UpdateTime": "2019-04-29 21:28:32",
    "AddTime": "2019-04-29 21:18:40",
    "PolicyName": "test-2019-04-29",
    "Description": "Test policy",
    "Type": 1,
    "RequestId": "845b309d-e531-402d-a4f6-ec124f06738b",
    "PresetAlias": "Remarks",
    "IsServiceLinkedRolePolicy": 0
  }
}
```

5. Developer Resources

SDK

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description

InternalError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.

DetachUserPolicy

Last updated : 2023-03-15 10:25:08

1. API Description

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

This API (DetachUserPolicy) is used to unassociate a policy and a user.

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	Common Params . The value used for this API: DetachUserPolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
DetachUin	Yes	Integer	Sub-account UIN

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 Unbinding policy from user

This example shows you how to unbind a policy (ID: 16313162) from a user (ID: 3449203261).

Input Example

```
https://cam.tencentcloudapi.com/?Action=DetachUserPolicy
&PolicyId=16313162
&DetachUin=3449203261
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "1a21f666-d00e-4df8-92f7-7121f9012e43"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.UserNotExist	User object does not exist
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.UserNotExist	User does not exist.

DetachGroupPolicy

Last updated : 2023-03-15 10:25:08

1. API Description

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

This API (DetachGroupPolicy) is used to unassociate a policy and a user group.

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	Common Params . The value used for this API: DetachGroupPolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
DetachGroupId	Yes	Integer	User 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 Unbinding policy from user group

This example shows you how to unbind a policy (ID: 524497) from a group (ID: 3449).

Input Example

```
https://cam.tencentcloudapi.com/?Action=DetachGroupPolicy
&PolicyId=524497
&DetachGroupId=3449
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "1a21f666-d00e-4df8-92f7-7121f9012e43"
  }
}
```

5. Developer Resources

SDK

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Command Line Interface

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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.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.UserNotExist	User object does not exist
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.UserNotExist	User does not exist.

DeletePolicy

Last updated : 2023-03-15 10:25:09

1. API Description

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

This API (DeletePolicy) is used to delete a policy.

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	Common Params . The value used for this API: DeletePolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId.N	Yes	Array of Integer	Array. Array elements are policy IDs. Policies can be deleted in a batch

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 policy

This example shows you how to delete a policy (ID: 524497).

Input Example

```
https://cam.tencentcloudapi.com/?Action=DeletePolicy
&PolicyId.0=524497
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "1a21f666-d00e-4df8-92f7-7121f9012e43"
  }
}
```

5. Developer Resources

SDK

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

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
InternalError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.

CreatePolicy

Last updated : 2023-03-15 10:25:09

1. API Description

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

This API (CreatePolicy) is used to create a policy.

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	Common Params . The value used for this API: CreatePolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyName	Yes	String	Policy name
PolicyDocument	Yes	String	Policy document, such as <pre>{"version": "2.0", "statement": [{"action": "name/sts:AssumeRole", "effect": "allow", "service": ["cloudaudit.cloud.tencent.com", "cls.cloud.tencent."]}</pre> where <code>principal</code> is used to specify the resources that the role is a access. For more information on this parameter, please see the <code>Role</code> parameter of the GetRole API
Description	No	String	Policy description

3. Output Parameters

Parameter Name	Type	Description
PolicyId	Integer	ID of newly added policy
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating policy

This example shows you how to create a policy that allows all COS APIs to access all COS resources.

Input Example

```
https://cam.tencentcloudapi.com/?Action=CreatePolicy
&PolicyName=test-2019-04-29
&Description=Policy description
&PolicyDocument={"version":"2.0","statement":[{"effect":"allow","action":["name/cos:*"],"resource":["*"]}]}
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "PolicyId": 17698703,
    "RequestId": "89360f78-b1dd-4e43-aa91-ecb2c8b8f282"
  }
}
```

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
FailedOperation.PolicyFull	The number of user policies has exceeded the limit.
FailedOperation.PolicyNameInUse	The policy name specified by the <code>PolicyName</code> field already exists.
InternalServerError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.
InvalidParameter.ActionNotExist	The action in the policy syntax does not exist.
InvalidParameter.ActionServiceNotExist	The action service in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed

	300 bytes in length.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.
InvalidParameter.NotSupportProduct	CAM does not support the resource type specified in the policy document.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyDocumentError	<code>PolicyDocument</code> field invalid.
InvalidParameter.PolicyDocumentLengthOverLimit	<code>PolicyDocument</code> field exceeds length restriction.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.ResourceContentError	The resource context in the policy syntax is incorrect.
InvalidParameter.ResourceError	<code>Resource</code> field of policy document invalid.
InvalidParameter.ResourceProjectError	The resource project in the policy syntax is incorrect.
InvalidParameter.ResourceQcsError	Incorrect resource <code>QCS</code> .
InvalidParameter.ResourceRegionError	The resource region in the policy syntax is incorrect.
InvalidParameter.ResourceServiceNotExist	The resource service in the policy syntax does not exist.
InvalidParameter.ResourceUinError	The resource root account in the policy syntax is incorrect.
InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.UserNotExist	User does not exist.

AttachUserPolicy

Last updated : 2023-03-15 10:25:10

1. API Description

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

This API (AttachUserPolicy) is used to associates a policy with a user.

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	Common Params . The value used for this API: AttachUserPolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
AttachUin	Yes	Integer	Sub-account UIN

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 Associating a policy with a user

This example shows you how to associate a policy (ID: 524497) with a user (ID: 3449203261).

Input Example

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

{
  "AttachUin": "3449203261",
  "PolicyId": "524497"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "1a21f666-d00e-4df8-92f7-7121f9012e43"
  }
}
```

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
FailedOperation.PolicyFull	The number of user policies has exceeded the limit.
InternalError.SystemError	Internal error.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.UserNotExist	User object does not exist
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.UserNotExist	User does not exist.

AttachGroupPolicy

Last updated : 2023-03-15 10:25:10

1. API Description

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

This API (AttachGroupPolicy) is used to associate a policy with a user group.

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	Common Params . The value used for this API: AttachGroupPolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
AttachGroupId	Yes	Integer	User 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 Binding policy to user group

This example shows you how to bind a policy (ID: 524497) to a user group (ID: 3449).

Input Example

```
https://cam.tencentcloudapi.com/?Action=AttachGroupPolicy
&PolicyId=524497
&AttachGroupId=3449
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "1a21f666-d00e-4df8-92f7-7121f9012e43"
  }
}
```

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.PolicyFull	The number of user policies has exceeded the limit.
InternalServerError.SystemError	Internal error.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.UserNotExist	User object does not exist
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.UserNotExist	User does not exist.

SetDefaultPolicyVersion

Last updated : 2023-03-15 10:25:06

1. API Description

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

This API is used to set the operative policy version.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: SetDefaultPolicyVersion.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
VersionId	Yes	Integer	Policy version, which can be obtained through <code>ListPolicyVersions</code> .

3. Output Parameters

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

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

4. Example

Example1 Setting an operative policy version

This example shows you how to set an operative policy version.

Input Example

```
https://cam.tencentcloudapi.com/?Action=SetDefaultPolicyVersion
&PolicyId=17698703
&VersionId=1
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "60e60a86-af67-4bbe-8377-7024a0e1d4c7"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for 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.PolicyNameInUse	The policy name specified by the <code>PolicyName</code> field already exists.
FailedOperation.PolicyVersionAlreadyDefault	The policy version is already the default policy version.
InternalError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.
InvalidParameter.ActionNotExist	The action in the policy syntax does not exist.
InvalidParameter.ActionServiceNotExist	The action service in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.
InvalidParameter.NotSupportProduct	CAM does not support the resource type specified in the policy document.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyDocumentError	<code>PolicyDocument</code> field invalid.

