Alibaba Cloud

PolarDB PostgreSQL

Pricing

C-D Alibaba Cloud

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Document conventions

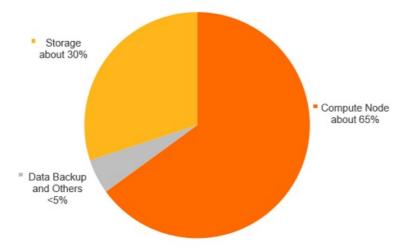| Style	Description	Example
⚠ Danger	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	⚠ **Danger:** Resetting will result in the loss of user configuration data.
🔔 Warning	A warning notice indicates a situation that may 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.
⑦ Note	A note indicates supplemental instructions, best practices, tips, and other content.	⑦ **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.Billable items

This topic describes the billable items of PolarDB.

The following figure shows the approximate proportion of each billable item in a PolarDB cluster.

Billable items

Billable item	Description	Billing method
Compute node	• Compute nodes contain primary and read-only nodes. • You are charged for compute nodes based on their region, specifications, and usage duration.	• Pay-as-you-go • Subscription ② Note • For more information about how to purchase compute nodes, see Overview. • For more information about the specifications and pricing of compute nodes, see Specifications of compute nodes and Pricing of compute nodes.

Billable item	Description	Billing method
Storage space	• Storage space is used to store cluster data files, index files, log files, and temporary files. Log files include online and archived logs. You are charged for the amount of storage space that you use. • The amount you are charged depend on the volume of data stored and the length of time for which data is retained.	• Pay-as-you-go and storage plan • Pay-as-you-go **?** **Note** • The subscription billing method is not supported for storage space. If you select **Subscription** when you purchase a cluster, the subscription billing method is applied only to compute nodes. Subscription clusters may incur additional fees on top of their subscription, such as those generated by storage space. We recommend that you purchase storage plans, which are cost-effective. For more information, see Together with storage plans. • For more information about the pricing of storage space, see Storage pricing.
Backup storage space (charged only after it exceeds the free quota)	• Backup files consume storage space. PolarDB offers a free storage quota for backup files. After this quota is consumed, you are charged for the amount of additional storage space consumed by backup files. • The amount you are charged depend on the size of data backup files and the length of time for which the files are retained.	• Pay-as-you-go and storage plan • Pay-as-you-go **?** **Note** • The subscription billing method is not supported for backup storage space. If you select **Subscription** when you purchase a cluster, the subscription billing method is applied only to compute nodes. Subscription clusters may incur additional fees on top of their subscription, such as those generated by storage space. We recommend that you purchase storage plans to offset fees generated by level-1 backup. For more information, see Storage plans billing. • For more information about the pricing of data backups, see Pay-as-you-go.

Billable item	Description	Billing method
SQL Explorer (optional)	• The SQL Explorer feature provides value-added capabilities, such as security auditing and performance diagnostics. After you enable this feature, you are charged for the amount of storage space consumed by audit logs. • The amount you are charged depend on the size of audit logs and the length of time for which the logs are retained.	• Pay-as-you-go ⑦ **Note** • The SQL Explorer feature does not support the subscription billing method. If you select **Subscription** when you purchase a cluster, the subscription billing method is applied only to compute nodes. Subscription clusters may incur additional fees on top of their subscription, such as those generated by the SQL Explorer feature. • For more information about the pricing of the SQL Explorer feature, see Pricing of SQL Explorer (optional).

2.Specifications of compute nodes

All the node specifications of PolarDB for PostgreSQL are dedicated nodes. The dedicated nodes indicate that the CPU, memory, storage, and I/O resources allocated to the nodes are dedicated to these nodes and are not shared by other nodes. Therefore, the performance of the dedicated nodes is more stable and reliable.

PolarDB for PostgreSQL provides nodes of the following specifications for your choice.

Specifications of compute nodes

Node type	CPU and memory	Maximum storage capacity	Maximum number of connections	Internal bandwidth	Maximum IOPS	I/O bandwidth
polar.pg.x4.medium	2 cores 8 GB	5 TB	800	1 Gbps	16,000	1 Gbps
polar.pg.x4.large	4 cores 16 GB	10 TB	1600	10 Gbps	64,000	4 Gbps
polar.pg.x4.xlarge	8 cores 32 GB	10 TB	3,200	10 Gbps	128,000	8 Gbps
polar.pg.x8.xlarge	8 cores 64 GB	30 TB	3,200	10 Gbps	160,000	10 Gbps
polar.pg.x8.2xlarge	16 cores 128 GB	50 TB	12,800	10 Gbps	256,000	16 Gbps
polar.pg.x8.4xlarge	32 cores 256 GB	50 TB	25,600	10 Gbps	384,000	24 Gbps
polar.pg.x8.8xlarge	64 cores 512 GB	100 TB	36,000	10 Gbps	409,600	24 Gbps
polar.pg.x8.12xlarge	88 cores 710 GB	100 TB	36,000	25 Gbps	512,000	32 Gbps

- A PolarDB cluster that has 2 CPU cores and 8 GB of memory is sufficient to provide the basic specifications required in tests, trials, and other light-load scenarios. We recommend that you do not

use clusters of these specifications in heavy-load production environments. In production
environments, we recommend that you use clusters that have at least 8 cores and 32 GB of memory.

- Clusters in a global database network (GDN) do not support specifications of 2 cores and 4 GB of
  memory or 2 cores and 8 GB of memory.

- You can specify specifications of primary nodes when you create a Cluster Edition cluster. The same
  node specifications are automatically applied to read-only nodes.

- The maximum IOPS is a theoretical value.

- The maximum number of connections for a cluster varies based on the node specifications of the
  cluster. If you add nodes to a cluster, the number of connections to the cluster remains unchanged.

- If you require a larger storage capacity of Archive Database compute nodes, Submit a ticket to
  increase the maximum storage capacity to 200 TB.

3.Purchase procedures
3.1. Purchase a pay-as-you-go cluster

This topic describes how to purchase a pay-as-you-go cluster in the PolarDB console.

Prerequisites

An Alibaba Cloud account is registered and is used to log on to the Alibaba Cloud Management Console. For more information, see Register and log on to an Alibaba Cloud account.

Background information

A cluster consists of one primary node and a maximum of 15 read-only nodes. To ensure high availability, at least one read-only node is required to implement the active-active architecture. A node is a virtual database server. You can create and manage multiple databases on a node.

> ⑦ Note
> - PolarDB for PostgreSQL supports only Virtual Private Cloud (VPC). Each VPC is an isolated network on Alibaba Cloud and is more secure than the classic network.
> - To optimize the performance of PolarDB, PolarDB clusters need to be deployed in the same internal network with Alibaba Cloud services. We recommend that you deploy PolarDB clusters and Elastic Compute Service (ECS) instances in the same VPC to ensure the optimal performance of PolarDB. If your ECS instance is deployed in the classic network, you must migrate the ECS instance to a VPC.

