

# Alibaba Cloud

Log Service

Pricing

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# Document conventions


Style	Description	Example
 <b>Danger</b>	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 <b>Danger:</b> Resetting will result in the loss of user configuration data.
 <b>Warning</b>	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 <b>Warning:</b> Restarting will cause business interruption. About 10 minutes are required to restart an instance.
 <b>Notice</b>	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 <b>Notice:</b> If the weight is set to 0, the server no longer receives new requests.
 <b>Note</b>	A note indicates supplemental instructions, best practices, tips, and other content.	 <b>Note:</b> You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click <b>Settings &gt; Network &gt; Set network type</b> .
<b>Bold</b>	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click <b>OK</b> .
<code>Courier font</code>	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>

# Table of Contents

1. Billing overview .....	05
2. Pay-as-you-go .....	08
3. View billing details .....	11
4. Overdue payments .....	12
5. Cost optimization .....	13
6. FAQ .....	14
6.1. Billing-related FAQ .....	14
6.2. How do I stop bill generation for Log Service? .....	14
6.3. Save indexing fees .....	15

# 1. Billing overview

This topic describes the billing items and billing methods of Log Service.

 **Note**

- For more information about the pricing of Log Service, see [Log Service pricing](#).
- For more information about the billing items of Log Service, see [Billing-related FAQ](#).

## Billing methods


- Pay-as-you-go


Log Service supports the pay-as-you-go billing method. When you use the pay-as-you-go billing method, you are charged based on the amount of resources that you have consumed. Log Service also offers free quotas on a monthly basis. For more information, see [Pay-as-you-go](#).

- Subscription resource plans

You can purchase a subscription resource plan. For example, you can purchase subscription resource plans for read/write traffic, indexing traffic, or occupied storage space. The resources that you use are deducted from the relevant resource plan.

## Billing items and methods


 **Note** You can use Log Service to collect log data and time series data. The price of time series data and indexing is different from the price of log data. The price of other billing items such as data transformation, data shipping, read/write traffic, and read/write requests are the same as the price of log data.

Billing items and methods	Description
Read/write traffic	<p>Read/write traffic is calculated based on the compressed log data. The compression ratio is 10% to 20%. Read/write traffic includes the traffic that is generated by data consumption in streaming mode. Example: A total of 10 GB of raw logs are generated. After the logs are written to Log Service, they are compressed to 1.5 GB. In this case, 1.5 GB of log data incur fees.</p> <div data-bbox="512 1547 1385 1850" style="background-color: #e0f2f7; padding: 10px;"> <p> <b>Note</b></p> <ul style="list-style-type: none"> <li>• The consumption preview feature in the Log Service console also generates a small amount of streaming consumption traffic.</li> <li>• Traffic generated by index-based queries and analysis is free of charge. For example, you are not charged when you query and analyze logs, generate reports, or use the alert feature in the Log Service console.</li> </ul> </div>

Billing items and methods	Description
Storage space occupied by log data	The storage space is the total size of compressed log data and the indexes. Example: Log data is written to Log Service at a speed of 1 GB per day and is compressed to 200 MB. Indexing is enabled for 10% of the raw log data. The size of indexes is 100 MB. If the data is stored for 30 days, the maximum cumulative storage space after 30 days is 9 GB (30 days × 100 MB/day + 30 days × 200 MB/day = 9 GB).
Storage space occupied by time series data	The storage space that time series data occupies is measured based on the size of the raw data.
Indexes created or recreated for log data	You are charged for the indexing traffic only once. This traffic is calculated based on the indexed fields. Example: If the fields to be queried account for 10% of logs whose size is 10 GB, an indexing fee is billed for 1 GB of log data.
Indexes created for time series data	<p><b>Note</b></p> <ul style="list-style-type: none"> <li>By default, the indexing feature is disabled. Indexing traffic incurs fees after you enable and use the indexing feature.</li> <li>Indexing traffic is calculated only once if you create both full text indexes and key/value indexes.</li> <li>Created indexes occupy storage space. Therefore, storage space fees are incurred.</li> </ul>
Active shards	Only shards in the readwrite state incur fees. Merged or split shards do not incur fees. Example: You need to merge three shards in the readwrite state. After you merge them, one shard is in the readwrite state, and the other two shards become read-only. On the day that you merge these three shards, you are charged for three shards. On the next day, you are charged for only one shard.  You can write 430 GB of log data per day to a shard.
Read/write operations	The number of operations that write logs to Log Service depends on the speed at which logs are generated. Log Service can minimize the number of read/write operations at the backend.
Read traffic over the Internet	When log data collected by Log Service is read and consumed by applications outside Alibaba Cloud internal network, you are charged for the generated data traffic.
Data transformation	You are charged for the server and network resources consumed when you use the data transformation feature.  <p><b>Note</b> If data is transmitted across regions for data transformation, Internet traffic is generated and compressed. You are charged for the compressed Internet traffic.</p>
LogShipper	You are charged for data that is shipped to OSS, MaxCompute, AnalyticDB for MySQL, and TSDB.

