

Alibaba Cloud

MaxCompute
Type

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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.Subscription

This topic describes the basic resources, billing rules, usage notes, and precautions for the subscription resource package of MaxCompute.

Basic resources

The following table describes the basic resources that are provided by the subscription resource package.

Basic resource	Description	Billing rule
Computing resources	A dedicated resource pool is provided. The resources are allocated based on the number of compute units (CUs) that you purchase. For projects that use the subscription resource package, only resources that are dedicated to the projects are consumed to execute computing jobs, such as SQL jobs that use user-defined functions (UDFs), MapReduce jobs, Spark jobs, and Graph jobs.	You must pay for CUs when you activate MaxCompute. You must purchase at least 50 CUs. For more information about the billing rules, see Computing pricing .
Storage resources	A shared resource pool is provided. You can use storage resources in the resource pool on demand. MaxCompute tables and resources consume storage resources.	MaxCompute compresses your data for storage. You are charged based on the data volume after compression. In most cases, data is compressed to about 20% of the original data volume. For more information about the billing rules, see Storage pricing (pay-as-you-go) .
Resources for data uploads	A shared resource pool is provided. Jobs in your MaxCompute project can preempt resources for data uploads in the resource pool when necessary. For example, the Tunnel Upload command consumes resources for data uploads.	You are not charged for the resources that are used to upload data to MaxCompute.
Resources for data downloads	A shared resource pool is provided. Jobs in your MaxCompute project can preempt resources for data downloads in the resource pool when necessary. For example, the Tunnel Download command consumes resources for data downloads.	You are charged only for the resources that are used to download data over the Internet. For more information about the billing rules, see Download pricing (pay-as-you-go) .

Usage notes

- For more information about how to activate the subscription resource package of MaxCompute, see [Activate MaxCompute and DataWorks](#).
- After you activate the subscription resource package of MaxCompute,
 - To use subscription resources, you must associate the subscription resource package with a project when you create the project in a region where MaxCompute is activated.

- By default, you can select computing resources of the subscription resource package for projects that are created in a region where MaxCompute is activated. By default, computing jobs of the projects in the region are run in this fixed computing resource pool. If the CUs that you purchase are insufficient, you can increase the number of CUs. If many CUs are idle, you can decrease the number of CUs. Example:

If Alibaba Cloud account A purchases 100 subscription CUs in the China (Hangzhou) region, Alibaba Cloud account A has a computing resource pool that contains 100 CUs in the China (Hangzhou) region.

- If the projects in this region use the subscription resource package, the computing jobs of these projects use resources in the resource pool that has 100 CUs by default.
 - If computing jobs use less than 100 CUs, the other CUs remain idle. If computing jobs require more than 100 CUs, the jobs use the 100 available CUs. The time required to execute jobs is extended because resources are insufficient. For more information about how to increase or decrease the number of CUs, see [Upgrade or downgrade configurations](#).
- After you purchase subscription computing resources, you can use MaxCompute Management to manage the resources, monitor the system status and jobs, and allocate resource groups. For more information, see [Use MaxCompute Management](#).

2. Pay-as-you-go

This topic describes the basic resources, billing rules, usage notes, and considerations for MaxCompute pay-as-you-go.

Basic resources

- Computing resources are shared. These resources are consumed to execute computing jobs, such as SQL statements, user-defined functions (UDFs), MapReduce jobs, Spark jobs, Lightning jobs, and Graph jobs. Computing jobs must compete for these resources. You cannot specify resources for computing jobs. No limits are imposed on these resources.
- Storage resources are shared and automatically scaled. No limits are imposed on these resources. MaxCompute tables and resources consume storage resources.
- Resources for data uploads and downloads are shared. You cannot specify resources for upload and download jobs. No limits are imposed on these resources. However, both upload and download jobs must compete for these resources. For example, these resources are consumed when you use the Tunnel Upload and Download commands.

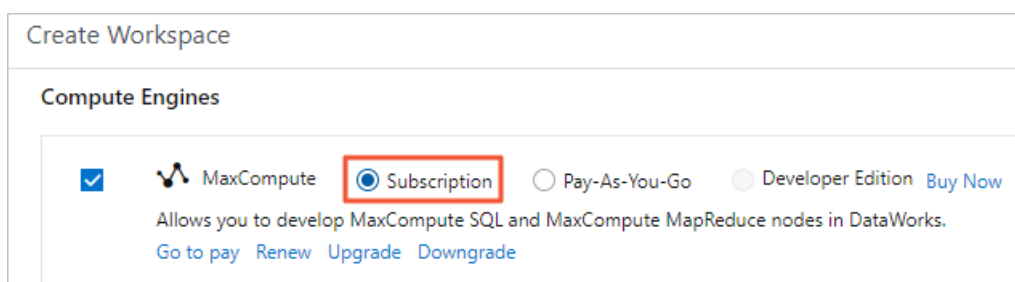
Billing rules

The resources of MaxCompute pay-as-you-go are charged based on the pay-as-you-go billing method. The resources are charged based on the following rules:

- Computing resources: You are charged for the computing resources that you use to execute computing jobs. For more information, see [Computing pricing](#).
- Storage resources: You are charged only for the resources that are used to store tables. MaxCompute compresses your data for storage. You are charged for the data volume after compression. Data is typically compressed to about 20% of the original data volume. For more information, see [Storage pricing \(pay-as-you-go\)](#).
- Resources for data uploads: You are not charged for the resources that are used to upload data to MaxCompute.
- Resources for data downloads: You are charged only for the resources that are used to download data over the Internet. For more information, see [Download pricing \(pay-as-you-go\)](#).