Procedure

1. Log on to the PolarDB console.
2. In the upper-left corner of the page, click **Create Cluster**.
3. Specify **Pay-As-You-Go** as the value of the **Product Type** parameter.
4. Specify the following parameters.

Parameter	Description
Region	The region where the cluster is deployed. You cannot change the region after you purchase the cluster. ⑦ **Note** Ensure that the PolarDB cluster and the ECS instance to be connected are deployed in the same region. Otherwise, the cluster and the ECS instance cannot communicate through the internal network and can communicate through only the Internet. This compromises the performance.

Parameter	Description

Create Type	The method to create a PolarDB cluster.
	
	○ **Create Primary Cluster**: creates a PolarDB cluster.
	
	○ **Restore from Recycle**: creates a cluster by restoring a backup of a deleted cluster from the recycle bin.
	  ■ **Source Version**: the version of the cluster that has been deleted.
	  ■ **Deleted Clusters**: the name of the cluster that has been deleted.
	  ■ **Backup History**: Select the backup that you want to restore.
	
	⑦ **Note** You can select other options to create databases of other engines.

Primary Availability Zone	The primary zone where the cluster is deployed. ○ Each zone is an independent geographical location in a region. The zones that are deployed in the same region are similar. ○ You can deploy your PolarDB cluster and ECS instance in the same zone or in different zones. ○ You need to select only the primary zone. The system automatically selects a secondary zone.
Network Type	The value of this parameter can be only **VPC**. You do not need to select the value of this parameter.

Parameter	Description

VPC VSwitch	Ensure that the PolarDB cluster to be created and the ECS instance to be connected are deployed in the same VPC. Otherwise, the cluster and the ECS instance cannot communicate over the internal network to achieve optimal performance.
	
	○ If you have created a VPC that meets your network plan, select the VPC. For example, if you have created an ECS instance and the VPC where the ECS instance is deployed meets your network plan, select this VPC.
	
	○ If you do not create a VPC that meets your network plan, use the default VPC and the default vSwitch.
	
	  ■ Default VPC:
	    ■ The default VPC is a unique VPC in the selected region.
	    ■ The subnet mask consists of 16 bits, such as 172.31.0.0/16. A maximum of 65,534 private IP addresses can be provided.
	    ■ The default VPC is not included in the total number of VPCs that you can create.
	
	  ■ Default vSwitch:
	    ■ The default vSwitch is a unique vSwitch in the selected zone.
	    ■ The subnet mask consists of 20 bits, such as 172.16.0.0/20. A maximum of 4,094 private IP addresses can be provided.
	    ■ The default vSwitch is not included in the total number of vSwitches that you can create in a VPC.
	
	○ If the default VPC and vSwitch cannot meet your requirements, you can create your own VPC and vSwitch. For more information, see Create and manage a VPC.

Compatibility	○ **MySQL 8.0**: fully compatible with MySQL 8.0. MySQL 8.0 supports parallel queries. In specific scenarios, the performance increases by 10 times. For more information, see Parallel query. ○ **MySQL 5.7**: fully compatible with MySQL 5.7. ○ **MySQL 5.6**: fully compatible with MySQL 5.6. ○ **PostgreSQL 11**: fully compatible with PostgreSQL 11. ○ **Compatible with Oracle Syntax**: highly compatible with the Oracle syntax. For more information, see Oracle compatibility.
Edition	By default, this parameter is set to **Cluster (2-16 Nodes) (Recommended)**.
Node Specification	Select the specifications as needed. All the nodes in the PolarDB cluster are dedicated nodes with stable and reliable performance. For more information about specifications of compute nodes, see Specifications and pricing.

Parameter	Description
Nodes	If the source cluster edition is **Cluster (2-16 Nodes) (Recommended)**, the system creates a primary node and a read-only node that have the same specification by default. You do not need to specify this parameter. ⑦ **Note** If the primary node fails, the system uses the read-only node as the primary node and creates another read-only node. For more information about read-only nodes, see Architecture.
Storage Cost	You do not need to specify this parameter. The system charges you on an hourly basis based on the actual data usage. For more information, see Specifications and pricing. ⑦ **Note** You do not need to select a storage capacity when you create a cluster. The system automatically scales the storage capacity when the amount of data is increased or decreased.
Enable TDE	Specify whether to enable transparent data encryption (TDE). After TDE is enabled, PolarDB encrypts the data files of your cluster. This operation is transparent to service access. The performance is reduced by 5% to 10%. ⑦ **Note** You cannot disable TDE after TDE is enabled.
Cluster Name	Enter a cluster name. The name must meet the following requirements: ○ It cannot start with `http://` or `https://`. ○ It must be 1 to 256 characters in length. If this parameter is left empty, the system automatically generates a cluster name. You can change the cluster name after the cluster is created.
Resource Group	Select a required resource group from available resource groups. For more information about how to create a resource group, see Create a resource group. ⑦ **Note** A resource group is a container that contains a group of resources in an Alibaba Cloud account. You can manage these resources in a centralized manner. A resource belongs to only one resource group. For more information, see Use RAM to create and authorize resource groups.

5. Specify the **Number** parameter and click **Buy Now**.

> ⑦ **Note** You can create a maximum of 50 clusters at a time. This allows you to create multiple clusters in specific scenarios. For example, you can enable multiple game servers at a time.

6. On the **Confirm Order** page, confirm your order information. Read and accept the terms of service, and then click **Activate Now**.

After you complete the activation, it takes 10 to 15 minutes to create the cluster. Then, the newly created cluster is displayed on the **Clusters** page.

> ⑦ **Note**
>
> - If nodes in the cluster are in the **Creating** state, the cluster is being created and unavailable. The cluster is available only if it is in the **Running** state.
> - Make sure that you have selected the region where the cluster is deployed. Otherwise, you cannot view the cluster.
> - We recommend that you purchase subscription PolarDB storage plans to store a large amount of data. Storage plans are more cost-effective than pay-as-you-go storage. You are offered larger discounts if you purchase storage plans that provide larger storage capacities. For more information, see Together with storage plans.

What to do next

Set IP address whitelists for a cluster

Related API operations

API	Description
CreateDBCluster	Creates a PolarDB cluster.
DescribeDBClusters	Queries PolarDB clusters.
DescribeDBClusterAttribute	Queries the detailed information about a specified PolarDB cluster.

3.2. Purchase a subscription cluster

This topic describes how to purchase a subscription cluster in the PolarDB console.

Prerequisites

An Alibaba Cloud account is registered and is used to log on to the Alibaba Cloud Management Console. For more information, see Register and log on to an Alibaba Cloud account.

Background information

A cluster consists of one primary node and a maximum of 15 read-only nodes. To ensure high availability, at least one read-only node is required to implement the active-active architecture. A node is a virtual database server. You can create and manage multiple databases on a node.