## Free quotas

Log Service provides free quotas for some billing items. The following table shows the item details.

 **Note** Log Service offers free quotas on a monthly basis and clears them at the end of each month. If the amount of resources used in a month is within the free quotas, you are not charged. Otherwise, you are charged for the excess amount.

Billing items and methods	Free monthly quota
Storage space occupied by log data	500 MB
Read/write traffic	500 MB
Indexes created or recreated for log data	500 MB
Active shards	31 (one shard per day)

# 2. Pay-as-you-go

Log Service supports the pay-as-you-go billing method that charges you based on the amount of resources used. The default billing method is pay-as-you-go after you activate Log Service. This topic describes the billing details of pay-as-you-go.

For more information about the billing items and billing method of Log Service, see [Billing overview](#). For more information about the pricing of Log service, see [Log Service pricing](#).

## Billing period


Fees are deducted from the balance of your Alibaba Cloud account on a daily basis. A bill is generated every day based on the amount of resources that you used on the previous day.

## Billing examples

- Example 1: free quotas

You have three servers. Each server generates 5 MB of log data every day. You want to use Log Service to perform the following operations.

- i. Query logs in real time and create a dashboard to visualize data query and analysis results.
- ii. Use a Java program to subscribe to log processing events and track log processing results in real time.

Billing item	Description
Shard	<p>Only one Logstore and one shard are created for 31 days in a month. This billing item is within the free quota.</p> <div style="background-color: #e6f2ff; padding: 5px; border: 1px solid #d9e1f2;"> <p> <b>Note</b> By default, two shards are created when you create a Logstore. You can change this number to 1 to make sure that the number of active shards is within the free quota.</p> </div>
Read/write traffic	A total of 15 MB of raw logs are generated every day. Assume that the compression ratio is 20%. The daily read/write traffic is 6 MB (15 MB × 20% × 2 = 6 MB). The monthly cumulative read/write traffic is 186 MB (6 MB/day × 31 days = 186 MB). This billing item is within the free quota.
Indexing traffic (logs)	The indexing traffic is 465 MB (15 MB/day × 31 days = 465 MB). This billing item is within the free quota.
Read/write operations	The number of monthly read/write operations is less than 1 million. This billing item is within the free quota.

- Example 2: real-time computing and offline computing

A website receives 100 million API requests per day. Each request generates a 200-byte log. The size of logs generated per day is 20 GB. The peak traffic is 1.16 MB/s, which is five times the average traffic. The lifecycle of these logs is two days. They are read once a day for real-time computing, and shipped to OSS for offline computing.

The fee incurred for one day is USD 3.3375:(USD 0.01 + USD 0.09 + USD 0.09 + USD 0.0115 + USD 0.136 + USD 3 = USD 3.3375). The following table shows the billing details.



Billing item	Description
Shard	Reserve a shard and you are charged USD 0.01 for the shard.
Read/write traffic	A total of 20 GB of raw logs are written every day. Assume that the compression ratio is 10%. The daily write traffic is 2 GB and you are charged USD 0.09(2 GB × USD 0.045/GB = USD 0.09).
	The same amount of log data is pulled for real-time computing. The fee is USD 0.09.
	The storage fee is USD 0.0115(2 GB × 2 days × USD 0.002875/GB/day = USD 0.0115).
	The fee for shipping logs to OSS in the CSV format is USD 0.136(20 GB × USD 0.0068/GB = USD 0.136).
API requests	The fee incurred for 100 million requests is USD 3(USD 0.00000003/time × 100,000,000 times = USD 3).

- Example 3: log indexing and online queries

A cloud service receives 1 million API requests per day. Each request generates a 200-byte log. The size of logs generated per day is 200 MB. These logs are stored in Log Service for 30 days so that you can query data of the last 30 days.

The fee incurred for one day is USD 0.0690625(USD 0.0175 + USD 0.0215625 + USD 0.03 = USD 0.0690625). The following table shows the billing details.