InvalidParameter.PolicyDocumentLengthOverLimit	<code>PolicyDocument</code> field exceeds length restriction.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.PolicyVersionNotExists	The policy version does not exist.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.PrincipalQcsError	Incorrect <code>PrincipalQcsc</code> .
InvalidParameter.PrincipalQcsNotExist	<code>PrincipalQcs</code> does not exist.
InvalidParameter.PrincipalServiceNotExist	<code>PrincipalService</code> does not exist.
InvalidParameter.ResourceContentError	The resource context in the policy syntax is incorrect.
InvalidParameter.ResourceError	<code>Resource</code> field of policy document invalid.
InvalidParameter.ResourceProjectError	The resource project in the policy syntax is incorrect.
InvalidParameter.ResourceQcsError	Incorrect resource <code>QCS</code> .
InvalidParameter.ResourceRegionError	The resource region in the policy syntax is incorrect.
InvalidParameter.ResourceServiceNotExist	The resource service in the policy syntax does not exist.
InvalidParameter.ResourceUinError	The resource root account in the policy syntax is incorrect.
InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.UserNotExist	User does not exist.

ListPolicyVersions

Last updated : 2023-03-15 10:25:06

1. API Description

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

This API is used to get the list of policy versions.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: ListPolicyVersions.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID

3. Output Parameters

Parameter Name	Type	Description
Versions	Array of PolicyVersionItem	Policy version list 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 Getting policy version list

This example shows you how to get the version list of a policy.

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListPolicyVersions
&PolicyId=17698703
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "Versions": [
      {
        "VersionId": 2,
        "CreateDate": "2019-08-09T10:31:47Z",
        "IsDefaultVersion": 1
      },
      {
        "VersionId": 3,
        "CreateDate": "2019-08-09T10:31:47Z",
        "IsDefaultVersion": 0
      }
    ],
    "RequestId": "13567bf0-a52b-49af-a3ce-ea934ef33c57"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.

GetPolicyVersion

Last updated : 2023-03-15 10:25:08

1. API Description

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

This API is used to query policy version details.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetPolicyVersion.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
VersionId	Yes	Integer	Policy version, which can be obtained through <code>ListPolicyVersions</code> .

3. Output Parameters

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

PolicyVersion	PolicyVersionDetail	Policy version details Note: this field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying policy version details

This example shows you how to query the details of a policy version.

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetPolicyVersion
&PolicyId=17698703
&VersionId=2
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "PolicyVersion": {
      "VersionId": 2,
      "CreateDate": "2019-08-09T10:31:47Z",
      "IsDefaultVersion": 1,
      "Document": "{\n  \"version\": \"2.0\",\n  \"statement\": [\n    {\n      \"effect\": \"allow\",\n      \"action\": [\n        \"name\\\\/cos:*\",\n        \"resource\": [\"*\"]\n      ]\n    }\n  ]\n}"
    },
    "RequestId": "8a0668c1-2d9b-40a5-acc6-151ea3c844e7"
  }
}
```

5. Developer Resources

SDK

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

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- [Tencent Cloud SDK 3.0 for Java](#)
- [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.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyVersionNotExists	The policy version does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.

DeletePolicyVersion

Last updated : 2023-03-15 10:25:09

1. API Description

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

This API is used to delete a policy version of a policy.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeletePolicyVersion.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
VersionId.N	Yes	Array of Integer	Policy version ID

3. Output Parameters

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

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

4. Example

Example1 Deleting policy version

This example shows you how to delete a policy version of a policy.

Input Example

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

{
  "VersionId": [
    1
  ],
  "PolicyId": 1
}
```

Output Example

```
{
  "Response": {
    "RequestId": "60e60a86-af67-4bbe-8377-7024a0e1d4c7"
  }
}
```

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.
FailedOperation.PolicyNameInUse	The policy name specified by the <code>PolicyName</code> field already exists.
FailedOperation.PolicyVersionAlreadyDefault	The policy version is already the default policy version.
InternalError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.
InvalidParameter.NotSupportProduct	CAM does not support the resource type specified in the policy document.
InvalidParameter.ParamError	Invalid input parameter.

InvalidParameter.PolicyDocumentError	<code>PolicyDocument</code> field invalid.
InvalidParameter.PolicyDocumentLengthOverLimit	<code>PolicyDocument</code> field exceeds length restriction.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.PolicyVersionNotExists	The policy version does not exist.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.ResourceError	<code>Resource</code> field of policy document invalid.
InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.UserNotExist	User does not exist.

CreatePolicyVersion

Last updated : 2023-03-15 10:25:09

1. API Description

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

This API is used to add a policy version. After creating a policy version, you can easily change the policy by changing the policy version.

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	Common Params . The value used for this API: CreatePolicyVersion.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
PolicyDocument	Yes	String	The policy document to use as the content for the new version
SetAsDefault	Yes	Boolean	Specifies whether to set this version as the default version

3. Output Parameters

Parameter Name	Type	Description
VersionId	Integer	Policy version ID Note: this field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Creating policy version

This example shows you how to create a policy version.

Input Example

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

{
  "PolicyDocument": "{\"version\":\"2.0\",\"statement\": [{\"effect\":\"allow\",\"action\": [\"name/cos:*\"], \"resource\": [\"*\"]}] }\",
  "SetAsDefault": true,
  "PolicyId": 1
}
```

Output Example

```
{
  "Response": {
    "VersionId": "4",
    "RequestId": "60e60a86-af67-4bbe-8377-7024a0e1d4c7"
  }
}
```

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
FailedOperation	Operation failed.
FailedOperation.PolicyFull	The number of user policies has exceeded the limit.
FailedOperation.PolicyNameInUse	The policy name specified by the <code>PolicyName</code> field already exists.
FailedOperation.PolicyVersionFull	The number of policy versions has reached the upper limit.
InternalError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.
InvalidParameter.ActionNotExist	The action in the policy syntax does not exist.
InvalidParameter.ActionServiceNotExist	The action service in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated

	policies in the <code>principal</code> field reached.
<code>InvalidParameter.ConditionContentError</code>	The condition content in the policy syntax is incorrect.
<code>InvalidParameter.ConditionError</code>	<code>condition</code> field of policy document invalid.
<code>InvalidParameter.ConditionTypeError</code>	The condition operator in the policy syntax is incorrect.
<code>InvalidParameter.DescriptionLengthOverlimit</code>	The input parameter <code>description</code> cannot exceed 300 bytes in length.
<code>InvalidParameter.EffectError</code>	<code>Effect</code> field of policy document invalid.
<code>InvalidParameter.NotSupportProduct</code>	CAM does not support the resource type specified in the policy document.
<code>InvalidParameter.ParamError</code>	Invalid input parameter.
<code>InvalidParameter.PolicyDocumentError</code>	<code>PolicyDocument</code> field invalid.
<code>InvalidParameter.PolicyDocumentLengthOverLimit</code>	<code>PolicyDocument</code> field exceeds length restriction.
<code>InvalidParameter.PolicyIdNotExist</code>	Policy ID does not exist.
<code>InvalidParameter.PolicyNameError</code>	<code>PolicyName</code> field invalid.
<code>InvalidParameter.PrincipalError</code>	<code>principal</code> field of policy document invalid.
<code>InvalidParameter.PrincipalQcsNotExist</code>	<code>PrincipalQcs</code> does not exist.
<code>InvalidParameter.ResourceContentError</code>	The resource context in the policy syntax is incorrect.
<code>InvalidParameter.ResourceError</code>	<code>Resource</code> field of policy document invalid.
<code>InvalidParameter.ResourceProjectError</code>	The resource project in the policy syntax is incorrect.
<code>InvalidParameter.ResourceQcsError</code>	Incorrect resource <code>QCS</code> .
<code>InvalidParameter.ResourceRegionError</code>	The resource region in the policy syntax is incorrect.
<code>InvalidParameter.ResourceServiceNotExist</code>	The resource service in the policy syntax does not exist.
<code>InvalidParameter.ResourceUinError</code>	The resource root account in the policy syntax is incorrect.
<code>InvalidParameter.StatementError</code>	<code>Statement</code> field of policy document invalid.
<code>InvalidParameter.UserNotExist</code>	User object does not exist

InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.UserNotExist	User does not exist.

ListAttachedUserAllPolicies

Last updated : 2023-03-15 10:25:07

1. API Description

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

This API is used to list policies associated with the user (including those inherited from the user group).

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	Common Params . The value used for this API: ListAttachedUserAllPolicies.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TargetUin	Yes	Integer	Target user ID.
Rp	Yes	Integer	The number of policies displayed on each page. Value range: 1-200.
Page	Yes	Integer	Page number. Value range: 1-200.
AttachType	Yes	Integer	<code>0</code> : return policies that are directly associated and inherited from the user group; <code>1</code> : return policies that are directly associated; <code>2</code> : return policies inherited from the user group.
StrategyType	No	Integer	Policy type.

Keyword	No	String	Keyword for searching.
---------	----	--------	------------------------

3. Output Parameters

Parameter Name	Type	Description
PolicyList	Array of AttachedUserPolicy	Policy list.
TotalNum	Integer	Total number of policies.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Listing policies associated with the user (including those inherited from the user group)

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListAttachedUserAllPolicies
&Rp=1
&Page=10
&AttachType=1
&TargetUin=1234565
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "TotalNum": 11,
    "PolicyList": [
      {
        "PolicyId": "522474",
        "PolicyName": "policygen-20191204195412",
        "Description": "",
        "AddTime": "2019-12-04 19:56:35",
        "StrategyType": "1",
```



```
"CreateMode": "3",
"Deactivated": 1,
"Groups": [],
"DeactivatedDetail": [
  "xx"
]
},
{
  "RequestId": "d369dabb-ebc9-4598-baae-e1177e9e3868"
}
}
```