> **⑦ Note**
>
> - PolarDB for PostgreSQL supports only Virtual Private Cloud (VPC). Each VPC is an isolated network on Alibaba Cloud and is more secure than the classic network.
> - To optimize the performance of PolarDB, PolarDB clusters need to be deployed in the same internal network with Alibaba Cloud services. We recommend that you deploy PolarDB clusters and Elastic Compute Service (ECS) instances in the same VPC to ensure the optimal performance of PolarDB. If your ECS instance is deployed in the classic network, you must migrate the ECS instance to a VPC.

Procedure

1. Log on to the PolarDB console.

2. In the upper-left corner of the page, click **Create Cluster**.

3. Specify **Subscription** as the value of the **Product Type** parameter.

4. Specify the following parameters.

Parameter	Description
Region	The region where the cluster is deployed. You cannot change the region after you purchase the cluster. **⑦ Note** Ensure that the PolarDB cluster and the ECS instance to be connected are deployed in the same region. Otherwise, the cluster and the ECS instance cannot communicate through the internal network and can communicate through only the Internet. This compromises the performance.
Create Type	The method to create a PolarDB cluster. ○ **Create Primary Cluster**: creates a PolarDB cluster. ○ **Restore from Recycle**: creates a cluster by restoring a backup of a deleted cluster from the recycle bin. 　■ **Source Version**: the version of the cluster that has been deleted. 　■ **Deleted Clusters**: the name of the cluster that has been deleted. 　■ **Backup History**: Select the backup that you want to restore. **⑦ Note** You can select other options to create databases of other engines.
Primary Availability Zone	The primary zone where the cluster is deployed. ○ Each zone is an independent geographical location in a region. The zones that are deployed in the same region are similar. ○ You can deploy your PolarDB cluster and ECS instance in the same zone or in different zones. ○ You need to select only the primary zone. The system automatically selects a secondary zone.

Parameter	Description
Network Type	The value of this parameter can be only **VPC**. You do not need to select the value of this parameter.

VPC
 	
VSwitch
	Ensure that the PolarDB cluster to be created and the ECS instance to be connected are deployed in the same VPC. Otherwise, the cluster and the ECS instance cannot communicate over the internal network to achieve optimal performance.
	
	○ If you have created a VPC that meets your network plan, select the VPC. For example, if you have created an ECS instance and the VPC where the ECS instance is deployed meets your network plan, select this VPC.
	
	○ If you do not create a VPC that meets your network plan, use the default VPC and the default vSwitch.
	  ■ Default VPC:
	    ■ The default VPC is a unique VPC in the selected region.
	    ■ The subnet mask consists of 16 bits, such as 172.31.0.0/16. A maximum of 65,534 private IP addresses can be provided.
	    ■ The default VPC is not included in the total number of VPCs that you can create.
	  ■ Default vSwitch:
	    ■ The default vSwitch is a unique vSwitch in the selected zone.
	    ■ The subnet mask consists of 20 bits, such as 172.16.0.0/20. A maximum of 4,094 private IP addresses can be provided.
	    ■ The default vSwitch is not included in the total number of vSwitches that you can create in a VPC.
	
	○ If the default VPC and vSwitch cannot meet your requirements, you can create your own VPC and vSwitch. For more information, see Create and manage a VPC.

Compatibility	○ **MySQL 8.0**: fully compatible with MySQL 8.0. MySQL 8.0 supports parallel queries. In specific scenarios, the performance increases by 10 times. For more information, see Parallel query. ○ **MySQL 5.7**: fully compatible with MySQL 5.7. ○ **MySQL 5.6**: fully compatible with MySQL 5.6. ○ **PostgreSQL 11**: fully compatible with PostgreSQL 11. ○ **Compatible with Oracle Syntax**: highly compatible with the Oracle syntax. For more information, see Oracle compatibility.
Edition	By default, this parameter is set to **Cluster (2-16 Nodes) (Recommended)**.
Node Specification	Select the specifications as needed. All the nodes in the PolarDB cluster are dedicated nodes with stable and reliable performance. For more information about specifications of compute nodes, see Specifications and pricing.

Parameter	Description
Nodes	If the source cluster edition is **Cluster (2-16 Nodes) (Recommended)**, the system creates a primary node and a read-only node that have the same specification by default. You do not need to specify this parameter. ⑦ **Note** If the primary node fails, the system uses the read-only node as the primary node and creates another read-only node. For more information about read-only nodes, see Architecture.
Storage Cost	You do not need to specify this parameter. The system charges you on an hourly basis based on the actual data usage. For more information, see Specifications and pricing. ⑦ **Note** You do not need to select a storage capacity when you create a cluster. The system automatically scales the storage capacity when the amount of data is increased or decreased.
Enable TDE	Specify whether to enable transparent data encryption (TDE). After TDE is enabled, PolarDB encrypts the data files of your cluster. This operation is transparent to service access. The performance is reduced by 5% to 10%. ⑦ **Note** You cannot disable TDE after TDE is enabled.
Cluster Name	Enter a cluster name. The name must meet the following requirements: ○ It cannot start with `http://` or `https://` . ○ It must be 1 to 256 characters in length. If this parameter is left empty, the system automatically generates a cluster name. You can change the cluster name after the cluster is created.
Resource Group	Select a required resource group from available resource groups. For more information about how to create a resource group, see Create a resource group. ⑦ **Note** A resource group is a container that contains a group of resources in an Alibaba Cloud account. You can manage these resources in a centralized manner. A resource belongs to only one resource group. For more information, see Use RAM to create and authorize resource groups.

5. Specify the **Purchase Plan** and **Number** parameters, and click **Buy Now**.

> ⑦ **Note** You can create a maximum of 50 clusters at a time. This allows you to create multiple clusters in specific scenarios. For example, you can enable multiple game servers at a time.

6. On the **Confirm Order** page, confirm your order information. Read and accept the terms of service,

and then click **Pay**.

7. On the **Purchase** page, confirm the unpaid order and the payment method and click **Purchase**.

   After you complete the payment, it takes 10 to 15 minutes to create the cluster. Then, the newly created cluster is displayed on the **Clusters** page.

   > ⑦ Note
   >
   > ○ If nodes in the cluster are in the **Creating** state, the cluster is being created and unavailable. The cluster is available only if it is in the **Running** state.
   >
   > ○ Make sure that you have selected the region where the cluster is deployed. Otherwise, you cannot view the cluster.
   >
   > ○ If you need to store a large amount of data, we recommend that you purchase PolarDB storage plans. Storage plans are more cost-effective than the pay-as-you-go billing method. You are offered larger discounts if you purchase storage plans that provide larger storage capacities. For more information, see Billing method 1: pay-as-you-go.

