Alibaba Cloud
Table Store

Pricing

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Generic conventions

Table -1: Style conventions

Style	Description	Example
⊖	This warning information 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.
⚠	This warning information 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 restore business.
📋	This indicates warning information, supplementary instructions, and other content that the user must understand.	ⓘ Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	📋 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK.
`Courier font`	It is used for commands.	Run the `cd /d C:/windows` command to enter the Windows system folder.
Italics	It is used for parameters and variables.	`bae log list --instanceid` *Instance_ID*
[] or [a|b]	It indicates that it is a optional value, and only one item can be selected.	`ipconfig` *[-all|-t]*

Style	Description	Example
{} or {a|b}	**It indicates that it is a required value, and only one item can be selected.**	`swich` *{stand | slave}*

Contents

1 Billing items and pricing

Billing items

Billing items of Table Store include Data storage, Reserved read/write throughput, Additional read/write throughput and Downstream Internet traffic.

· Data Storage

Data storage fees are based on the total volume of instance data. Fees are calculated on a per hour basis. Due to fluctuations in the total data volume utilized, Table Store collects the total data volume of all table partitions at regular intervals and calculates the average hourly total data volume. This average volume value is then multiplied by the unit price to account for the actual storage fee. For more information about the data storage, see *Data storage*.

· Reserved read/write throughput

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

Capacity instances do not support reserved read/write throughput. Table Store charges for the total reserved read/write throughput of all tables in a high-performance instance. Fees are calculated per hour. Because the configured reserved read/write throughput may fluctuate, Table Store collects the reserved read/write throughput of the tables 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.

· Additional read/write throughput

The additional read/write throughput is the portion of read/write throughput actually consumed that exceeds the reserved read/write throughput, and is measured per second.

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

· Downstream Internet traffic

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 the 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 across different regions also counts as Internet access.

The descriptions of billing items and pricing of Table Store are shown as follows:

Billing items	Billing standard	Billing method
Data Storage	Total fees of data per instance	Pay-As-You-Go
Reserved read/write throughput	Fees for reserved read/write throughput that you configure	Pay-As-You-Go
Additional read/write throughput	The additional read/write throughput is the portion of read/write throughput actually consumed that exceeds the reserved read/write throughput	Pay-As-You-Go
Internet downstream traffic	Fees for Internet outbound traffic	Pay-As-You-Go

Note:

· For more information about the billing standard, see *Table Store pricing details*.

· The unit price of these billing items may change from time to time. For more information, see *Table Store pricing details*.

Billing description

The form store provides a way to pay by volume. The descriptions of billing methods, expiration/overdue payment and renewal are as follows:

Method	Description	Expiration/Overdue payment description	Renewal description
Pay-As-You-Go	· Billing per hour. · The system generates a bill after a table is created.	· Fees are calculated on an hourly basis. If funds are unavailable to rectify your calculated bill, you are notified through your preferred contact method (SMS or email). The severity of the effect to your account of overdue account payments increases as follows: · Within 15 days of your payment being overdue, and after a notification has been sent, your services remain unaffected. · If your payment has been overdue for more than 15 days and the account has not been rectified, Alibaba Cloud suspends your service and freezes your Table Store. Your data remains stored in the system, and remains billable. At the same time, you will	A Pay-As-You-Go instance is billed according to the actual usage time. Renewal is not required.

2 Data storage

The total data volume of an instance is the sum of data from all tables in that instance
. The total data volume of a table is the sum of data in all rows of that table. The total
data volume of all rows is the sum of data in all primary key columns and attribute
columns of a single row.

Data storage fees are based on the total volume of instance data. Fees are calculated
on a per hour basis. Due to fluctuations in the total data volume utilized, Table
Store collects the total data volume of all table partitions at regular intervals and
calculates the average hourly total data volume. This average volume value is then
multiplied by the unit price to account for the actual storage fee. For the latest unit
price information, see *Table Store pricing details*.

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 consumes space in Table Store. When the Max
Versions 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.

Among of which,

· Data size of a primary key = name length of the primary key column + size of the
value of the primary key column
· For more information about how to calculate the amount of data in an attribute
column, see the detailed sample calculation of the amount of data for rows and
tables in this document.

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.
Interger	8 Bytes

Value type	Data size
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. Where ID is a primary key column, and the others are attribute columns.

ID	Name	Length	Comments
1	timestamp = 1466676354000, value = 'zhangsan'	timestamp = 1466676354000, value = 20	timestamp = 1466676354000, value = String (100 Bytes) timestamp = 1466679954000, value = String (150 Bytes)

The preceding table has two valid versions for attribute column "Comments".