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
InvalidParameter.ParamError	Invalid input parameter.
ResourceNotFound.UserNotExist	User does not exist.

UnauthorizedOperation	Unauthorized operation.
-----------------------	-------------------------

Role APIs

UpdateRoleDescription

Last updated : 2023-03-15 10:25:01

1. API Description

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

This API (UpdateRoleDescription) is used to modify the description of a role.

A maximum of 3 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateRoleDescription.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Description	Yes	String	Role description
RoleId	No	String	Role ID, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>
RoleName	No	String	Role name, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>

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 a role description

Input Example

```
https://cam.tencentcloudapi.com/?Action=UpdateRoleDescription
&RoleId=4611686018427731422
&Description=abc234
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "405af400-30ec-4c78-8955-ef4da843bde2"
  }
}
```

5. Developer Resources

SDK

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

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

Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
InternalError.SystemError	Internal error.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNotExist	Role does not exist.

UpdateAssumeRolePolicy

Last updated : 2023-03-15 10:25:01

1. API Description

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

This API (UpdateAssumeRolePolicy) is used to modify the trust policy of a role.

A maximum of 3 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateAssumeRolePolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyDocument	Yes	String	Policy document
RoleId	No	String	Role ID, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>
RoleName	No	String	Role name, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>

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 role trust policy

Input Example

```
https://cam.tencentcloudapi.com/?Action=UpdateAssumeRolePolicy
&RoleId=4611686018427731422
&PolicyDocument=%7B%22version%22%3A%222.0%22%2C%22statement%22%3A%5B%7B%22action%
22%3A%22name%2Fsts%3AAssumeRole%22%2C%22effect%22%3A%22allow%22%2C%22principal%22
%3A%7B%22service%22%3A%5B%22cloudaudit.cloud.tencent.com%22%2C%22cls.cloud.tencen
t.com%22%5D%7D%7D%5D%7D
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "69103fca-ec49-40c9-8986-788b57421501"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyDocumentLengthOverLimit	<code>PolicyDocument</code> field exceeds length restriction.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.PrincipalQcsCrossError	Cross-site access is not supported for this role entity.
InvalidParameter.PrincipalQcsError	Incorrect <code>PrincipalQcs</code> .
InvalidParameter.PrincipalQcsNotExist	<code>PrincipalQcs</code> does not exist.
InvalidParameter.PrincipalServiceNotExist	<code>PrincipalService</code> does not exist.
InvalidParameter.RoleNotExist	Role does not exist.

InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.

ListAttachedRolePolicies

Last updated : 2023-03-15 10:25:02

1. API Description

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

This API (ListAttachedRolePolicies) is used to obtain the list of the policies associated with a role.

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	Common Params . The value used for this API: ListAttachedRolePolicies.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Page	Yes	Integer	Page number, beginning from 1
Rp	Yes	Integer	Number of lines per page, no more than 200
RoleId	No	String	Role ID, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>
RoleName	No	String	Role name, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>
PolicyType	No	String	Filter according to policy type. <code>User</code> indicates querying custom policies only. <code>QCS</code> indicates querying preset policies only

Keyword	No	String	Search by keyword
---------	----	--------	-------------------

3. Output Parameters

Parameter Name	Type	Description
List	Array of AttachedPolicyOfRole	List of policies associated with the role
TotalNum	Integer	Total number of policies associated with the role
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 policies associated with a role

Input Example

```
https://cam.tencentcloudapi.com/?Action=ListAttachedRolePolicies
&RoleId=4611686018427397905
&Page=1
&Rp=10
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "List": [
      {
        "PolicyName": "QcloudAccessForASRole",
        "Description": "xx",
        "CreateMode": 1,
        "Deactivated": 1,
        "AddTime": "2019-07-10 11:17:41",
        "PolicyType": "QCS",
        "PolicyId": 13847366,
        "DeactivatedDetail": [
```

```
"xx"
]
}
],
"RequestId": "60dc7f3f-5d8b-45e9-b703-5feefac9960c",
"TotalNum": 1
}
}
```

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
InternalServerError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.

GetRole

Last updated : 2023-03-15 10:25:03

1. API Description

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

This API (GetRole) is used to get the details of a specified role.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
RoleId	No	String	Role ID, used to specify role. Input either <code>RoleId</code> or <code>RoleName</code>
RoleName	No	String	Role name, used to specify role. Input either <code>RoleId</code> or <code>RoleName</code>

3. Output Parameters

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

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

4. Example

Example1 Getting role details

Input Example

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

{
  "RoleId": "4611686018427844696"
}
```

Output Example

```
{
  "Response": {
    "RoleInfo": {
      "RoleId": "4611686018427844696",
      "RoleName": "test_1234544",
      "PolicyDocument": "{\"version\":\"2.0\",\"statement\": [{\"action\":\"name/sts:AssumeRole\",\"effect\":\"allow\",\"principal\":{\"service\": [\"cloudaudit.cloud.tencent.com\",\"cls.cloud.tencent.com\"]}}]}\",
      "Description": "abc",
      "AddTime": "2019-07-10 11:22:27",
      "UpdateTime": "2019-07-10 11:22:27",
      "ConsoleLogin": 0,
      "RoleType": "system",
      "SessionDuration": 43200,
      "DeletionTaskId": "114",
      "Tags": [
        {
          "Value": "xx",
          "Key": "xx"
        }
      ]
    }
  }
}
```

```
}  
]  
},  
"RequestId": "87fb9770-0fca-4c5a-b985-1c36b05a95cb"  
}  
}
```

Example2 Getting details of a service-linked role

Input Example

```
POST / HTTP/1.1  
Host: cam.tencentcloudapi.com  
Content-Type: application/json  
X-TC-Action: GetRole  
<Common request parameters>  
  
{  
  "RoleId": "4611686018427411642"  
}
```