What to do next

Set IP address whitelists for a cluster

Related API operations

API	Description
CreateDBCluster	Creates a PolarDB cluster.
DescribeDBClusters	Queries PolarDB clusters.
DescribeDBClusterAttribute	Queries the detailed information about a specified PolarDB cluster.
DescribeAutoRenewAttribute	Queries the auto-renewal status of subscription PolarDB clusters.
ModifyAutoRenewAttribute	Modifies auto-renewal parameters for a subscription PolarDB cluster.

3.3. Purchase a storage plan

This topic describes how to purchase a storage plan.

Eligibility

You are eligible for storage plans when you use the following resources:

● Cluster storage

The storage of each PolarDB cluster is charged based on the data volume and retention period. If you require a larger storage capacity, such as 1,000 GB or more, we recommend that you use storage plans to reduce costs.

● Level-1 backups that exceed the free quota

Storage plans are applied to all PolarDB clusters that belong to your account. The remaining capacity of a storage plan is automatically applied to the overage of level-1 backups at a ratio of 1:1.6 when the free quota is exhausted. In this case, every 1 GB of the storage plan is used to deduct 1.6 GB of level-1 backup storage. If the remaining capacity of the storage plan is insufficient to offset the overage of level-1 backups, the overage is charged on a pay-as-you-go basis. For more information about storage plans, see Storage plans.

Considerations

- You can select the following types of storage plans: storage plans that apply to regions inside **mainland China**, and storage plans that apply to **China (Hong Kong) and regions outside China**. You can purchase only one storage plan for each type.

- A storage plan can be shared by multiple clusters. A storage plan can be used by all the clusters in the regions that are specified by the **Plan Type** parameter. You can specify **mainland China** or **China (Hong Kong) and regions outside China** as the value of the parameter.

- If the capacity of your storage plan is insufficient, you can upgrade the storage plan. However, storage plans cannot be downgraded.

- You are charged for the extra storage that is not covered by the storage plan on a pay-as-you-go basis.
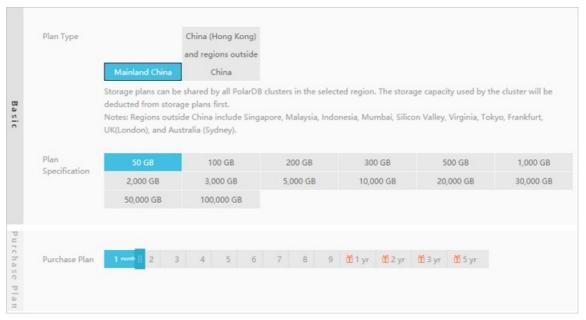
  Assume that you have three PolarDB clusters and each cluster requires 400 GB of storage. If you purchase a storage plan of 1,000 GB and these clusters share the storage plan, you are charged for the extra 200 GB of storage based on the pay-as-you-go billing method. For more information, see View the database storage usage.

- You can select the following types of storage plan: storage plans that apply to regions inside **mainland China**, and storage plans that apply to **China (Hong Kong) and regions outside China**. You can purchase only one storage plan for each type. An Alibaba Cloud account can purchase only one storage plan in **mainland China** and one storage plan in **China (Hong Kong) or regions outside China**.

- If the capacity of your storage plan is insufficient, you can upgrade the storage plan. However, storage plans cannot be downgraded.

- After your storage plan is exhausted, the overage is billed on a pay-as-you-go basis.

  For example, you have created three PolarDB clusters and each cluster requires 400 GB of storage. If you purchase a storage plan of 1,000 GB and these clusters share the storage plan, the overage (200 GB) is billed on a pay-as-you-go basis. For more information, see View the database storage usage.

Procedure

1. Log on to the PolarDB console.

2. In the upper-left corner of the page, click **Create Cluster**.

3. Click the **Storage Plan** tab and specify the following parameters.

Parameter	Description
Plan Type	○ **Mainland China**: The storage plan can be used by all PolarDB clusters that are deployed in regions of mainland China, such as China (Hangzhou), China (Shanghai), and China (Beijing). ○ **China (Hong Kong) and regions outside China**: The storage plan can be used by all PolarDB clusters that are deployed in China (Hong Kong) and regions outside China, such as UK (London) and Singapore (Singapore).
Plan Specification	The storage capacity of the storage plan.
Purchase Plan	The validity period of the storage plan. ⓘ **Note** If you purchase a storage plan for one year or more, you are offered a 15% discount on top of the monthly price.

4. Click **Buy Now**.

5. Read and accept the agreement of service, and then click **Pay** to complete the payment.

References

- View the deducted capacity of a storage plan
- Renew or upgrade a storage plan

3.4. Change the billing method from subscription to pay-as-you-go

You can change the billing method of a PolarDB cluster from subscription to pay-as-you-go based on your business requirements.

Prerequisites

- Your cluster is in the **Running** state.

- Your cluster is not in the progress of a temporary upgrade.

- Make sure that your account balance is sufficient to prevent service downtime that is caused by overdue payments after you switch the billing method to pay-as-you-go.

Pricing

After you change the billing method of the cluster from subscription to pay-as-you-go, a subscription refund is returned to your original payment account.

Refund = (Number of remaining days/Total days) × Order cash amount
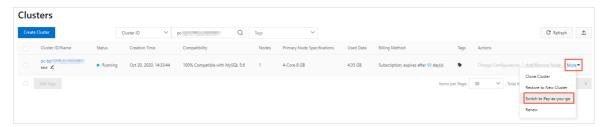
> ? **Note**
> - The order cash amount indicates the actual paid cash amount that excludes vouchers and coupons.
> - You are not charged for service fees when you change the billing method from subscription to pay-as-you-go.

Impacts

The operations in this topic do not affect the running of clusters.

Procedure

1. Log on to the PolarDB console.

2. In the upper-left corner of the console, select the region where the cluster that you want to manage is deployed.

3. Find the cluster for which you want to change the billing method and choose **More > Switch to Pay-as-you-go** in the **Actions** column.

4. On the **Switch to Pay-as-you-go** page, confirm the cluster information, read and accept the terms of service, and then click **Buy Now**.

> ⓘ **Note**
>
> - The new billing method takes effect after you pay for the order.
> - If the order is unpaid or the payment fails, an unfinished order appears on the Orders page. You cannot purchase a new cluster or change the billing method from subscription to pay-as-you-go before you complete the payment. In this case, you must pay for or cancel the order.

3.5. Change the billing method from pay-as-you-go to subscription

This topic describes how to change the billing method of a cluster from **pay-as-you-go** to **subscription** based on your business requirements.

Prerequisites
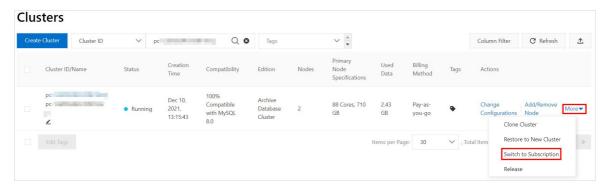
- The cluster must be in the **Running** state.
- No pending orders to change the billing method from pay-as-you-go to subscription. If pending orders exist, you must pay for or cancel these orders on the Orders page.

