

# Table Store

Pricing

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## Billing

### Billing items

Billing item	Billing standard
<ul style="list-style-type: none"><li>- Data storage</li><li>- The reserved read/write throughput</li><li>- The additional read/write throughput</li><li>- The Internet downstream traffic</li></ul>	For details about the billing standard, refer to Table Store pricing details.

### Billing

Billing method	Billing description	Expiration/Overdue payment description	Renewal description
Pay-As-You-Go	<ul style="list-style-type: none"><li>- Billing per hour.</li><li>- In post payment mode, the system generates a billing order after creating a table.</li></ul>	<p>The fee is calculated per hour. If your account balance at the time the bill is generated is less than the calculated bill, you will be notified through your preferred setup (SMS or email). The severity of overdue account payments increase as follows:</p> <ul style="list-style-type: none"><li>- Within the first 24 hours of your account being overdue, and a notification has been sent, your services are unaffected.</li><li>- If, after 24 hours of</li></ul>	A Pay-As-You-Go instance is billed according to the actual usage time, so no renewal is required. You can recharge your account on the Alibaba Cloud Console.

		<p>your account being overdue, and no payment is received, Alibaba Cloud will suspend your service and freeze your Table Store. You will receive a notification. Your data will remain stored in the system, and will remain billable.</p> <p>- If your account remains overdue for more than 15 days, and no payment is received, Alibaba Cloud will cease to provide any additional services. Any data stored on your Table Store will be deleted, emptied, and unrecoverable. You will receive a notification. You will be notified through SMS or email one day before the data is emptied.</p>	
Free quota	Until December 31, 2017, every registered user receives 25 GB of free storage per month.	-	-

## Fees

Data storage fees are based on the total volume of instance data. The fee is calculated per hour. Due to fluctuations in the total data volume, Table Store collects the total data volume of all table partitions at regular intervals to calculate the average hourly total data volume. This average value is then multiplied by the unit price to indicate the actual storage fee.

An instance' s total data volume is the sum of data from all tables in that instance. A table' s total data volume is the sum of data in all rows of that table. The following examples illustrate how to calculate a row and table' s data volume.

## Calculation of a row's data volume

The data in each row of a table occupies space in Table Store. When the multi-version or TTL feature is enabled, the data of each version includes the version number (eight bits), column name, and data value.

**Storage space is calculated as follows:**

Data size of a single row = Size of the Primary Keys' data + Size of all Attribute columns' data

Data size of a Primary Key = Name length of the Primary Key column + Size of the value of the Primary Key column

When the multi-version and TTL features are disabled (Max Versions = 1 and TTL = -1):

Data size of a single Attribute column = Name length of the Attribute column + Size of the value of the Attribute column

When the multi-version or TTL feature is enabled (Max Versions > 1 or TTL != -1), each version number occupies 8 Bytes of the storage space:

Data size of a single Attribute column = (Name length of the Attribute column + 8) \* Number of the valid versions + Total size of the values of all the valid versions in the Attribute column

**Data size of the column values is calculated as follows:**

Value type	Data size
String	Bytes of the string in UTF-8 encoding. If the string is null (Table Store supports the null string type), the data size is 0.
Integer	8 Bytes.
Double	8 Bytes.
Boolean	1 Byte.
Binary	Bytes of the Binary data.

**An example of how to calculate a row's data size is as follows:**

ID (Integer) is the Primary Key column of the table.

ID	Name	Length	Comments
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1	timestamp = 1466676354000, value = 'zhangsan'	timestamp = 1466676354000, value = 20	timestamp = 1466676354000, value = String (100 Bytes); timestamp = 1466679954000, value = String (150 Bytes)
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In the preceding table, there are two valid versions for Attribute column Comments.

If Max Version = 2 and TTL = 2592000, the row's data size calculation is as follows:

Data size of the Primary Key =  $\text{len}(\text{'ID'}) + \text{len}(1) = 10$  Bytes

Data size of the Attribute column Name =  $[\text{len}(\text{'Name'}) + 8] * 1 + \text{len}(\text{'zhangsan'}) = 20$  Bytes

Data size of the Attribute column Length =  $[\text{len}(\text{'Length'}) + 8] * 1 + \text{len}(20) = 22$  Bytes

Data size of the Attribute column Comments =  $[\text{len}(\text{'Comments'}) + 8] * 2 + 100 + 150 = 282$  Bytes

If Max Versions = 1 and TTL = -1, the row's data size calculation is as follows:

**Note:** Although there are two versions for the column Comments, as a result of Max Versions = 1, only the latest version is valid.