Usage notes

- For more information about how to activate MaxCompute and purchase resources through standard pay-as-you-go, see [Activate MaxCompute and DataWorks](#).
- Resources purchased through standard pay-as-you-go can be used by all projects that reside in the same region where the resources are purchased.



- If a project uses a subscription-based resource package and you have purchased a pay-as-you-go resource package, you can switch the resource package of the project to the pay-as-you-go

resource package. If a project uses a pay-as-you-go resource package and you have purchased a subscription-based resource package, you can switch the resource package of the project to the subscription-based resource package.

- No limits are imposed on the number of resources in pay-as-you-go. The computing resources purchased through standard pay-as-you-go are from a shared resource pool. For example, a job requires 1,200 CUs. If the current resource pool has sufficient resources, the job can use 1,200 CUs. If all the resources in the current resource pool are occupied or the resources that remain are insufficient for the job, the job must wait for the resources released or compete for the remaining resources. As a result, the execution duration is prolonged.

3. Upgrade or downgrade configurations

This topic describes how to upgrade or downgrade the configurations of a MaxCompute subscription instance. You can scale out the resources allocated to a subscription instance to handle increased workloads or scale in resources to reduce costs.

Upgrade resource configurations

If the resources allocated to your MaxCompute subscription instance cannot handle the required workloads, you can upgrade the resource configurations to scale out the resources.

1. Log on to the [MaxCompute console](#), and select the region where your MaxCompute project is located in the top navigation bar.
2. Click the **Resource management** tab. In the **Annual and monthly resources** section, click **Upgrade** in the Actions column.

Annual and monthly resources								
Resource specification type	Region	Reserved computing resources (CU)	Non-reserved computing resources (CU)	Storage Resources	Opening time	Valid Until	Status	Actions
	China (Hangzhou)	10			Dec 18, 2020	Dec 19, 2021	✓ Normal	Renew Upgrade Downgrade Housekeeper

3. On the **Upgrade/Downgrade** page, specify the number of compute units (CUs) that you require, read and select **MaxCompute (Subscription) Agreement of Service**, and then click **Buy Now**.
4. On the **Unpaid Orders** page, confirm the order and click **Subscribe** to complete the upgrade.

After you submit the order, go to the [Orders](#) page to view the details of the upgrade order.

Downgrade resource configurations

You are charged for idle resources. If your actual workloads do not use all of the resources that are allocated to your MaxCompute subscription instance, you can perform the following steps to release the idle resources to reduce costs:


1. Log on to the [MaxCompute console](#), and select the region where your MaxCompute project is located in the top navigation bar.
2. Click the **Resource management** tab. In the **Annual and monthly resources** section, click **Downgrade** in the Actions column.

Annual and monthly resources								
Resource specification type	Region	Reserved computing resources (CU)	Non-reserved computing resources (CU)	Storage Resources	Opening time	Valid Until	Status	Actions
	China (Hangzhou)	10			Dec 18, 2020	Dec 19, 2021	✓ Normal	Renew Upgrade Downgrade Housekeeper

3. On the **Downgrade** page, specify the number of CUs that you require, read and select **MaxCompute (Subscription) Agreement of Service**, and then click **Buy Now**.

For more information about refund rules for real-time configuration downgrade, see [Refund rules for real-time configuration downgrade](#).

After you submit the order, click the [Orders](#) page to view the details of the downgrade order.

 **Note** If you downgrade resource configurations immediately after an upgrade, you may receive only part of the refund due to one of the following reasons:

- A discount is applied to the order you placed when you purchased the instance. For example, you placed a one-year subscription order. A discount of 15% is applied to the order. Therefore, if the price is USD 154.7, you paid USD 131.5. In this case, the refund is calculated based on the amount after the discount was applied, which is USD 131.5.
- A voucher is applied to the order you placed when you purchased the instance. In this case, the refund does not include the vouchers that you used.

4.FAQ about resource packages

This topic provides answers to some frequently asked questions about resource packages of MaxCompute.

Category	FAQ
Subscription	<ul style="list-style-type: none">• How do I estimate the amount of computing resources I must purchase after I change the billing method from pay-as-you-go to subscription?• How do I use subscription computing resources?
Pay-as-you-go	Do I need to purchase computing resources in advance if my MaxCompute project uses the pay-as-you-go billing method?

How do I estimate the amount of computing resources I must purchase after I change the billing method from pay-as-you-go to subscription?

The amount of computing resources that you must purchase is based on specific jobs. We recommend that you purchase a small amount of computing resources and then adjust the amount of computing resources based on the resource usage. We recommend that you purchase at least 50 compute units (CUs).

After you purchase subscription computing resources, you can monitor the resource usage by using one of the following tools:

- Use MaxCompute Management. For more information, see [Use MaxCompute Management](#).
- Use Logview. For more information, see [Use Logview V2.0 to view job execution information](#).

How do I use subscription computing resources?

Subscription computing resources are dedicated and allocated based on the number of CUs that you purchase. You can configure quota groups for computing resources and configure resource scheduling periods for quota groups. For more information, see [Use MaxCompute Management](#).

Do I need to purchase computing resources in advance if my MaxCompute project uses the pay-as-you-go billing method?

No, you do not need to purchase computing resources in advance. Computing jobs in your MaxCompute project can preempt computing resources on demand. For more information about the resource packages that are supported by the pay-as-you-go billing method, see [Standard pay-as-you-goPay-as-you-go](#).