Notes

- You cannot change the billing method of a cluster from subscription to pay-as-you-go. Consider your requirements before changing the billing method to subscription to avoid unnecessary resource usage.
- Before you change the billing method, you must first upgrade the specification. If a cluster uses a specification that is no longer available, you cannot switch the billing method to subscription. For more information, see Change specifications.

Procedure

1. Log on to the PolarDB console.

2. In the upper-left corner of the console, select the region where the cluster that you want to manage is deployed.

3. Find the cluster on the Clusters page and choose **More > Switch to Subscription** in the **Actions** column.

4. On the **Switch to Subscription** page, check the cluster information, specify **Purchase Plan**, read and accept the terms of service, and then click **Buy Now** to complete the payment.

> ? Note
>
> - The new billing method takes effect after you complete the payment.
>
> - If the order is unpaid or the payment fails, an unfinished order appears on the Orders page. You cannot purchase a new cluster or change the billing method to subscription before you complete the payment.

4.Instructions for purchase
4.1. Manage storage plans
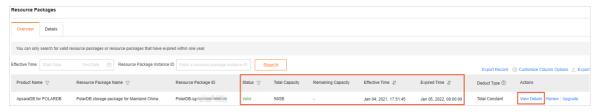### 4.1.1. View the deducted capacity of a storage plan

The storage capacity of PolarDB is automatically scaled in or out based on the amount of stored data. You do not need to manually specify the storage capacity. You are charged only for the used storage. If you need to store a large amount of data, we recommend that you use PolarDB storage plans. This reduces the storage costs. This topic describes how to view the deducted capacity of a storage plan.

Considerations

- You can view further details of valid resource plans and resource plans that have expired within one year.
- To view the database storage usage of the current cluster, see View the database storage usage.
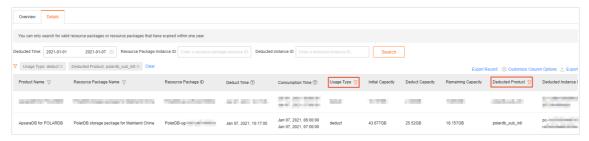
View the deducted capacity of a storage plan

1. Log on to the Billing Management console.

2. In the left-side navigation pane, choose **Resource Packages > Overview**.

3. On the **Overview** tab of the **Resource Packages** page, view the information about the storage plan, such as **Status**, **Remaining Capacity**, **Effective Time**, and **Expired Time**. In the **Actions** column, you can click **View Details** to view the usage details of the storage plan.

4. On the **Details** tab, view the offset details of the storage plan.

   You can use storage plans to offset the used storage of PolarDB clusters and the used storage that exceeds the free quota for level-1 backups. For the offset details of level-1 backups, see Storage plan rules.

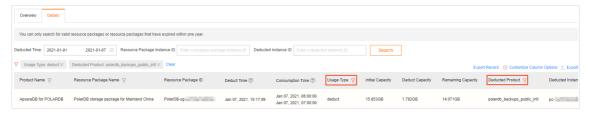   ○ View the deducted storage capacity in the cluster

   a. Click the 🔽 icon in the **Usage Type** column of the storage plan and select **deduct**.

b. Click the 🔽 icon in the **Deducted Product** column of the storage plan and select

`polardb_payg_intl` or `polardb_sub_intl`. This way, you can view the offset details of all the pay-as-you-go or subscription clusters for which the storage plan is used to offset the used storage within your account.

For example, the preceding offset details show that the storage plan was used for the subscription cluster `pc-***********` to offset 25.52 GB of the storage from 06:00 to 07:00 on January 7, 2021. Before the fees were offset, the remaining capacity of the storage plan was 43.677 GB. After the fees were offset, the remaining capacity is 18.157 GB.

○ View the deducted capacity for the used storage that exceeds the free quota for level-1 backups

a. Click the 🔽 icon in the **Usage Type** column of the storage plan and select `deduct`.

b. Click the 🔽 icon in the **Deducted Product** column of the storage plan and select

`polardb_backups_public_intl`. This way, you can view the offset details of the used storage that exceeds the free quota for level-1 backups. The storage plan is used to offset the used storage.

For example, the preceding offset details show that the storage plan was used for the cluster `pc-***********`. The storage plan was used to offset 1.782 GB of the used storage for level-1 backups from 06:00 to 07:00 on January 7, 2021. Before the fees were offset, the remaining capacity of the storage plan was 15.853 GB. After the fees were offset, the remaining capacity is 14.071 GB.

4.1.2. Renew or upgrade a storage plan

The storage capacity of PolarDB is automatically scaled in or out based on the amount of stored data. You do not need to manually specify the storage capacity. You are charged only for the used storage. If you need to store a large amount of data, we recommend that you use PolarDB storage plans. This reduces the storage costs. This topic describes how to renew or upgrade a storage plan.

Renew a storage plan

1. Log on to the User Center.

2. In the left-side navigation pane, choose **Resource Packages > Overview**.

3. On the **Overview** tab of the **Resource Packages** page, find the storage plan that you want to renew, and click **Renew** in the **Actions** column.

4. Specify **Renewal Duration**. Read and accept the agreement of service, and then click **Pay**.

5. On the **Purchase** page, confirm the unpaid order and the payment method and click **Purchase**.

Upgrade a storage plan

1. Log on to the User Center.

2. In the left-side navigation pane, choose **Resource Packages > Overview**.

3. On the **Overview** tab of the **Resource Packages** page, find the storage plan that you want to upgrade, and click **Upgrade** in the **Actions** column.

4. Specify **Plan Specification**. Read and accept the agreement of service, and then click **Pay**.

5. On the **Purchase** page, confirm the unpaid order and the payment method and click **Purchase**.

4.2. Expiration or overdue payments

A PolarDB for PostgreSQL cluster is locked after the cluster expires or a payment becomes overdue. You can add funds to your account or renew the cluster to unlock the cluster.

> 🔔 **Warning**   The system sends a notification when a cluster expires or a payment becomes overdue. To avoid service suspension, we recommend that you renew the cluster in a timely manner.

