Key Management Service
TCCLI Management Guide
Product Documentation

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TCCLI Management Guide
Operation Overview

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You can call KMS TCCLI to manage your keys, such as creating/editing/rotating a key and viewing the key ID list.
Operations can be performed using Tencent Cloud's Command Line Tool TCCLI, and subsequently, you can call it using any supported programming language.

Action	Note
Create a Key	Describes how to call TCCLI to create a key
View a Key	Provides an example of how to call TCCLI to view the key ID and detailed information.
Edit a Key	Describes how to call TCCLI to edit a key
Enable/Disable a Key	Describes how to call TCCLI to enable/disable a key.
Key Rotation	Describes how to call TCCLI to rotate a key
Encryption and Decryption	Describes how to call TCCLI for encryption and decryption
Delete a Key	Describes how to call TCCLI to delete a key
Key Archiving	Describes how to call TCCLI to enable/disable key archiving.

Create Secret Key

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Overview

The CreateKey API can be called to create a customer master key (CMK) used for DEK management. The CMK can be used in other APIs to create DEKs, perform encryption and decryption, and do more.
The Alias is a required parameter in this API operation. You can refer to the CreateKey API documentation to add additional descriptions to the CMK.
This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

This example shows you how to create a key named `test-gz01` in Guangzhou region with the description `this is test for gz key`.

Input

```
tccli kms CreateKey --region ap-guangzhou --Alias test-gz01 --Description 'this is test for
```

Output

After creation, the key will be enabled by default, with the key rotation feature disabled.

```
{
  "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09",
  "Description": "this is test for gz key",
  "Alias": "test-gz01",
  "KeyUsage": "ENCRYPT_DECRYPT",
  "RequestId": "994bbd90-7c8e-4522-85f2-c712da23f863",
  "KeyState": "Enabled",
  "CreateTime": 1571903621
}
```

View Secret Key

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Overview

API	API Description	Note
ListKeys	List the key information (KeyId) under the account	This API operation has no required parameters. For more information, see the ListKeys interface.
DescribeKey	View the detailed information of a specified Customer Master Key (CMK), including the CMK name, ID, status, region, and other key details.	The KeyId for this API operation is a required parameter. For more details, please refer to the DescribeKey interface.

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Viewing Key ID List Example

This example describes how to view the information of the first five KeyIds in Guangzhou region.

Input

```
tccli kms ListKeys --region ap-guangzhou --Limit 5
```

Output


```
{
  "Keys": [
    {
      "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09"
    },
    {
      "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09"
    },
    {
      "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09"
    },
    {
      "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09"
    },
    {
      "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09"
    }
  ],
  "TotalCount": 114,
  "RequestId": "afaaeb5e-c97d-4726-8012-6ae337d62928"
}
```


Viewing Key ID Details Example

This example describes how to view the details of the specified CMK.

Input

```
tccli kms DescribeKey --region ap-guangzhou --KeyId 521xxxxx-xxxx-xxxx-xxxx-52xxxxd4
```

Output

If the API is successfully executed, the details of the CMK will be returned.


```
{
 "KeyMetadata": {
      "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09",
      "Description": "this is test for gz key",
      "CreatorUin": 10xxxxxxxxx,
      "KeyRotationEnabled": false,
      "NextRotateTime": 1603439621,
      "CreateTime": 1571903621,
```



```
        "Alias": "test-gz01",
        "KeyUsage": "ENCRYPT_DECRYPT",
        "DeletionDate": 0,
        "KeyState": "Enabled",
        "Type": 4,
        "Owner": "user"
    },
    "RequestId": "608f514c-3279-44ea-8e4c-c00b69e3521c"
}
```

Editing Key

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Overview

The operations of renaming a key and modifying key description involve the following two functions:

API	API Description	Note
UpdateAlias	Modify Key Name	The KeyId and Alias are mandatory parameters for this API operation. For more details, please refer to the UpdateAlias interface documentation.
UpdateKeyDescription	Modify Key Description	The KeyId and Description are mandatory parameters for this API operation. For more details, please refer to the UpdateKeyDescription interface documentation.

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Example of Renaming a Key

Input

```
tccli kms UpdateAlias --region ap-guangzhou --KeyId 52xxxx-xxxx-xxxx-xxxx-5xxxx4 --Ali
```

Output

If the modification is successful, the following information will be returned.

```
{
  "RequestId": "489a4274-0b81-4db7-8160-542c5c5bed68"
}
```

Modifying Key Description Example

Input

```
tccli kms UpdateKeyDescription --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-5
```

Output

If the modification is successful, the following information will be returned.

```
{
  "RequestId": "31134207-5de8-44f2-8c00-8bd0e88f95a6"
}
```

Enabling/Disabling Key

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Overview

The operations of enabling and disabling a key involve the following two APIs:

API	API Description	Note
EnableKey	Enable the Customer Master Key (CMK)	The KeyId is a required parameter for this API operation. For more details, please refer to the EnableKey interface documentation.
DisableKey	Disable Master Key	The KeyId is a required parameter for this API operation. For more details, please refer to the DisableKey interface documentation.