Output Example

```
{  
  "Response": {  
    "RoleInfo": {  
      "RoleId": "4611686018427411642",  
      "RoleName": "byron3214_QcsRole",  
      "PolicyDocument": "{\n\"version\": \"2.0\", \"statement\": [\n{\n\"action\": \"sts:AssumeRole\", \"effect\": \"allow\", \"principal\": {\n\"service\": [\n\"ccslinked.qcloud.com\n\"]\n}}\n]}",  
      "Description": "role222",  
      "AddTime": "2020-03-25 11:03:00",  
      "UpdateTime": "2020-03-25 11:03:00",  
      "ConsoleLogin": 0,  
      "RoleType": "service_linked",  
      "SessionDuration": 43200,  
      "DeletionTaskId": "114",  
      "Tags": [  
        {  
          "Value": "xx",  
          "Key": "xx"  
        }  
      ]  
    },  
  },  
}
```

```
"RequestId": "1fb826eb-6d21-42f3-8f6e-9f51360f585d"
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNotExist	Role does not exist.

DetachRolePolicy

Last updated : 2023-03-15 10:25:04

1. API Description

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

This API (DetachRolePolicy) is used to unassociate a policy and a role.

A maximum of 3 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DetachRolePolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	No	Integer	Policy ID. Either <code>PolicyId</code> or <code>PolicyName</code> must be entered
DetachRoleId	No	String	Role ID, which is used to specify a role. The input parameter is either <code>DetachRoleId</code> or <code>DetachRoleName</code> .
DetachRoleName	No	String	Role name, which is used to specify a role. The input parameter is either <code>DetachRoleId</code> or <code>DetachRoleName</code> .
PolicyName	No	String	Policy name. Either <code>PolicyId</code> or <code>PolicyName</code> must be entered

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 Disassociating a policy from a role

Input Example

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

{
  "PolicyId": "1",
  "DetachRoleId": "4611686018427397905"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "62c57079-8c81-469a-9112-9c5f2025b0b0"
  }
}
```

5. Developer Resources

SDK

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

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
InternalServerError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.RoleNotExist	Role does not exist.

DescribeRoleList

Last updated : 2023-03-15 10:25:04

1. API Description

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

This API (DescribeRoleList) is used to get the role list under the account.

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	Common Params . The value used for this API: DescribeRoleList.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Page	Yes	Integer	Page number, beginning from 1
Rp	Yes	Integer	Number of lines per page, no greater than 200
Tags.N	No	Array of RoleTags	A parameter used to filter the list of roles under a tag.

3. Output Parameters

Parameter Name	Type	Description
List	Array of RoleInfo	Role details list Note: This field may return null, indicating that no valid value was found.
TotalNum	Integer	Total number of roles
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Getting the role list

Input Example

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

{
  "Rp": "5",
  "Page": "1"
}
```

Output Example

```
{
  "Response": {
    "List": [
      {
        "AddTime": "2020-11-28 10:05:52",
        "ConsoleLogin": 0,
        "DeletionTaskId": null,
        "Description": "The current role is the TencentCloud Automation Tools (TAT) service-linked role, and it will access your other Tencent Cloud resources within the permissions granted by the associated policies.",
        "PolicyDocument": "{\"version\":\"2.0\",\"statement\": [{\"action\":\"sts:AssumeRo
```

```

le\","effect\":"allow\","principal\":{"service\":["command.tat.cloud.tencent.com\"]]}}}],
"RoleId": "4611686018433460000",
"RoleName": "TAT_QCSLinkedRoleInCommand",
"RoleType": "service_linked",
"SessionDuration": 43200,
"Tags": [],
"UpdateTime": "2020-11-28 10:05:52"
},
{
"AddTime": "2020-06-28 12:07:06",
"ConsoleLogin": 0,
"DeletionTaskId": null,
>Description": "The current role is the CVM service-linked role, and it will access your other Tencent Cloud resources within the permissions granted by the associated policies.",
"PolicyDocument": "{\n  \"version\": \"2.0\",\n  \"statement\": [\n    {\n      \"action\": \"sts:AssumeRole\",\n      \"effect\": \"allow\",\n      \"principal\": {\n        \"service\": [\n          \"cvmsmartdiagnostic.cvm.cloud.tencent.com\"\n        ]\n      }\n    }\n  ]\n}",
"RoleId": "4611686018432380000",
"RoleName": "CVM_QCSLinkedRoleInCVMSmartDiagnostic",
"RoleType": "service_linked",
"SessionDuration": 43200,
"Tags": [
{
"Key": "K1",
"Value": "V7"
}
],
"UpdateTime": "2020-06-28 12:07:06"
}
],
"RequestId": "36d78422-f6ce-4edb-a5a0-a217b366aa70",
"TotalNum": 2
}
}

```

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
FailedOperation	Operation failed.
InternalServerError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.

DeleteRole

Last updated : 2023-03-15 10:25:05

1. API Description

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

This API (DeleteRole) is used to delete a specified role.

A maximum of 3 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
RoleId	No	String	Role ID, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>
RoleName	No	String	Role name, used to specify a role. Input either <code>RoleId</code> or <code>RoleName</code>

3. Output Parameters

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

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

4. Example

Example1 Deleting a role

Input Example

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

{
  "RoleId": "4611686018427844696"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "dc9759b5-5345-490e-b276-a3a0dd45004c"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.OrganizationRoleOperateError	The current role can only be operated by the organization admin. To modify it, contact the admin.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.TagParamError	Incorrect tag parameter.

CreateRole

Last updated : 2023-03-15 10:25:05

1. API Description

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

This API (CreateRole) is used to create a role.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
RoleName	Yes	String	Role name
PolicyDocument	Yes	String	Policy document
Description	No	String	Role description
ConsoleLogin	No	Integer	Whether login is allowed. 1: yes, 0: no
SessionDuration	No	Integer	The maximum validity period of the temporary key for creating a role (range: 0-43200)
Tags.N	No	Array of	Tags bound to the role.

[RoleTags](#)

3. Output Parameters

Parameter Name	Type	Description
RoleId	String	Role ID Note: This field may return null, 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 role

Input Example

```
https://cam.tencentcloudapi.com/?Action=CreateRole
&RoleName=test_1234544
&PolicyDocument=%7B%22version%22%3A%222.0%22%2C%22statement%22%3A%5B%7B%22action%
22%3A%22name%2Fsts%3AAssumeRole%22%2C%22effect%22%3A%22allow%22%2C%22principal%22
%3A%7B%22service%22%3A%5B%22cloudaudit.cloud.tencent.com%22%2C%22cls.cloud.tencen
t.com%22%5D%7D%7D%5D%7D
&Description=abc
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RoleId": 123456789,
    "RequestId": "0bac591a-6cc7-4e9d-8d01-74618f1a9611"
  }
}
```

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
FailedOperation.TagResourceFailed	Failed to bind the tag.
InternalServerError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.

InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.PrincipalQcsCrossError	Cross-site access is not supported for this role entity.
InvalidParameter.PrincipalQcsError	Incorrect <code>PrincipalQcsc</code> .
InvalidParameter.PrincipalQcsNotExist	<code>PrincipalQcs</code> does not exist.
InvalidParameter.PrincipalServiceNotExist	<code>PrincipalService</code> does not exist.
InvalidParameter.RoleFull	Limit on number of roles reached.
InvalidParameter.RoleNameError	Role name invalid.
InvalidParameter.RoleNameInUse	A role with the same name already exists.
InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.
InvalidParameter.TagLimitExceeded	The tag limit has been exceeded.
InvalidParameter.TagParamError	Incorrect tag parameter.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.

AttachRolePolicy

Last updated : 2023-03-15 10:25:05

1. API Description

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

This API (AttachRolePolicy) is used to associate a policy with a role.

A maximum of 3 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: AttachRolePolicy.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	No	Integer	Policy ID. Either <code>PolicyId</code> or <code>PolicyName</code> must be entered
AttachRoleId	No	String	Role ID, used to specify a role. Input either <code>AttachRoleId</code> or <code>AttachRoleName</code>
AttachRoleName	No	String	Role name, used to specify a role. Input either <code>AttachRoleId</code> or <code>AttachRoleName</code>
PolicyName	No	String	Policy name. Either <code>PolicyId</code> or <code>PolicyName</code> must be entered

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 Associating a permissions policy with a role

Input Example

```
https://cam.tencentcloudapi.com/?Action=AttachRolePolicy
&PolicyId=1
&AttachRoleId=4611686018427397905
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "0b55ef5b-36b1-4649-8bb9-1aca465f17fb"
  }
}
```

5. Developer Resources

SDK

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

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
InternalError.SystemError	Internal error.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.

UpdateRoleConsoleLogin

Last updated : 2023-03-15 10:25:01

1. API Description

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

This API is used to modify a role's login permissions.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UpdateRoleConsoleLogin.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
ConsoleLogin	Yes	Integer	Whether login is allowed. 1: yes, 0: no
RoleId	No	Integer	Role ID. Use either <code>RoleId</code> or <code>RoleName</code> as the input parameter.
RoleName	No	String	Role name. Use either <code>RoleId</code> or <code>RoleName</code> as the input parameter.

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 a role's login permissions

This example shows you how to use a role ID.

Input Example

```
https://cam.tencentcloudapi.com/?Action=UpdateRoleConsoleLogin
&RoleId=10000000947212312
&ConsoleLogin=1
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "59e72a7a-1e49-4a73-a2db-8993c0334c57"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNotExist	Role does not exist.