Rules for unlocking expired and overdue clusters

Cluster type	Cluster status	Solution
	The cluster remains in the running state during the first day to the fifteenth day after the cluster expires.	
	The cluster enters the locked state on the sixteenth day after the cluster expires and remains in that state until the thirtieth day. You cannot connect to the locked cluster.	You can renew the cluster to prevent the cluster from being released after the cluster expires. For more information, see Renewal.
Subscription		

Cluster type	Cluster status	Solution
ption	On the thirty-first day after the cluster expires: • If you set the backup retention policy for releasing or deleting a cluster to **Retain Last Automatic Backup (Automatic Backup before Release) (Default)** or **Retain All Backups** when you created the cluster, the cluster is moved to Cluster Recycle. • If you set the backup retention policy for releasing or deleting a cluster to **Delete All Backups (Cannot be Restored)** when you created the cluster, the cluster and all of its data are released.	• If you set the backup retention policy for releasing or deleting a cluster to **Retain Last Automatic Backup (Automatic Backup before Release) (Default)** or **Retain All Backups**, you can restore the released cluster from Cluster Recycle after you renew the cluster. For more information, see Renewal and Restore a released cluster. • If you set the backup retention policy for releasing or deleting a cluster to **Delete All Backups (Cannot be Restored)**, the cluster cannot be restored.
Pay-as-you-go cluster	If your Alibaba Cloud account has an overdue payment, all pay-as-you-go clusters that belong to your account become overdue. The cluster remains in the running state during the first day to the fifteenth day after a payment becomes overdue.	Before the cluster is released, check the payment method of your Alibaba Cloud account in the Billing Management console.
	The cluster enters the locked state on the sixteenth day after a payment becomes overdue and remains in that state until the thirtieth day. You cannot connect to the locked cluster.	
	On the thirty-first day after a payment becomes overdue: • If you set the backup retention policy for releasing or deleting a cluster to **Retain Last Automatic Backup (Automatic Backup before Release) (Default)** or **Retain All Backups** when you created the cluster, the cluster is moved to Cluster Recycle. • If you set the backup retention policy for releasing or deleting a cluster to **Delete All Backups (Cannot be Restored)** when you created the cluster, the cluster and all of its data are released.	• If you set the backup retention policy for releasing or deleting a cluster to **Retain Last Automatic Backup (Automatic Backup before Release) (Default)** or **Retain All Backups**, you can restore the released cluster from Cluster Recycle based on backup sets after you add funds to your Alibaba Cloud account. For more information, see Restore a released cluster. • If you set the backup retention policy for releasing or deleting a cluster to **Delete All Backups (Cannot be Restored)**, the cluster cannot be restored.

Suggestions

- To avoid possible service interruptions, we recommend that you manually renew the cluster or enable auto-renewal before your subscription cluster expires. For more information, see Manual renewal and Auto-renewal.

- Make sure that you have sufficient balance within your account.

4.3. Renew subscription clusters

4.3.1. Manual renewal

This topic describes how to manually renew PolarDB subscription clusters in the PolarDB console or the Billing Management console.
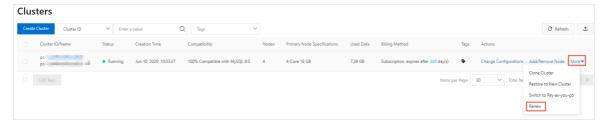
Limits

Only PolarDB clusters whose billing method is subscription support manual renewal. Pay-as-you-go PolarDB clusters do not expire. You do not need to renew pay-as-you-go clusters.

Fee deduction time

When you renew clusters, manually pay for them.

Method 1: Renew a cluster in the PolarDB console

1. Log on to the PolarDB console.

2. In the upper-left corner of the console, select the region where the cluster that you want to manage is deployed.

3. In the **Actions** column on the right of the cluster that you want to renew, choose **More > Renew**.
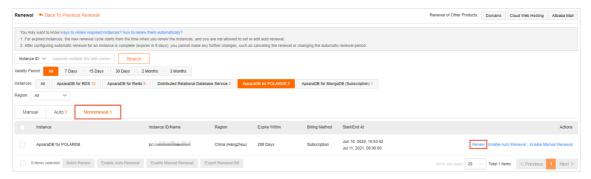

4. On the **Renew** page, specify **Purchase Plan**, select the check box of Terms of Service, and then click **Buy Now**.

5. On the **Purchase** page, confirm the unpaid order and the payment method and click **Purchase**.

    After you complete the payment, it takes 10 to 15 minutes to renew the cluster. After the cluster is renewed, you can view its expiration time on the **Clusters** page.

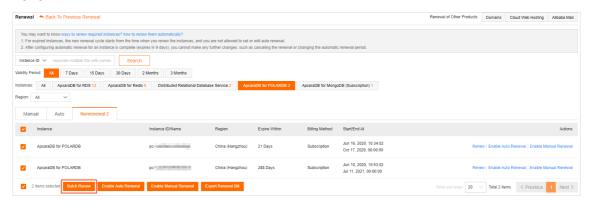## Method 2: Renew a cluster in the Billing Management console

1. Log on to the PolarDB console.

2. In the upper-left corner of the console, select the region where the cluster that you want to manage is deployed.

3. On the **Manual** tab or the **Nonrenewal** tab of the **Renewal** page, use filters to find the cluster that you want to renew. You can renew one or more clusters at a time.

    ○ Renew a cluster

In the **Actions** column on the right of the cluster that you want to renew, click **Renew**.

- Renew multiple clusters at a time

  Select the clusters that you want to renew. Then, in the lower part of the page, click **Batch Renew**.

4. On the **Renew** page, specify **Purchase Plan**, select the check box of Terms of Service, and then click **Buy Now**.

5. On the **Purchase** page, confirm the unpaid order and the payment method and click **Purchase**.

   After you complete the payment, it takes 10 to 15 minutes to renew the cluster. After the cluster is renewed, you can view its expiration time on the **Clusters** page.

4.3.2. Auto-renewal

This topic describes how to enable auto-renewal for a subscription PolarDB cluster. After you enable auto-renewal, you do not need to manually renew your cluster.

Background information

A subscription cluster has a validity period. If the cluster is not renewed before the end of the validity period, service interruptions or even data loss occurs. If you enable auto-renewal for your cluster, you do not need to manually renew your cluster. This way, you can prevent service interruptions that are caused by the expired cluster.

> ⑦ **Note**   Pay-as-you-go clusters do not expire. You do not need to renew pay-as-you-go clusters.

Notes

- After you enable auto-renewal for a cluster, the system automatically renews the cluster. The auto renewal cycle is the subscription duration of the cluster. For example, if the subscription duration of

your cluster is three months and auto-renewal is enabled, you are charged for a three-month subscription each time the subscription is automatically renewed.
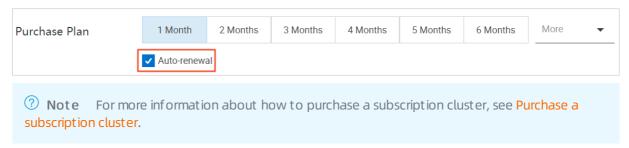
- If you manually renew the cluster before the fees are automatically deducted, the system automatically renews the cluster next time before the cluster expires.

- After you enable auto-renewal, it takes effect the next day. If your cluster is due to expire the next day, manually renew the cluster to prevent your service from being interrupted.

