Alibaba Cloud

Key Management Service

Pricing

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C−⊃ Alibaba Cloud

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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 `cd /d C:/window` command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	`bae log list --instanceid` *Instance_ID*
[] or [a|b]	This format is used for an optional value, where only one item can be selected.	`ipconfig [-all|-t]`
{} or {a|b}	This format is used for a required value, where only one item can be selected.	`switch {active|stand}`

Table of Contents

1.Billing

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

Fees for KMS resources and API operation calls (pay-as-you-go)

Fees for hosting keys

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

Key creator	Billable 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]	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`, `RSA_3072`, `EC_P256`, or `EC_P256K` and whose protection level is `HSM`.

Fees for calling API operations

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.

> ? **Note** You are charged only when you call the cryptographic operations. For more information about cryptographic operations, see Cryptographic operations.

Key category	Unit price in Alibaba Cloud regions in the Chinese mainland (USD/10,000 calls)	Unit price in Alibaba Cloud regions outside the Chinese mainland (USD/10,000 calls)
Service-managed key[1]	0.08	0.03

Key category	Unit price in Alibaba Cloud regions in the Chinese mainland (USD/10,000 calls)	Unit price in Alibaba Cloud regions outside the Chinese mainland (USD/10,000 calls)
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` , `RSA_3072` , `EC_P256` , or `EC_P256K` .

Billing examples

- Billing example 1: Disk encryption

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

  Fees:

  ○ Hosted keys: one CMK

  > ⑦ **Note**   The CMK can be a custom hardware key. In this case, you are charged for hosting the CMK. The CMK can also be a service-managed key. In this case, you are charged for calling API operations by using the CMK beyond the monthly free quota of 20,000 calls.

  ○ 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 (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 (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

Fees for Dedicated KMS (subscription)

Dedicated KMS uses the subscription billing method. Fees:USD 1,799/month.

2.Overdue payments

If your Alibaba Cloud account has overdue payments, top up your account at the earliest opportunity to prevent impacts on your services.

Impacts of overdue payments

If you do not settle your overdue payments within seven days, your Key Management Service (KMS) is disabled. Your key-related data is retained but your access to KMS is denied. During the period of arrears, KMS does not charge you.

3.FAQ about billing

This topic provides answers to some frequently asked questions about billing in Key Management Service (KMS).

When am I not charged for KMS?

If the CMKs within your Alibaba Cloud account are deleted, you are no longer charged. You can log on to the KMS console to delete the CMKs that you create in each region. For more information, see Schedule a key deletion task.

> ⑦ **Note**   KMS allows you only to schedule key deletion tasks. After you schedule a key deletion task, the CMK is in the **Pending Deletion** state. In this case, you are not charged for the CMK, and the CMK cannot be used to encrypt data, decrypt data, or generate data keys.

Does Dedicated KMS support free trials?

Yes, Dedicated KMS supports free trials. Dedicated KMS supports 7-day free trials. When a 7-day free trial ends, Alibaba Cloud automatically releases the dedicated KMS instance that is created during the trial period. Then, you must purchase a dedicated KMS instance to continue using the features of Dedicated KMS.

For more information about how to apply for a free trial, see Apply for the free trial of Dedicated KMS.

What are the precautions when I purchase a dedicated KMS instance?

- Before you can purchase a dedicated KMS instance, you must purchase two hardware security module (HSM) instances that reside in different zones, and create and activate an HSM cluster.
- We recommend that you set the same subscription duration for the dedicated KMS instance and the HSM instances and enable auto-renewal for the dedicated KMS instance. This prevents unexpected business interruptions upon the expiration of the dedicated KMS instance.

For more information about how to purchase a dedicated KMS instance, see Purchase a dedicated KMS instance.

How do I renew my dedicated KMS instance?

1. Log on to the KMS console.
2. In the left-side navigation pane, click **Dedicated KMS**.
3. Find the dedicated KMS instance that you want to renew and click **Renew** in the **Actions** column.
4. On the **Renew** page, configure **Subscription Period**. Then, read and select **Dedicated KMS Terms of Service**.
5. Click **Buy Now**.
6. On the **Purchase** page, select a payment method and click **Purchase**.

   After you complete the payment, the **Remaining Subscription Period** parameter of the dedicated KMS instance is updated.