GetServiceLinkedRoleDeletionStatus

Last updated : 2023-03-15 10:25:03

1. API Description

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

This API is used to get the status of the service-linked role deletion based on the `TaskId`

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: GetServiceLinkedRoleDeletionStatus.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
DeletionTaskId	Yes	String	Deletion task ID

3. Output Parameters

Parameter Name	Type	Description
Status	String	Status: NOT_STARTED, IN_PROGRESS, SUCCEEDED, FAILED

Reason	String	Reasons why the deletion failed.
ServiceType	String	Service type Note: this field may return null, indicating that no valid values can be obtained.
ServiceName	String	Service name 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 Getting the deletion status of service role

Input Example

```
https://cam.tencentcloudapi.com/?Action=GetServiceLinkedRoleDeletionStatus
&DeletionTaskId=100
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "Status": "SUCCEEDED",
    "ServiceType": "cam",
    "ServiceName": "CAM",
    "Reason": "{}",
    "RequestId": "c3da1c1c-df35-467d-9335-99c68d993e0a"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.DeletionTaskNotExist	The task does not exist.
InvalidParameter.ParamError	Invalid input parameter.

DeleteServiceLinkedRole

Last updated : 2023-03-15 10:25:04

1. API Description

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

This API is used to delete a service-linked role.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteServiceLinkedRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
RoleName	Yes	String	Name of the service-linked role to be deleted.

3. Output Parameters

Parameter Name	Type	Description
DeletionTaskId	String	Deletion task identifier, which can be used to check the status of a service-linked

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

4. Example

Example1 Deleting service role

Input Example

```
https://cam.tencentcloudapi.com/?Action=DeleteServiceLinkedRole
&RoleName=Qcs_Role
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "DeletionTaskId": "100",
    "RequestId": "c3da1c1c-df35-467d-9335-99c68d993e0a"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNotExist	Role does not exist.

CreateServiceLinkedRole

Last updated : 2023-03-15 10:25:05

1. API Description

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

This API is used to create a service-linked role.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: CreateServiceLinkedRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
QCSServiceName.N	Yes	Array of String	Authorized service, i.e., Tencent Cloud service entity with this role attached.
CustomSuffix	No	String	Custom suffix. A string you provide, which is combined with the service-provided prefix to form the complete role name.
Description	No	String	Role description.
Tags.N	No	Array of RoleTags	Tags bound to the role.

3. Output Parameters

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

4. Example

Example1 Creating a service-related role

Input Example

```
https://cam.tencentcloudapi.com/?Action=CreateServiceLinkedRole
&QCSServiceName.0=ccs.qcloud.com
&CustomSuffix=forTest
&Description=ccsLinkedRole
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RoleId": "4611686018427411525",
    "RequestId": "c3da1c1c-df35-467d-9335-99c68d993e0a"
  }
}
```

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
FailedOperation.TagResourceFailed	Failed to bind the tag.
InternalServerError.SystemError	Internal error.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.PrincipalQcsError	Incorrect <code>PrincipalQcsc</code> .
InvalidParameter.PrincipalQcsNotExist	<code>PrincipalQcs</code> does not exist.
InvalidParameter.PrincipalServiceNotExist	<code>PrincipalService</code> does not exist.
InvalidParameter.RoleNameError	Role name invalid.
InvalidParameter.RoleNameInUse	A role with the same name already exists.

InvalidParameter.TagLimitExceeded	The tag limit has been exceeded.
InvalidParameter.TagParamError	Incorrect tag parameter.

PutRolePermissionsBoundary

Last updated : 2023-03-15 10:25:02

1. API Description

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

This API is used to set a role permission boundary.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: PutRolePermissionsBoundary.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
PolicyId	Yes	Integer	Policy ID
RoleId	No	String	Role ID (either it or the role name must be entered)
RoleName	No	String	Role name (either it or the role ID must be entered)

3. Output Parameters

--	--	--

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

4. Example

Example1 Setting a role permissions boundary

Input Example

```
https://cam.tencentcloudapi.com/?Action=PutRolePermissionsBoundary
&RoleId=1234567
&PolicyId=1234567
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "4097a057-19c9-45bd-ad12-b4225a75c085"
  }
}
```

5. Developer Resources

SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
InternalError.SystemError	Internal error.
InvalidParameter.OperateEntitiesOverLimit	There were too many entities in one operation.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.ServiceLinkedPolicyCantInPermissionBoundary	Service policies cannot be used for permission boundaries.
InvalidParameter.ServiceLinkedRoleCantUsePermissionBoundary	Permission boundaries cannot be used for service roles.
InvalidParameter.UserNotExist	User object does not exist
UnauthorizedOperation	Unauthorized operation.

DeleteRolePermissionsBoundary

Last updated : 2023-03-15 10:25:05

1. API Description

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

This API is used to delete a role permission boundary.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: DeleteRolePermissionsBoundary.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
RoleId	No	String	Role ID (either it or the role name must be entered)
RoleName	No	String	Role name (either it or the role ID must be entered)

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 a role permissions boundary

Input Example

```
https://cam.tencentcloudapi.com/?Action=DeleteRolePermissionsBoundary
&RoleId=1234567
&<Common request parameters>
```

Output Example

```
{
  "Response": {
    "RequestId": "4097a057-19c9-45bd-ad12-b4225a75c085"
  }
}
```

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
InternalError.SystemError	Internal error.
InvalidParameter.OperateEntitiesOverLimit	There were too many entities in one operation.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.ServiceLinkedRoleCantUsePermissionBoundary	Permission boundaries cannot be used for service roles.
InvalidParameter.UserNotExist	User object does not exist
UnauthorizedOperation	Unauthorized operation.

DescribeSafeAuthFlag

Last updated : 2022-03-14 17:37:07

1. API Description

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

This API is used to query security 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](#).

This document describes the parameters for Signature V1. It's recommended to use the V3 signature, which provides higher security. Note that for Signature V3, the common parameters need to be placed in the HTTP Header. [See details](#).

Parameter Name	Required	Type	Description
Action	Yes	String	Common parameter. The value used for this API: DescribeSafeAuthFlag.
Version	Yes	String	Common parameter. The value used for this API: 2019-01-16.
Region	No	String	Common parameter. This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description

LoginFlag	LoginActionFlag	Login protection settings
ActionFlag	LoginActionFlag	Sensitive operation protection settings
OffsiteFlag	OffsiteFlag	Suspicious login location protection settings
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying security settings

Input Example

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

Output Example

```
{
  "Response": {
    "LoginFlag": {
      "Phone": 1,
      "Token": 0,
      "Stoken": 0,
      "Wechat": 0,
      "Custom": 0
    },
    "ActionFlag": {
      "Phone": 0,
      "Token": 0,
      "Stoken": 0,
      "Wechat": 0,
      "Custom": 0
    },
    "OffsiteFlag": {
      "VerifyFlag": 0,
      "NotifyPhone": 1,
      "NotifyEmail": 1,
      "NotifyWechat": 1,
      "Tips": 0
    },
    "RequestId": "9626da03-4645-4c54-ba90-74836284af0c"
  }
}
```

```
}  
}
```

5. Developer Resources

SDK

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Command Line Interface

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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.ParamError	Invalid input parameter.
ResourceNotFound.UserNotExist	User does not exist.