Fee deduction time

Fees are initially deducted from your Alibaba Cloud account at 08:00 on the ninth day before a subscription cluster expires. If the payment fails, the system attempts to deduct fees from your account once a day until the fees are deducted or the expiration date arrives. Make sure that your Alibaba Cloud account balance is sufficient. If your cluster is due to expire the next day, manually renew the cluster. For more information, see Manual renewal.
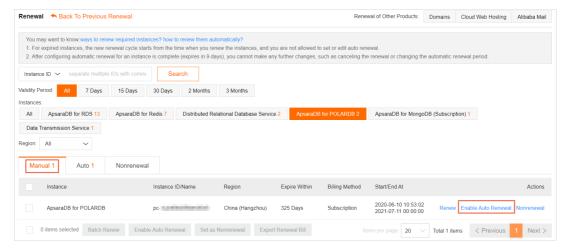
Enable auto-renewal when a cluster is purchased

When you purchase a subscription cluster, you can select **Auto-renewal**.

> ⑦ **Note** For more information about how to purchase a subscription cluster, see Purchase a subscription cluster.
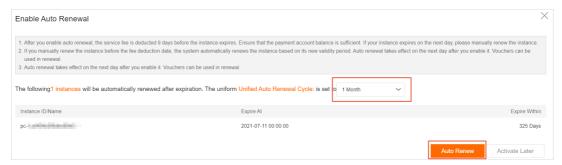
Enable auto-renewal after a cluster is purchased

1. Log on to the PolarDB console.

2. In the top navigation bar, choose **Expenses > Renewal Management**.

3. On the **Manual** tab or the **Nonrenewal** tab of the **Renewal** page, use filters to find the cluster for which you want to enable auto-renewal. You can enable auto-renewal for one or more clusters at a time.

   ○ Enable auto-renewal for a cluster

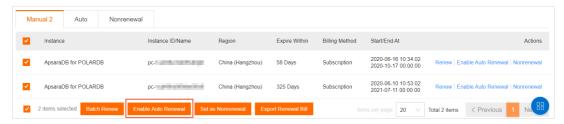   a. On the right of the cluster, click **Enable Auto Renewal**.

b. In the dialog box that appears, select a value for **Unified Auto Renewal Cycle** and click **Auto Renew**.

○ Enable auto-renewal for multiple clusters at a time

a. Select the clusters for which you want to enable auto-renewal, and click **Enable Auto Renewal** in the lower part of the page.

b. In the dialog box that appears, select a value for **Unified Auto Renewal Cycle** and click **Auto Renew**.
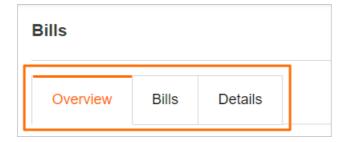
4.4. View bills

You can view bills in the PolarDB console to know billing information about your different billing cycles and accounts, such as billing overview, bills, and billing details.

Procedure

1. Log on to the PolarDB console.

2. In the upper-right corner of the page, choose **Expenses > User Center** to go to the **User Center** page.

3. In the left-side navigation pane, choose **Spending Summary > Spending Summary**.

4. On the **Bills** page, click the **Overview**, **Bills**, or **Details** tab to view the corresponding consumption and billing information. For more information, see Overview, Bills, and Details.

5.Billing rules of PolarDB for MySQL
5.1. Storage pricing

The storage is used to store cluster data files, index files, log files, and temporary files. Log files include online logs and archived logs. This topic describes the billing and pricing for storage resources.

> ⑦ **Note** After you purchase a PolarDB cluster, the system automatically creates the files that are required for regular database operations. These files include the preceding files and consume some storage.

Pay-as-you-go

A serverless architecture is used for storage. Therefore, you do not need to specify the storage capacity when you purchase clusters. The storage capacity is automatically increased when the amount of data increases. You are charged for only the storage that you use. On the **Overview** page of the cluster, you can view **Database Storage Usage**. For more information, see View the database storage usage.

- Mainland China: USD 0.00077/GB/hour.
- China (Hong Kong) and regions outside China: USD 0.00085/GB/hour.

> ⑦ **Note** The maximum storage capacity of each cluster varies based on cluster specifications. If the storage usage reaches 90%, the system sends SMS messages and emails to you on a daily basis. To increase the maximum storage capacity, upgrade your cluster specifications. For more information, see Change specifications.

Storage plans

If you need to store a large amount of data, such as 1,000 GB or more, storage plans are more cost-effective than the pay-as-you-go billing method. Higher discounts are offered for the storage plans that provide larger storage capacities. For more information, see Purchase a storage plan.

> ⑦ **Note** Storage plans can be used to deduct the following fees at a specific ratio:
> - Deduct the fees of the storage at a ratio of 1:1. In this case, every 1 GB of the storage plan can deduct 1 GB of storage.
> - Deduct the fees of the storage that exceeds the free quota for level-1 backups at a ratio of 1:1.6. In this case, every 1 GB of the storage plan can deduct 1.6 GB of the storage for level-1 backups.
>
> For more information, see Billing rules of backup storage that exceeds the free quota.

Prices for storage with/without storage plans

Capacity (GB)	Mainland China		China (Hong Kong) and regions outside China	
	Without storage plans (USD/month)	With storage plans (USD/month)	Without storage plans (USD/month)	With storage plans (USD/month)
100	56	55 (approximately 1.7% off)	62	61 (approximately 1.6% off)
200	112	109 (approximately 2.7% off)	124	121 (approximately 2.4% off)
300	168	163 (approximately 3.0% off)	186	182 (approximately 2.2% off)
500	280	271 (approximately 3.2% off)	310	302 (approximately 2.6% off)
1,000	560	490 (approximately 12.5% off)	620	550 (approximately 11.3% off)
2,000	1,120	980 (approximately 12.5% off)	1,240	1,090 (approximately 12.1% off)
3,000	1,680	1,210 (approximately 28.0% off)	1,860	1,340 (approximately 28.0% off)
5,000	2,800	2,020 (approximately 28.0% off)	3,100	2,230 (approximately 28.1% off)
10,000	5,600	3,260 (approximately 41.8% off)	6,200	3,630 (approximately 41.5% off)

Capacity (GB)	Mainland China		China (Hong Kong) and regions outside China	
	Without storage plans (USD/month)	With storage plans (USD/month)	Without storage plans (USD/month)	With storage plans (USD/month)
20,000	11,200	6,510 (approximately 41.9% off)	12,400	7,250 (approximately 41.5% off)
30,000	16,800	9,760 (approximately 42.0% off)	18,600	10,870 (approximately 41.5% off)
50,000	28,000	14,860 (approximately 47.0% off)	31,000	16,550 (approximately 46.6% off)
100,000	56,000	29,720 (approximately 47.0% off)	62,000	33,110 (approximately 46.6% off)

5.2. Billing rules of backup storage that exceeds the free quota

PolarDB allows you to use the backup and restoration features free of charge. However, backup files consume storage space. This topic describes the billing rules of storage space consumed by PolarDB backup files.

