

Alibaba Cloud

Key Management Service Pricing

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Document conventions









Style	Description	Example
 Danger	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
 Warning	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restart an instance.
 Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
 Note	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings> Network> Set network type .
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

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1. Activate KMS

Before you can use Key Management Service (KMS), you must activate it. This topic describes how to activate KMS.

Prerequisites

An Alibaba Cloud account is created and passes real-name verification. For more information, see [Account registration](#) and [Real-name verification](#).

Procedure

1. Go to the [KMS activation page](#).
2. Select **Key Management Service Terms of Service**.
3. Click **Activate Now**.
After the service is activated, you are charged based on the actual resource usage. For more information, see [Billing](#).

2. Billing

This topic describes the fees charged for Key Management Service (KMS) and provides some billing examples.

Key hosting fees

Customer master keys (CMKs) in the Pending Deletion state are not billed. The following table describes billing rules for CMKs in other states.

Key creator	Billing item	Unit price in Alibaba Cloud regions (USD/day)
Alibaba Cloud service	Version of a service-managed key ^①	0.0
User	Version of a software key ^②	0.002
	Version of a basic hardware key ^③	0.033
	Version of an advanced hardware key ^④	<ul style="list-style-type: none"> • 0.083 for the first 2,000 key versions • 0.033 for other key versions

^① A CMK automatically created by an Alibaba Cloud service and managed by an Alibaba Cloud account. For more information, see [Select appropriate keys](#).

^② A CMK whose protection level is `Software`.

^③ A CMK whose key type is `Aliyun_AES_256`, `Aliyun_SM4`, or `RSA_2048` and whose protection level is `HSM`.

^④ A CMK whose key type is `Aliyun_SM2`, `EC_P256`, or `EC_P256K` and whose protection level is `HSM`.

API operation call fees

You can make a total number of 20,000 API operation calls free of charge for your service-managed keys in all regions each month. API operation calls for service-managed keys beyond this free quota and API operation calls for user-managed keys are subject to the billing rules listed in the following table.

Key category	Unit price in regions in mainland China (USD/10,000 calls)	Unit price in regions outside mainland China (USD/10,000 calls)
Service-managed key ^①	0.08	0.03
Basic key ^② (software and hardware)	0.08	0.03
Advanced key ^③ (software and hardware)	0.24	0.15

^① A CMK automatically created by an Alibaba Cloud service and managed by an Alibaba Cloud account. For more information, see [Select appropriate keys](#).

^② A CMK whose key type is `Aliyun_AES_256` , `Aliyun_SM4` , or `RSA_2048` .

^③ A CMK whose key type is `Aliyun_SM2` , `EC_P256` , or `EC_P256K` .

Billing example 1: Disk encryption

In the Singapore region, 250 disks are created per month. A CMK is used to encrypt the disks.

Fees:

- Hosted keys: one CMK
- API operation calls: 750 (250 calls to create data keys, 250 calls to encrypt the data keys, and 250 calls to decrypt the data keys)

The following table lists the estimated monthly costs.

Fee	Service-managed key (USD)	Custom hardware key (USD)
Key hosting	0	1
API operation calls	0 (The number of calls is 750, which does not exceed the free quota 20,000.)	0.002 (0.03 × 750/10,000)
Total	0	1.002

Billing example 2: OSS client-side encryption

In the Singapore region, a CMK is used for OSS client-side encryption, which is based on envelope encryption. A total number of 10,000 objects are encrypted and uploaded per month. The encrypted objects are read for 2,000,000 times per month.

Fees:

- Hosted keys: one CMK
- API operation calls: 10,000 calls to create data keys (one call for each object to be uploaded)
- API operation calls: 2,000,000 calls to decrypt data keys

The following table lists the estimated monthly costs.

Fee	Custom hardware key (USD)
Key hosting	1
API operation calls	6.03 (0.03 × 2,010,000/10,000)
Total	7.03

Billing example 3: Signature generation

In the Singapore region, a CMK whose key type is `EC_P256` is used to generate 100,000 signatures.

Fees:

- Hosted keys: one CMK
- API operation calls: 100,000 calls to generate signatures

The following table lists the estimated monthly costs.

Fee	Custom hardware key (USD)
Key hosting	2.49
API operation calls	1.50 (0.15 × 100,000/10,000)
Total	3.99

3.Overdue payments

If your Alibaba Cloud account is overdue, top up your account in a timely manner to avoid impacts on your services.

Service status in the first 24 hours after your account is overdue

When your account becomes overdue, you receive a notification and your access to Key Management Service (KMS) is denied.

Service status after your account is overdue for 24 hours

If you do not top up your Alibaba Cloud account within 24 hours, KMS is stopped. Your key-related data is retained but your access to KMS is denied. No bills are generated for you when KMS is stopped.