DescribeSafeAuthFlagIntl

Last updated : 2023-03-15 10:25:04

1. API Description

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

This API is used to query security 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	Common Params . The value used for this API: DescribeSafeAuthFlagIntl.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.

3. Output Parameters

Parameter Name	Type	Description
LoginFlag	LoginActionFlagIntl	Login protection settings
ActionFlag	LoginActionFlagIntl	Sensitive operation protection settings

OffsiteFlag	OffsiteFlag	Suspicious login location protection settings
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

4. Example

Example1 Querying security settings

Input Example

```
https://cam.tencentcloudapi.com/?Action=DescribeSafeAuthFlagIntl  
&<common request parameters>
```

Output Example

```
{  
  "Response": {  
    "LoginFlag": {  
      "Phone": 1,  
      "Token": 0,  
      "Stoken": 0,  
      "Wechat": 0,  
      "Custom": 0  
      "Mail": 0  
    },  
    "ActionFlag": {  
      "Phone": 0,  
      "Token": 0,  
      "Stoken": 0,  
      "Wechat": 0,  
      "Custom": 0  
      "Mail": 0  
    },  
    "OffsiteFlag": {  
      "VerifyFlag": 0,  
      "NotifyPhone": 1,  
      "NotifyEmail": 1,  
      "NotifyWechat": 1,  
      "Tips": 0  
    },  
    "RequestId": "9626da03-4645-4c54-ba90-74836284af0c"  
  }  
}
```

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
FailedOperation	Operation failed.
InvalidParameter.ParamError	Invalid input parameter.
ResourceNotFound.UserNotExist	User does not exist.

UntagRole

Last updated : 2023-03-15 10:25:02

1. API Description

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

This API is used to unbind tags from a role.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: UntagRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
TagKeys.N	Yes	Array of String	Tag key.
RoleName	No	String	Role name. Specify either the role name or role ID.
RoleId	No	String	Role ID. Specify either the role ID or role name.

3. Output Parameters

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

4. Example

Example1 Unbinding tags from a role

Input Example

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

{
  "TagKeys": [
    "AKey"
  ],
  "RoleName": "CAM_QCSRole"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "xxx-xxx-xxx-xxx"
  }
}
```

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.UnauthorizedOperation	No permission.
FailedOperation.UnTagResourceFailed	Failed to unbind the tag
InternalServerError	Internal error
InternalServerError.SystemError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNameError	Role name invalid.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.TagParamError	Incorrect tag parameter.

TagRole

Last updated : 2023-03-15 10:25:02

1. API Description

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

This API is used to bind tags to a role.

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

We recommend you to use API Explorer

[Try it](#)

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

2. Input Parameters

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

Parameter Name	Required	Type	Description
Action	Yes	String	Common Params . The value used for this API: TagRole.
Version	Yes	String	Common Params . The value used for this API: 2019-01-16.
Region	No	String	Common Params . This parameter is not required for this API.
Tags.N	Yes	Array of RoleTags	Tag.
RoleName	No	String	Role name. Specify either the role name or role ID.
RoleId	No	String	Role ID. Specify either the role ID or role name.

3. Output Parameters

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

4. Example

Example1 Binding tags to a role

Input Example

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

{
  "Tags": [
    {
      "Key": "AKey",
      "Value": "AValue"
    }
  ],
  "RoleName": "CAM_QCSRole"
}
```

Output Example

```
{
  "Response": {
    "RequestId": "xxx-xxx-xxx-xxx"
  }
}
```

5. Developer Resources

SDK

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

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Command Line Interface

- [Tencent Cloud CLI 3.0](#)

6. Error Code

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

Error Code	Description
AuthFailure.UnauthorizedOperation	No permission.
FailedOperation.TagResourceFailed	Failed to bind the tag.
InternalError	Internal error
InternalError.SystemError	Internal error.
InvalidParameter	Incorrect parameter.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.TagLimitExceeded	The tag limit has been exceeded.
InvalidParameter.TagParamError	Incorrect tag parameter.

Data Types

Last updated : 2024-05-21 14:33:32

AccessKey

Access key list

Used by actions: ListAccessKeys.

Name	Type	Description
AccessKeyId	String	Access key ID
Status	String	Key status. Valid values: Active (activated), Inactive (not activated)
CreateTime	Timestamp	Creation time

AccessKeyDetail

Access key

Used by actions: CreateAccessKey.

Name	Type	Description
AccessKeyId	String	Access key ID
SecretAccessKey	String	Access key, which is visible only when it is created. Keep it properly.
Status	String	Key status. Valid values: <code>Active</code> (activated), <code>Inactive</code> (not activated).
CreateTime	Timestamp	Creation time

AttachEntityOfPolicy

The entity associated with the policy

Used by actions: ListEntitiesForPolicy.

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Name	Type	Description
Id	String	Entity ID
Name	String	Entity Name Note: This field may return null, indicating that no valid value was found.
Uin	Integer	Entity UIN Note: This field may return null, indicating that no valid value was found.
RelatedType	Integer	Type of entity association. 1: Associate by users; 2: Associate by User Groups
AttachmentTime	String	Policy association time Note: this field may return <code>null</code> , indicating that no valid value was found.

AttachPolicyInfo

Associated policy

Used by actions: ListAttachedGroupPolicies, ListAttachedUserPolicies.

Name	Type	Description
PolicyId	Integer	Policy ID
PolicyName	String	Policy name Note: This field may return null, indicating that no valid value was found.
AddTime	Timestamp	Time created Note: This field may return null, indicating that no valid value was found.
CreateMode	Integer	How the policy was created: 1: Via console; 2: Via syntax Note: This field may return null, indicating that no valid value was found.
PolicyType	String	Valid values: <code>user</code> and <code>QCS</code> Note: This field may return null, indicating that no valid value was found.
Remark	String	Policy remarks
OperateOwnerUin	String	Root account of the operator associating the policy Note: this field may return null, indicating that no valid values can be obtained.
OperateUin	String	The ID of the account associating the policy. If <code>UinType</code> is 0, this indicates that this is a sub-account <code>UIN</code> . If <code>UinType</code> is 1, this indicates this is a role ID

OperateUinType	Integer	If <code>UinType</code> is 0, <code>OperateUin</code> indicates that this is a sub-account <code>UIN</code> . If <code>UinType</code> is 1, <code>OperateUin</code> indicates that this is a role ID
Deactivated	Integer	Queries if the policy has been deactivated Note: this field may return null, indicating that no valid values can be obtained.
DeactivatedDetail	Array of String	List of deprecated products Note: this field may return null, indicating that no valid values can be obtained.

AttachedPolicyOfRole

Policy associated with the role

Used by actions: ListAttachedRolePolicies.

Name	Type	Description
PolicyId	Integer	Policy ID
PolicyName	String	Policy name
AddTime	String	Time of association
PolicyType	String	Policy type. <code>User</code> indicates custom policy; <code>QCS</code> indicates preset policy Note: This field may return null, indicating that no valid value was found.
CreateMode	Integer	Policy creation method. 1: indicates the policy was created based on product function or item permission; other values indicate the policy was created based on the policy syntax
Deactivated	Integer	Whether the product has been deprecated (0: no; 1: yes) Note: this field may return null, indicating that no valid values can be obtained.
DeactivatedDetail	Array of String	List of deprecated products Note: this field may return null, indicating that no valid values can be obtained.
Description	String	Policy description Note: this field may return null, indicating that no valid values can be obtained.

AttachedUserPolicy

Details of policies associated with the user

Used by actions: ListAttachedUserAllPolicies.