Data size of the Primary Key =  $\text{len}(\text{'ID'}) + \text{len}(1) = 10$  Bytes

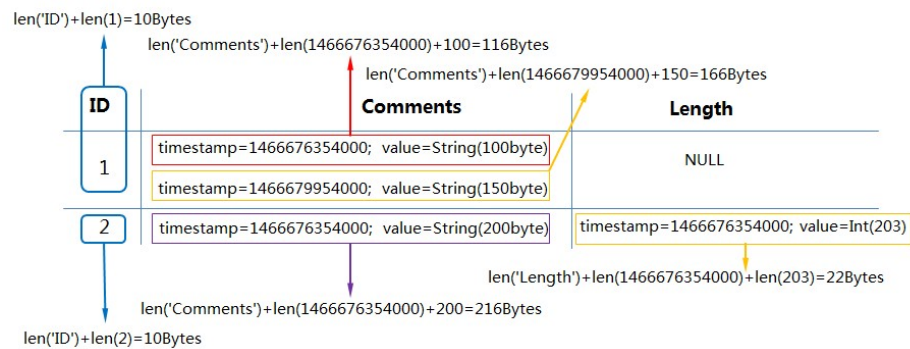
Data size of the Attribute column Name =  $\text{len}(\text{'Name'}) + \text{len}(\text{'zhangsan'}) = 12$  Bytes

Data size of the Attribute column Length =  $\text{len}(\text{'Length'}) + \text{len}(20) = 14$  Bytes

Data size of the Attribute column Comments =  $\text{len}(\text{'Comments'}) + 150$  (Bytes) = 158 Bytes

## Calculation of the table's data size

Assume that there is a table whose Primary Key is the ID column, and other columns are Attribute columns. If its Max Versions = 2 and TTL = -1, the table' s data size is calculated as follows:



The data size of the row whose ID is 1 = 10 (Primary Key size) + (116 + 166) (total data size of the two versions in the Attribute column Comments) = 292 Bytes

The data size of the row whose ID is 2 = 10 (Primary Key size) + 216 (data size of a version in the Attribute column Comments) + 22 (data size of a version in the Attribute column Length) = 248 Bytes

The table' s total data volume = 292 + 248 = 540 Bytes.

If the table' s data volume does not change within the measured hour, the table is billed for 540 Bytes. Table Store does not limit the data volume for an individual table, nor does it charge for unused resources.

**Note:**

- Before calculating the data size of the partition, Table Store asynchronously clears any expired data from each partition, as well as version data that exceeds the value of Max Versions. The clearance duration is related to the total data volume, but is typically finished within 24 hours. The data written to a partition after a clearance operation is added to the partition' s data volume upon completion of the next clearance operation.
- Table Store only provides final precise measurement of the stored data volume instead of real-time precise measurement. That is, Table Store measures the data volume after a time if no data is written or the data expires.

The reserved read/write throughput is a table' s attribute. Setting an accurate reserved read/write throughput for your data tables helps reduce the costs of resource usage.

Table Store charges for the total reserved read/write throughput of all tables in a high-performance instance. The fee is measured per hour. Because the configured reserved read/write throughput may

fluctuate, Table Store collects the tables' reserved read/write throughput at regular intervals to calculate the hourly average throughput. The average value is then multiplied by the unit price to reflect the actual hourly fee.

**Note:** Capacity instances do not support reserved read/write throughput.

**Additional read/write throughput** is the portion of actual consumed read/write throughput that exceeds the reserved read/write throughput, and is measured per second.

Table Store accumulates the additional read throughputs and write throughputs of all tables in an instance during every billing cycle. The actual consumed additional throughput is multiplied by the corresponding unit price to indicate the actual charge amount.

Table Store charges fees when applications access Table Store and generate downstream Internet traffic. Typically, an application's use of HTTP to access responses returned by Table Store is what generates majority of downstream Internet traffic charges. Even if the operation fails, the error information returned by Table Store still produces downstream traffic, which is billable. Table Store does not charge for intranet downstream traffic, or Internet upstream traffic.

**Note:** Access among different regions also belongs to the Internet access.

Table Store offers 25 GB of free storage per month for each user before December 31, 2017. This amount does not roll over between months, and any additional storage used is charged.

For example,

If you used a total of 20 GB of storage space in January 2017. The storage space for the month is free of charge, but the remaining amount (5 GB) will not be added to February 2017.

If you used a total of 30 GB of storage space in February 2017, the first 25 GB of space is free of charge, but you will have to pay for the remaining 5 GB of space.

**Note:**

- The free storage only applies to data storage. All read/write throughputs and downstream Internet traffic are still charged based on the unit price on the official website.
- If a cloud account has multiple high-performance instances and capacity-type instances at the same time, the order of free storage deductions will follow the order of actual fee deduction.

A user in Japan activated Table Store and created a capacity instance. The table data under the instance consistently maintains 10,000 read QPS per day, and the accessed data does not exceed 4 KB (equal to 1 CU). The user wants to know how the table is billed on a daily basis. To calculate the daily billing amount of the table, the following table is used:

**Note:** The following unit prices for Table Store are accurate as at April 1, 2017. For the latest Table Store unit prices, see [Pricing](#).

Billing item	Unit price
Additional read throughput	USD 0.0006 /10,000 CU

The calculated daily fee:

$$10000 \times 86400 / 10000 \times 0.0006 = \text{USD } 51.84$$

**Note:** Additional read/write throughput is billed based on the sum of additional CUs consumed. The number of CUs consumed per day is  $10000 \times 86400 = 864$  million CUs.