Billing item	Description
Indexing traffic (logs)	Create indexes for all fields. The indexing fee is USD 0.0175(0.2 GB × USD 0.0875/GB = USD 0.0175).
Storage space (logs)	200 MB + 50 MB (indexing traffic) = 250 MB. The maximum storage space is 7.5 GB (0.25 GB × 30 days = 7.5 GB). The maximum daily storage fee is USD 0.0215625(7.5 GB × 0.002875 USD/GB/day = USD 0.0215625). Indexing traffic is compressed from raw logs. The compression ratio is 25%.
API requests	The fee incurred for 1 million requests is USD 0.03(USD 0.00000003/time × 1,000,000 times = USD 0.03).

- Example 4: time series data storage

A cloud service writes 400 MB of time series data to Log Service per day. The data is stored for 15 days.

The fee incurred for one day is USD 0.014124(USD 0.010884 + USD 0.00324 = USD 0.014124). The following table shows the billing details.

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Billing item	Description
Indexing traffic (time series)	Create indexes for all fields. The indexing fee is USD 0.010884( $0.4 \text{ GB} \times 0.02721 \text{ USD/GB} = \text{USD } 0.010884$ ).
Storage space (time series)	<p><math>400 \text{ MB} + 50 \text{ MB (indexing traffic)} = 450 \text{ MB}</math>. The maximum storage space is 6.75 GB (<math>0.45 \text{ GB} \times 15 \text{ days} = 6.75 \text{ GB}</math>). The maximum daily storage fee is USD 0.00324(<math>6.75 \text{ GB} \times 0.00048 \text{ USD/GB/day} = \text{USD } 0.00324</math>).</p> <p>Indexing traffic is compressed from raw logs. The compression ratio is 12.5%.</p>

## 3.View billing details

You can view the billing details of Log Service in the billing center. These details include the number of requests, storage space, indexing traffic, and active shards.

### View billing details

1. Log on to the [Alibaba Cloud Management Console](#).
2. In the top navigation bar, click **Expenses**.
3. In the left-side navigation pane, choose **Spending Summary > Spending Summary**.
4. On the **Details** tab, set the **Billing Cycle** parameter, and select **Log Service** in the **Product Name** column. You can set the **Statistic Item** and **Statistic Period** parameters to specify the items that you want to display.

Overview Bills **Details** [Documentation](#)

**i** The billing details are updated one day later. The data of current billing cycle **do not contain** unsettled Pay-As-You-Go fee, so the query results are for reference only and not as a basis for reconciliation. Actual details of current billing cycle is subject to the data queried in the next month;  
For Cloud Communication products, only the detail data of and after November 2020 are supported, and the product data of net.cn (including domain names, trademarks, etc.) are not included.

Billing Cycle : 2020-11  Resource Group : All Resource Groups  Instance Name

Statistic Item:  Billing Item  Instance  Product  Account  Cost Center


Statistic Period:  Billing Cycle  By Day  Billing Period

[Clear](#) [Customize Column Options](#) [Export Billing Overview \(CSV\)](#)

Billing Cycle	Cost Center	Account Name	Product Name	Product Detail	Subscription Type	Instance ID	Resource Group	Region
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## 4. Overdue payments

This topic describes the condition that may lead to an overdue payment and the status of Log Service after you have an overdue payment.

 **Warning** The system may send you notifications that you have an overdue payment. In this case, you must clear the overdue payment in time to ensure your business continuity.

If your account balance is insufficient and you continue to use the paid services of Log Service, you will have an overdue payment.

If you have an overdue payment, note that:

- A bill is generated within 4 hours after the current billing cycle ends. Log Service automatically deducts the charges from your account balance. If the account balance is insufficient, the bill becomes overdue.
- If the bill is overdue for more than 15 days, Log Service becomes unavailable. However, you are still charged for the occupied storage space for 15 days until the resources are automatically released. In this case, the overdue amount increases. We recommend that you pay the overdue bill within 15 days to avoid business losses caused by service unavailability.
- If your services become unavailable due to the overdue payment, you can top up your account balance within 15 days to pay the overdue bill. Then Log Service automatically becomes available. If you do not pay the bill within 15 days after your services become unavailable, Log Service releases your projects and clears your data. The cleared data cannot be recovered.

# 5. Cost optimization

The cost of Log Service is related to two factors:

- Data volume: Data volume is determined by your business needs.
- Configurations: You can use configurations that match your data volume and choose the best solution to minimize the cost.

## Configurations optimization

The following two configurations can be optimized:

- Number of shards

Each shard can process data at a maximum speed of 5 MB/s. Only shards in the readwrite state incur fees. You can adjust the number of shards so that each shard can process data at a speed of 5 MB/s. You can also merge the shards to reduce the number of shards.

- Data retention period of a Logstore

We recommend that you optimize the data retention period of a Logstore based on your requirements for log query and storage.

- If you collect logs for stream computing, we recommend that you use only LogHub and do not create indexes.
- If you want to store logs for a long time, we recommend that you ship logs to OSS.