Name	Type	Description
PolicyId	String	Policy ID.
PolicyName	String	Policy name.
Description	String	Policy description.
AddTime	String	Creation time.
StrategyType	String	Policy type (<code>1</code> : custom policy; <code>2</code> : preset policy).
CreateMode	String	Creation mode (<code>1</code> : create by product feature or project permission; other values: create by policy syntax).
Groups	Array of AttachedUserPolicyGroupInfo	Information on policies inherited from the user group. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Deactivated	Integer	Whether the product has been deprecated (<code>0</code> : no; <code>1</code> : yes). Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DeactivatedDetail	Array of String	List of deprecated products. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

AttachedUserPolicyGroupInfo

Information on policies that are associated with the user and inherited from the user group

Used by actions: ListAttachedUserAllPolicies.

Name	Type	Description
GroupId	Integer	Group ID.
GroupName	String	Group name.

GroupIdOfUidInfo

Information on the association between a sub-user and a User Group

Used by actions: AddUserToGroup, RemoveUserFromGroup.

Name	Type	Required	Description
GroupId	Integer	Yes	User Group ID
Uid	Integer	No	Sub-user UID
Uin	Integer	No	Sub-user UIN. For UIN and UID, at least one of them is required.

GroupInfo

User Group information

Used by actions: ListGroups, ListGroupsForUser.

Name	Type	Description
GroupId	Integer	User group ID
GroupName	String	User Group name
CreateTime	String	Time User Group created
Remark	String	User Group description

GroupMemberInfo

User Group user information

Used by actions: GetGroup, ListUsersForGroup.

Name	Type	Description
Uid	Integer	Sub-user UID
Uin	Integer	Sub-user UIN
Name	String	Sub-user name

PhoneNum	String	Mobile number
CountryCode	String	Mobile number country/area code
PhoneFlag	Integer	Whether the mobile phone has been verified. 0 : No; 1 : Yes.
Email	String	Email address
EmailFlag	Integer	Whether the email has been verified. 0 : No; 1 : Yes.
UserType	Integer	User type. 1 : Global collaborator; 2 : Project collaborator; 3 : Message recipient.
CreateTime	String	Time policy created
IsReceiverOwner	Integer	Whether the user is the primary message recipient. 0 : No; 1 : Yes.

LoginActionFlag

Login and sensitive operation flag

Used by actions: DescribeSafeAuthFlagColl.

Name	Type	Required	Description
Phone	Integer	No	Phone
Token	Integer	No	Hard token
Stoken	Integer	No	Soft token
Wechat	Integer	No	WeChat
Custom	Integer	No	Custom
Mail	Integer	No	Mail
U2FToken	Integer	No	U2F token

LoginActionFlagIntl

Login and sensitive operation flag

Used by actions: DescribeSafeAuthFlagIntl.

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Name	Type	Required	Description
Phone	Integer	No	Mobile number
Token	Integer	No	Hard token
Stoken	Integer	No	Soft token
Wechat	Integer	No	WeChat
Custom	Integer	No	Custom
Mail	Integer	No	Email

LoginActionMfaFlag

Login and sensitive operation flag

Used by actions: SetMfaFlag.

Name	Type	Required	Description
Phone	Integer	No	Mobile phone
Stoken	Integer	No	Soft token
Wechat	Integer	No	WeChat

OffsiteFlag

Suspicious login location settings

Used by actions: DescribeSafeAuthFlagColl, DescribeSafeAuthFlagIntl.

Name	Type	Required	Description
VerifyFlag	Integer	No	Verification flag
NotifyPhone	Integer	No	Phone notification
NotifyEmail	Integer	No	Email notification
NotifyWechat	Integer	No	WeChat notification
Tips	Integer	No	Alert

PolicyVersionDetail

Policy version details

Used by actions: GetPolicyVersion.

Name	Type	Description
VersionId	Integer	Policy version ID Note: this field may return null, indicating that no valid values can be obtained.
CreateDate	String	Policy version creation time Note: this field may return null, indicating that no valid values can be obtained.
IsDefaultVersion	Integer	Whether it is the operative version. 0: no, 1: yes Note: this field may return null, indicating that no valid values can be obtained.
Document	String	Policy syntax text Note: this field may return null, indicating that no valid values can be obtained.

PolicyVersionItem

Policy version list element structure

Used by actions: ListPolicyVersions.

Name	Type	Description
VersionId	Integer	Policy version ID Note: this field may return null, indicating that no valid values can be obtained.
CreateDate	String	Policy version creation time Note: this field may return null, indicating that no valid values can be obtained.
IsDefaultVersion	Integer	Whether it is the operative version. 0: no, 1: yes Note: this field may return null, indicating that no valid values can be obtained.

RoleInfo

Role details

Used by actions: DescribeRoleList, GetRole.

Name	Type	Description
RoleId	String	Role ID
RoleName	String	Role name
PolicyDocument	String	Role policy document
Description	String	Role description
AddTime	String	Time role created
UpdateTime	String	Time role last updated
ConsoleLogin	Integer	If login is allowed for the role
RoleType	String	User role. Valid values: <code>user</code> , <code>system</code> , <code>service_linked</code> Note: this field may return null, indicating that no valid values can be obtained.
SessionDuration	Integer	Valid period Note: this field may return null, indicating that no valid values can be obtained.
DeletionTaskId	String	Task identifier for deleting a service-linked role Note: this field may return null, indicating that no valid values can be obtained.
Tags	Array of RoleTags	Tags. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

RoleTags

Role tag type

Used by actions: CreateRole, CreateServiceLinkedRole, DescribeRoleList, GetRole, TagRole.

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

SAMLProviderInfo

SAML identity provider

Used by actions: ListSAMLProviders.

Name	Type	Required	Description
Name	String	Yes	SAML identity provider name
Description	String	Yes	SAML identity provider description
CreateTime	String	Yes	Time SAML identity provider created
ModifyTime	String	Yes	Time SAML identity provider last modified

SecretIdLastUsed

The last time the key was used.

Used by actions: GetSecurityLastUsed.

Name	Type	Description
SecretId	String	Key ID.
LastUsedDate	Date	The date when the key ID was last used (the value is obtained one day later). Note: this field may return <code>null</code> , indicating that no valid value can be obtained.
LastSecretUsedDate	Integer	The most recent date the key was accessed Note: This field may return null, indicating that no valid values can be obtained.

StrategyInfo

Policy information

Used by actions: ListPolicies.

Name	Type	Description

PolicyId	Integer	Policy ID
PolicyName	String	Policy name
AddTime	Timestamp	Time policy created Note: This field may return null, indicating that no valid value was found.
Type	Integer	Policy type. 1: Custom policy; 2: Preset policy
Description	String	Policy description Note: This field may return null, indicating that no valid value was found.
CreateMode	Integer	How the policy was created: 1: Via console; 2: Via syntax
Attachments	Integer	Number of associated users
ServiceType	String	Product associated with the policy Note: This field may return null, indicating that no valid value was found.
IsAttached	Integer	This value should not be null when querying whether a marked entity has been associated with a policy. 0 indicates that no policy has been associated, while 1 indicates that a policy has been associated
Deactivated	Integer	Queries if the policy has been deactivated Note: this field may return null, indicating that no valid values can be obtained.
DeactivatedDetail	Array of String	List of deprecated products Note: this field may return null, indicating that no valid values can be obtained.
IsServiceLinkedPolicy	Integer	The deletion task identifier used to check the deletion status of the service-linked role Note: this field may return null, indicating that no valid values can be obtained.
AttachEntityCount	Integer	The number of entities associated with the policy. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
AttachEntityBoundaryCount	Integer	The number of entities associated with the permission boundary. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

UpdateTime	Timestamp	The last edited time. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
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SubAccountInfo

Sub-user information

Used by actions: ListCollaborators, ListUsers.

Name	Type	Description
Uin	Integer	Sub-user user ID
Name	String	Sub-user username
Uid	Integer	Sub-user UID
Remark	String	Sub-user remarks
ConsoleLogin	Integer	If sub-user can log in to the console
PhoneNum	String	Mobile number
CountryCode	String	Country/Area code
Email	String	Email
CreateTime	Timestamp	Creation time Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
NickName	String	Nickname. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

SubAccountUser

Sub-user information

Used by actions: DescribeSubAccounts.