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Enable Key Example

Input

```
tccli kms EnableKey --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52xxxxx4
```

Output

If the key is successfully enabled, the following request will be returned.

```
{
  "RequestId": "6b2187b0-f40a-46d0-8065-2434afc54619"
}
```

Disable Key Example

Input

```
tccli kms DisableKey --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52xxxxx4
```

Output

If the key is successfully disabled, the following request will be returned.

```
{
  "RequestId": "e5674638-1466-4607-a3ea-b60d30f4e5e3"
}
```

Key Rotation

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Overview

The key rotation feature involves three APIs:

API	API Description	Note
GetKeyRotationStatus	View key rotation status	The KeyId is a required parameter for this API operation. For more details, please refer to the GetKeyRotationStatus interface documentation.
EnableKeyRotation	Enable Key Rotation	The KeyId is a required parameter for this API operation. For more details, please refer to the EnableKeyRotation interface documentation.
DisableKeyRotation	Disable Key Rotation	The KeyId is a required parameter for this API operation. For more details, please refer to the DisableKeyRotation interface documentation.

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

View Key Rotation Status Example

Input

```
tccli kms GetKeyRotationStatus --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52
```

Output

If the API is called successfully, the key rotation status of the CMK will be returned.

```
{
  "KeyRotationEnabled": false,
```

```
  "RequestId": "e1432224-4dc2-48da-a8e8-e84d30afd9ef"
}
```

Enable Key Rotation Example

Input

```
tccli kms EnableKeyRotation --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52xx
```

Output

If the feature is disabled normally, the request information as shown below will be returned.

```
{
  "RequestId": "4e0fa96f-e86e-4517-af27-3dfe6e5b2a72"
}
```

Disable Key Rotation Example

Input

```
tccli kms DisableKeyRotation --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52xx
```

Output

If the feature is disabled normally, the request information as shown below will be returned.

```
{
  "RequestId": "c8b73c8b-1ee5-4b23-b800-7cccc58e7ffb"
}
```

Encryption and Decryption

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Overview

The online encryption and decryption operations involve two APIs:

API	API Description	Note
Encrypt	Encryption	The KeyId and Plaintext are mandatory parameters for this API operation. For more details, please refer to the Encrypt interface documentation.
Decrypt	Decrypt	The CiphertextBlob is a required parameter for this API operation. For more details, please refer to the Decrypt interface documentation.

Encryption

Encrypt is used to encrypt user data, with a maximum data size of 4KB for any data, suitable for encrypting database passwords, RSA Keys, or other small sensitive information. For application data encryption, it is recommended to use the DEK generated by GenerateDataKey for local data encryption and decryption operations.
This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Encryption Example

When using TCCLI to call the encryption interface, you need to perform Base64 encoding on the plaintext data. This example uses the text "This example is used for testing."

Input

```
tccli kms Encrypt --KeyId 6xxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxx5 --Plaintext "VGhpcyBleGl
```

Output

If the execution is successful, the ciphertext and the CMK ID used to encrypt the plaintext will be returned, of which the ciphertext will be used for subsequent decryption operations.

```
{
  "KeyId": "6xxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxx5",
  "RequestId": "23781471-c213-44c5-92a4-731b882e25b5",
  "CiphertextBlob": "Rrnqz5fthTxcSdCYIw5pBoEWLvrdqYNZ0oXKOmvYx/1Oo2R+DqEFPjj
}
```

Decryption Example

Now, let's decrypt the encrypted data, using the CMK created in the previous example as a reference.

Input

```
tccli kms Decrypt --CiphertextBlob "Rrnqz5fthTxcSdCYIw5pBoEWLvrdqYNZ0oXKOmvYx/1(
```

Output

If the execution is successful, the request data will return the Base64-encoded plaintext and the CMK ID used to encrypt the plaintext. Subsequently, an additional Base64 decryption operation is required to obtain the plaintext.

```
{
  "Plaintext": "VGhpcyBleGFtcGxlIGlzIHVzZWQgZm9yIHRlc3Rpbmc=",
  "KeyId": "6xxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxx5",
  "RequestId": "bcce3fae-**--**-d42780c10702"
}
```

Asymmetric Key Decryption

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Overview

KMS provides the following SM2 and RSA asymmetric key-based decryption APIs:

API	API Description	Note
AsymmetricSm2Decrypt	SM2 decryption	Please refer to AsymmetricSm2Decrypt
AsymmetricRsaDecrypt	RSA decryption	Please refer to AsymmetricRsaDecrypt

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Asymmetric Decryption

RSA decryption

Input

```
tccli kms AsymmetricRsaDecrypt --KeyId 22d79428-61d9-11ea-a3c8-525400** --Algorithı
```

Output

```
{
  "Response": {
    "RequestId": "6758cbf5-5e21-4c37-a2cf-8d47f5**",
    "KeyId": "22d79428-61d9-11ea-a3c8-525400**",
    "Plaintext": "dGVzdAo="
  }
}
```

SM2 decryption

Input

```
tccli kms AsymmetricSm2Decrypt --KeyId 22d79428-61d9-11ea-a3c8-525400** --Ciphert
```

Output

```
{
  "Response": {
    "RequestId": "6758cbf5-5e21-4c37-a2cf-8d47f5**",
    "KeyId": "22d79428-61d9-11ea-a3c8-525400**",
    "Plaintext": "dGVzdAo="
  }
}
```


View public key

Overview

Obtain the public key information for the specified KeyId. For API documentation, please refer to GetPublicKey.
This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Input

```
tccli kms GetPublicKey  --KeyId 22d79428-61d9-11ea-a3c8-525400**
```

Output:


```
{
  "Response": {
    "RequestId": "408fa858-cd6d-4011-b8a0-653805**",
    "KeyId": "22d79428-61d9-11ea-a3c8-525400**",
    "PublicKey": "MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAzQk7x7ladgVFE
    "PublicKeyPem": "-----BEGIN PUBLIC KEY-----\nMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8A
  }
}
```

Deleting Key

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Overview

The schedule key deletion feature involves the following two APIs:

API	API Description	Note
ScheduleKeyDeletion	Add scheduled key deletion task	The KeyId and PendingWindowInDays are mandatory parameters for this API operation. For more details, please refer to the ScheduleKeyDeletion interface.
CancelKeyDeletion	Cancel Scheduled Deletion Task	The KeyId is a required parameter for this API operation. For more details, please refer to the CancelKeyDeletion interface documentation.

Note
If a CMK schedule deletion waiting period is set through the ScheduleKeyDeletion API when the CMK is in disabled status, the CMK will be deleted automatically at the specified time.

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Creating a scheduled deletion task example

This example shows you how to delete a disabled CMK in 7 days.

Input

```
tccli kms ScheduleKeyDeletion --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52
```

Output

If the setting is successful, the ID of the CMK to be deleted and the schedule deletion timestamp will be returned.

```
{
  "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09",
  "RequestId": "2bd72d85-f9dd-4465-ae51-beebff54f540",
  "DeletionDate": 1572512542
}
```

Canceling a scheduled deletion task example

This example shows you how to cancel a schedule deletion task, where the CMK is the one used in the above example.

Input

```
tccli kms CancelKeyDeletion --region ap-guangzhou --KeyId 5xxxxx-xxxx-xxxx-xxxx-52xx
```

Output

If the execution is successful, the returned request will contain the ID of the CMK for which the schedule deletion task is successfully canceled.

```
{
  "KeyId": "6xxxxxxx-xxxx-xxxx-xxxx-5xxxxxxxxc09",
  "RequestId": "c85473c6-e18d-4a09-9eac-03958dd4714d"
}
```

Archive Key

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Overview

The operations of enabling and disabling key archiving involve the following two functions:

API name	API Description	Note
ArchiveKey	Enable Key Archiving	The KeyId is a required parameter for this API operation. For more details, please refer to the ArchiveKey interface documentation.
CancelKeyArchive	Unarchives keys	The KeyId is a required parameter for this API operation. For more details, please refer to the CancelKeyArchive interface documentation.

This example uses Tencent Cloud's Command Line Tool TCCLI. You can use any supported programming language for subsequent calls.

Sample

Enable Key Archiving

Input

```
tccli kms ArchiveKey --region ap-guangzhou --KeyId 5*-**---52*4
```

Output

If the key archiving is successfully enabled, the following request will be returned:

```
{
 "Response": {
  "RequestId": "1b580852-1e38-11e9-b129-5**19b4b00"
 }
}
```

Unarchives keys

Input

```
tccli kms CancelKeyArchive --region ap-guangzhou --KeyId 5*-**---52*4
```

Output

If the key archiving is successfully canceled, the following request will be returned:

```
{
   "RequestId": "e5674638-1466-4607-a3ea-b**0f4e5e3"
}
```