## Other optimization recommendations

- Use Logtail: Logtail allows you to transmit data in batches and resume data transmission by using checkpoints. Logtail can transmit data in real time with an optimal algorithm. Compared with other software products such as Logstash and FluentD, Logtail reduces CPU consumption by 75%.
- Use large packages (64 KB - 1 MB) to write logs by calling API operations. This reduces the number of requests.
- Configure indexes only for key fields, such as UserID and Action.

## 6.FAQ

### 6.1. Billing-related FAQ

#### What should I do if I have overdue payment in Log Service?

Log Service charges resources in pay-as-you-go mode. It generates a bill every day and automatically deducts fees. The bill lists the resources that you used on the last day. If the bill is overdue for more than 24 hours, Log Service automatically stops to provide services for you. However, it still charges you for the storage space that you are using, and the overdue amount increases. We recommend that you pay off the overdue bill within 24 hours to avoid any business loss caused by service interruption. You can continue to use Log Service after paying off the overdue bill.

#### I only created projects and Logstores. Why do I have a bill?

If you have created a project and a Logstore, shards are created by default to reserve resources. As indicated on the page when you create a Logstore, Log Service charges a small amount of resource reservation fees for shards. Based on the current billing policy, you can use a shard free of charge for 31 days. If you create two shards, they are charged after 15 days. You can delete the project and Logstore if you no longer need the shards. If you delete the resources, Log Service sends you the bill of resource usage the next day. You will not receive any project bills from the third day.

#### How do I disable Log Service?

If you no longer need Log Service, you can delete all the projects under your account. In this case, Log Service is disabled. You will not be charged from the next day. If you have overdue payment, pay off the overdue bill and delete the projects. If no Log Service services or resources exist under your account, you will not receive any Log Service bills from the third day.

#### Will any write or read traffic be generated on the Internet if I query and analyze logs in the console?


If you perform any operations in the console, for example, you query and analyze logs, you access Log Service on the intranet. Your intranet access does not generate write or read traffic on the Internet. Therefore, no such traffic is billed.

### 6.2. How do I stop bill generation for Log Service?


To stop bill generation for Log Service, you must delete all data in Log Service. Before you delete the data, make sure that you no longer need to use Log Service.

#### Procedure


You can delete data in Log Service by deleting Logstores and projects. You are charged for data storage in the Logstores on the day the Logstores are deleted and no billing items will be generated the next day.

 **Warning** After Logstores and projects are deleted, all log data stored in the Logstores and projects and the configurations of the Logstores and projects are deleted and cannot be recovered. Proceed with caution.

1. Log on to the [Log Service console](#).
2. Delete a Logstore.

 **Note**

- Before you can delete a Logstore, you must delete all Logtail configurations that are associated with the Logstore.
- If the log shipping feature is enabled for a Logstore, we recommend that you stop writing data to the Logstore before you delete the Logstore. In addition, make sure that all data in the Logstore is shipped.
- If you cannot delete a Logstore by using your Alibaba Cloud account due to insufficient permissions, [submit a ticket](#).

- i. In the **Projects** section, click the target project name.
  - ii. On the page that appears, choose **Log Management > Logstores**. Find the target Logstore, and then choose  > **Delete**.
  - iii. In the dialog box that appears, click **OK**.
3. Delete a project.
    - i. Go back to the **Projects** section. Find the target project, and then click **Delete**.
    - ii. Select a reason for the deletion, and then click **OK**.

## 6.3. Save indexing fees

Indexing fees account for a large proportion of the cost of Log Service. You can save indexing fees to save the cost.

You can use one of the following methods to save indexing fees as needed:

### Disable full-text indexing

You can disable full-text indexing and specify the key value during queries to save the cost.

Log Service supports full-text indexing and field indexing. For more information, see [index types in Overview](#). Full-text indexing creates an index of the text type on all fields of a log. The key and value are used as normal text during queries. For fields of the long or double type, the key length is not included in indexing. If full-text indexing is enabled, the key and value are stored as text, and the key length is included in indexing. Therefore, the traffic of field indexing is lower than that of full-text indexing.

### Disable LogReduce

You can disable [LogReduce](#) to save the indexing cost.

After LogReduce is enabled, the size of indexes increases by 10% of that of raw logs. For example, if the size of raw log data is 100 GB/day, the size of log indexes increases by 10 GB after you enable LogReduce.



## Create indexes only on key fields

You can create indexes only on key fields to save the traffic and storage cost.

If a large amount of data is recorded in the raw log, some fields are not used for query and analysis. Therefore, you do not need to create indexes on these fields.