Name	Type	Description

Uin	Integer	Sub-user ID
Name	String	Sub-user name
Uid	Integer	Sub-user UID. UID is the unique identifier of a user who is a message recipient, while UIN is a unique identifier of a user.
Remark	String	Sub-user remarks
CreateTime	Timestamp	Creation time Note: this field may return null, indicating that no valid values can be obtained.
UserType	Integer	User type (1: root account; 2: sub-user; 3: WeCom sub-user; 4: collaborator; 5: message recipient)
LastLoginIp	String	
LastLoginTime	String	

Error Codes

Last updated : 2024-05-21 14:33:32

Feature Description

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

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

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

Error Code List

Common Error Codes

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

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

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

Service Error Codes

Error Code	Description
FailedOperation.Accesskey	An error occurred while manipulating the access key.
FailedOperation.PolicyFull	The number of user policies has exceeded the limit.
FailedOperation.PolicyNameInUse	The policy name specified by the <code>PolicyName</code> field already exists.
FailedOperation.PolicyVersionAlreadyDefault	The policy version is already the default policy version.
FailedOperation.PolicyVersionFull	The number of policy versions has reached the upper limit.
FailedOperation.TagResourceFailed	Failed to bind the tag.

FailedOperation.UnTagResourceFailed	Failed to unbind the tag
FailedOperation.UserNotBindPhone	No mobile number is bound to the account
FailedOperation.UserNotBindWechat	No WeChat Account is bound to the account
FailedOperation.UserUnbindNoPermission	User does not have permission.
InternalError.SystemError	Internal error.
InvalidParameter.ActionError	<code>Action</code> field of policy document invalid.
InvalidParameter.ActionMiss	The action in the policy syntax does not exist.
InvalidParameter.ActionNotExist	The action in the policy syntax does not exist.
InvalidParameter.ActionServiceNotExist	The action service in the policy syntax does not exist.
InvalidParameter.AttachmentFull	Limit on number of authorization object associated policies in the <code>principal</code> field reached.
InvalidParameter.ConditionContentError	The condition content in the policy syntax is incorrect.
InvalidParameter.ConditionError	<code>condition</code> field of policy document invalid.
InvalidParameter.ConditionTypeError	The condition operator in the policy syntax is incorrect.
InvalidParameter.DeletionTaskNotExist	The task does not exist.
InvalidParameter.DescriptionLengthOverlimit	The input parameter <code>description</code> cannot exceed 300 bytes in length.
InvalidParameter.EffectError	<code>Effect</code> field of policy document invalid.
InvalidParameter.EntityFilterError	<code>EntityFilter</code> field invalid.
InvalidParameter.GroupFull	Limit on number of user groups reached.

InvalidParameter.GroupIdError	<code>GroupId</code> field invalid.
InvalidParameter.GroupNameInUse	User Group name repeated.
InvalidParameter.GroupNotExist	User Group does not exist.
InvalidParameter.GroupUserFull	Limit on number of sub-users in the user group reached.
InvalidParameter.IdentityNameInUse	Identity provider name already in use.
InvalidParameter.KeywordError	<code>Keyword</code> field invalid.
InvalidParameter.MFATokenError	Multi-factor Token verification failed.
InvalidParameter.NotSupportProduct	CAM does not support the resource type specified in the policy document.
InvalidParameter.OperateEntitiesOverLimit	There were too many entities in one operation.
InvalidParameter.OrganizationRoleOperateError	The current role can only be operated by the organization admin. To modify it, contact the admin.
InvalidParameter.ParamError	Invalid input parameter.
InvalidParameter.PasswordViolatedRules	Password incompatible with user safety settings.
InvalidParameter.PolicyDocumentError	<code>PolicyDocument</code> field invalid.
InvalidParameter.PolicyDocumentLengthOverLimit	<code>PolicyDocument</code> field exceeds length restriction.
InvalidParameter.PolicyIdError	Input parameter <code>PolicyId</code> invalid.
InvalidParameter.PolicyIdNotExist	Policy ID does not exist.
InvalidParameter.PolicyNameError	<code>PolicyName</code> field invalid.
InvalidParameter.PolicyVersionNotExists	The policy version does not exist.
InvalidParameter.PrincipalError	<code>principal</code> field of policy document invalid.
InvalidParameter.PrincipalQcsCrossError	Cross-site access is not supported for this role entity.

InvalidParameter.PrincipalQcsError	Incorrect <code>PrincipalQcsc</code> .
InvalidParameter.PrincipalQcsNotExist	<code>PrincipalQcs</code> does not exist.
InvalidParameter.PrincipalServiceNotExist	<code>PrincipalService</code> does not exist.
InvalidParameter.ResourceContentError	The resource context in the policy syntax is incorrect.
InvalidParameter.ResourceError	<code>Resource</code> field of policy document invalid.
InvalidParameter.ResourceProjectError	The resource project in the policy syntax is incorrect.
InvalidParameter.ResourceQcsError	Incorrect resource <code>QCS</code> .
InvalidParameter.ResourceRegionError	The resource region in the policy syntax is incorrect.
InvalidParameter.ResourceServiceNotExist	The resource service in the policy syntax does not exist.
InvalidParameter.ResourceUinError	The resource root account in the policy syntax is incorrect.
InvalidParameter.RoleFull	Limit on number of roles reached.
InvalidParameter.RoleNameError	Role name invalid.
InvalidParameter.RoleNameInUse	A role with the same name already exists.
InvalidParameter.RoleNotExist	Role does not exist.
InvalidParameter.ScopeError	<code>Scope</code> field invalid.
InvalidParameter.SearchKeywordLengthError	An error occurred while querying the keyword length.
InvalidParameter.ServiceLinkedPolicyCantInPermissionBoundary	Service policies cannot be used for permission boundaries.
InvalidParameter.ServiceLinkedRoleCantUsePermissionBoundary	Permission boundaries cannot be used for service roles.
InvalidParameter.ServiceTypeError	<code>ServiceType</code> field invalid.
InvalidParameter.StatementError	<code>Statement</code> field of policy document invalid.

InvalidParameter.SubUserFull	Limit on number of sub-accounts reached.
InvalidParameter.SubUserNameInUse	Sub-user name repeated.
InvalidParameter.TagLimitExceeded	The tag limit has been exceeded.
InvalidParameter.TagParamError	Incorrect tag parameter.
InvalidParameter.UinError	<code>Uin</code> field invalid.
InvalidParameter.UserGroupFull	Limit on number of user groups joined by a sub-user reached.
InvalidParameter.UserNameIllegal	Invalid username.
InvalidParameter.UserNotExist	User object does not exist
InvalidParameter.UserUinAndUinNotAllNull	A user's UIN and UID cannot be left empty at the same time.
InvalidParameter.VersionError	<code>Version</code> field of policy document invalid.
InvalidParameterValue.IdentityKeyError	The OIDC signature public key is incorrect.
InvalidParameterValue.IdentityUrlError	The IdP URL is incorrect.
InvalidParameterValue.MetadataError	Identity provider metadata document error.
InvalidParameterValue.NameError	Identity provider name error.
LimitExceeded.IdentityFull	Limit on number of identity providers reached.
OperationDenied.AccessKeyOverLimit	Each account can have up to two <code>AccessKey</code> .
OperationDenied.HaveKeys	There are undeleted API keys.
OperationDenied.SubUin	The sub-user is not allowed to use the root account key.
OperationDenied.UinNotMatch	The access key does not match the account.
RequestLimitExceeded.CreateUser	The frequency limit of creating sub-users

	has been reached.
ResourceNotFound.GroupNotExist	User group does not exist.
ResourceNotFound.IdentityNotExist	Identity provider does not exist.
ResourceNotFound.NotFound	Resource does not exist.
ResourceNotFound.PolicyIdNotFound	Resources specified by <code>PolicyId</code> does not exist.
ResourceNotFound.SecretNotExist	The key does not exist.
ResourceNotFound.UserNotExist	User does not exist.
UnauthorizedOperation.DeleteApiKey	User do not have the authorization to delete API keys.