· If Max Versions = 2 and TTL = 2592000

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

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

The row's data size is 334 bytes, and the calculation is as follows:

- Data size of the primary key = len ('ID') + len (1) = 10 Bytes

- Data size of the attribute column Name = [len ('Name') + 8]*1 + len ('zhangsan') = 20 Bytes

- Data size of the attribute column Length = [len ('Length') + 8]*1 + len (20) = 22 Bytes

- Data size of the attribute column Comments = [len ('Comments') + 8)*2 + 100 + 150 = 282 Bytes
· If 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

> **Note:**
>
> - When the multiple versions (that is, Max versions = 1) or TTL (that is, TTL = -1) is disabled, the version number consumes no bytes of the storage space.
> - Although the column Comments has two versions, as a result of Max Versions = 1, only the latest version is valid.

The row's data size is 194 bytes, and the calculation is as follows:

- Data size of the primary key = len ('ID') + len (1) = 10 Bytes
- Data size of the attribute column Name = len ('Name') + len ('jonathon') = 12 Bytes
- Data size of the attribute column Length = len ('Length') + len (20) = 14 Bytes
- Data size of the attribute column Comments = len ('Comments') + 150 (Bytes) = 158 Bytes

Calculation of the table's data size

Assume that there is a table whose primary key is ID (Integer), and other columns are attribute columns. If its Max Versions = 2 and TTL = –1, the table's data size is calculated as follows:
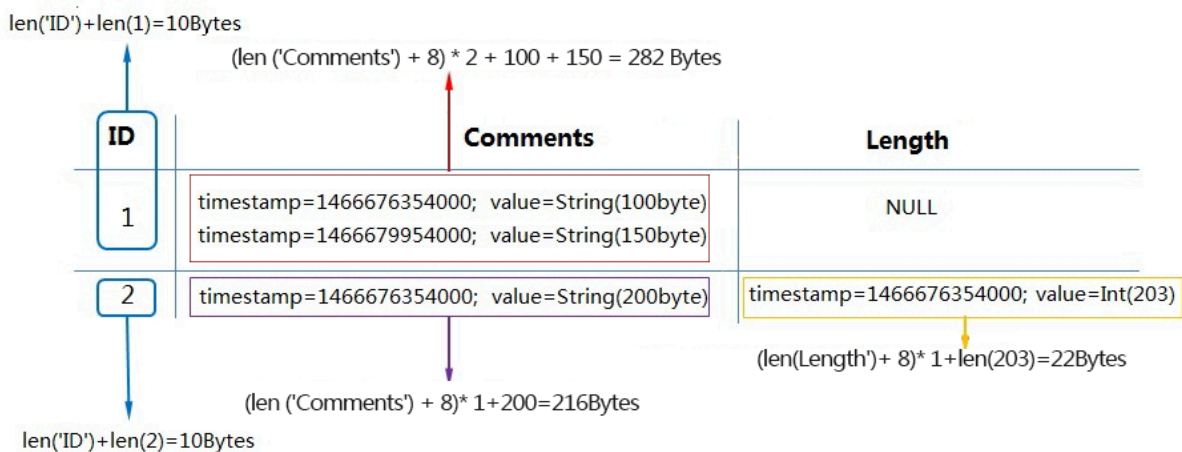
- The data size of the row whose ID is 1 = 10 (primary key size) + (116 + 166) (total data size of the two versions in the attribute column Comments) = 292 Bytes
- The data size of the row whose ID is 2 = 10 (primary key size) + 216 (data size of a version in the attribute column Comments) + 22 (data size of a version in the attribute column Length) = 248 Bytes
- The total data volume of the table = 292 + 248 = 540 Bytes.

If the table's data volume does not change within an hour, the table is billed for 540 bytes. Table Store does not limit the data volume for an individual table and does not charge for unused resources.

> **Note:**
> Before calculating the data size of the partition, Table Store asynchronously clears expired data from each partition and version data that exceeds the value of Max Versions. The time it takes to clear the data depends on the total data volume being cleared. This process is typically finished within 24 hours. The data written to a partition after a clear data operation is added to the partition's data volume. This data is added upon completion of the next clearance operation.

3 Billing example

Background

A user in California activates Table Store and creates a high-performance instance
. The table data on the instance has a consistent read volume of around 10,000 read
queries per second (QPS) per day, and the accessed data does not exceed 4 KB (
equivalent to 1 CU). The user wants to know how the table is calculated on a daily
basis. The calculated daily billing amount of the table is detailed in the following
example.

Case analysis

> **Note:**
> In the following example, the unit prices were the actual prices on August 1, 2018.
> For the latest Table Store unit prices, see Alibaba Cloud website pricing.

Billing items	Unit price
Additional read throughput	USD 0.0030/10,000 CU

The calculated daily bill:

10000 * 86400/10000 * 0.0030 = USD 259.20

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