Free quota

PolarDB offers a free storage quota for backup files. After this quota is consumed, you are charged by PolarDB for additional storage space occupied by backup files and the length of time for which the files are retained.

Backup type		Free quota
Data backup	Level-1 backup	Database storage usage × 50% For more information about how to view the database storage usage, see View the database storage usage.
	Level-2 backup	None
Log backup		100 GB

Pay-as-you-go

After the free quota is consumed, you are charged for additional storage space consumed by backup files and the length of time for which the files are retained.

Backup type	Unit price (USD/GB/hour)		Billing method
	Regions inside mainland China	The China (Hong Kong) region and regions outside China	
Level-1 backup	0.000464	0.000650	Storage fee per hour = (Total size of level-1 backups - Free quota) × Unit price per hour For example, if the total size of level-1 backups (snapshots) is 700 GB and the database storage usage is 1,000 GB, the storage fee per hour is USD 0.0928. The fee is calculated based on the following formula: [700 GB - (1,000 GB × 50%)] × USD 0.000464/GB/hour = USD 0.0928/hour. ⑦ **Note** For more information, see FAQ.
Level-2 backup	0.0000325	0.0000455	Storage fee per hour = Total size of level-2 backups × Unit price per hour For example, if the total size of level-2 backups is 1,000 GB, the storage fee per hour is USD 0.0325. The fee is calculated based on the following formula: 1,000 GB × USD 0.0000325/GB/hour = USD 0.0325/hour.
Log backup	0.0000325	0.0000455	Storage fee per hour = (Total size of log backups - 100 GB) × Unit price per hour For example, if the total size of log backups is 1,000 GB, the hourly fee is USD 0.02925. The fee is calculated based on the following formula: (1,000 GB - 100 GB) × USD 0.0000325/GB/hour = USD 0.02925/hour.

Use storage plans to offset level-1 backup storage fees

After the free quota is consumed, you are charged for additional storage space on a pay-as-you-go basis. To reduce the costs of level-1 backups, we recommend that you use storage plans, which are cost-effective.

Storage plans are applied to all PolarDB clusters that belong to your account. The remaining capacity of a storage plan is automatically used to offset the level-1 backup storage space that exceeds the free quota at a ratio of 1:1.6. In this case, every 1 GB of the storage plan is used to offset 1.6 GB of level-1 backup storage.

For example, you purchase a storage plan of 100 GB in size and you have 50 GB of data. The data itself consumes 50 GB of the storage plan, which leaves 50 GB remaining. The level-1 backups of the cluster consume 50 GB of storage space beyond the free quota. In this case, 31.25 GB (50/1.6 = 31.25) of the storage plan is automatically used to offset the additional storage space consumed by the level-1 backups, which leaves a final size of 18.75 GB remaining in your storage plan.

If the remaining capacity of the storage plan is insufficient to offset the level-1 backup storage space, you are charged for additional storage space on a pay-as-you-go basis. For more information about storage plans, see Storage plans.

5.3. Pricing of SQL Explorer (optional)

This topic describes the pricing of PolarDB SQL Explorer.

You are charged for SQL Explorer only after the SQL Explorer feature is enabled. For more information about how to enable SQL Explorer, see SQL Explorer.

SQL Explorer is charged based on the storage of audit logs.

- Mainland China: USD 0.0013/GB/hour

- China (Hong Kong) and regions outside China: USD 0.0019/GB/hour

> ⑦ **Note**   You are charged for the storage that is consumed by audit logs only on a pay-as-you-go basis.

5.4. Configuration change fees

This topic describes how you are charged for configuration changes of pay-as-you-go and subscription clusters.

Pay-as-you-go

Pay-as-you-go clusters are charged on an hourly basis. After you change the configurations of a pay-as-you-go cluster, the cluster is charged at the new price on an hourly basis.

Subscription

Change type	Description

Change type	Description
Upgrade specifications or add nodes	Fees = Total fees of the new configurations for the remaining subscription period - Total fees of the original configurations for the remaining subscription period. Total fees of the new configurations for the remaining subscription period is calculated based on the following formula: Monthly price of the new configurations/30/24 × Remaining subscription period measured in hours. Total fees of the original configurations for the remaining subscription period is calculated based on the following formula: Monthly price of the original configurations/30/24 × Remaining subscription period measured in hours. For example, the monthly price of the new configurations is USD 14,400. The monthly price of the original configurations is USD 7,200. The remaining subscription period is 50 days. The payment is calculated based on the following formula: (USD 14,400/30/24 × 50 × 24) - (USD 7,200/30/24 × 50 × 24) = USD 12,000.
Downgrade specifications or delete nodes	Refund = Total fees of the original configurations for the remaining subscription period (Monthly price of the original configurations/30/24 × Remaining subscription period measured in hours) - Total fees of the new configurations for the remaining subscription period (Monthly price of the new configurations/30/24 × Remaining subscription period measured in hours). For example, to purchase a subscription cluster for three months, you are charged USD 3,500. You pay USD 3,000 for the cluster after you use coupons. After two months, the total fees of the original configurations for the remaining subscription period become USD 1,000. The total fees of the new configurations for a month are USD 800. The refund is calculated based on the following formula: USD 1,000 - USD 800 = USD 200. ⑦ **Note** The system refunds fees for the downgraded configurations of a subscription cluster. However, the system does not refund fees for the entire cluster. If you want to use this service, submit a ticket. If your application is approved, your subscription cluster is frozen and will be deleted after 14 days.

FAQ

Why is my received refund less than the refund that I calculated for the downgraded configurations of the cluster?

Check the following scenarios before you downgrade the cluster configurations:

- You are offered discounts for the order of the original configurations. For example, if you purchase the cluster on the International site (alibabacloud.com) and the subscription period is one year or longer, you are offered a 15% discount.Assume that the original price of the cluster is USD 1,000 and you pay USD 850 for the cluster. If you downgrade the cluster configurations, USD 850 is used as the payment amount to calculate the refund of the downgrade.

- Assume that you use coupons for the order of the original configurations and you pay USD 500 for the order. If you downgrade the cluster configurations, USD 500 is used as the payment amount to calculate the refund of the downgrade.

References

PolarDB for PostgreSQL: Change specifications

6.FAQ
6.1. Storage plans

This topic provides answers to some frequently asked questions about PolarDB storage plans.

Purchase and usage

- Do I need to purchase a storage plan after I purchase a cluster?

  No, you do not need to purchase a storage plan after you purchase a cluster. You can purchase storage plans based on your business requirements. After you purchase a storage plan, the storage plan is automatically applied to clusters in the same region. For more information, see Together with storage plans.

- The storage capacity of a storage plan is 3 TB or 5 TB. If my services require 4 TB of storage, which storage plan do I purchase?

  We recommend that you first purchase a 3-TB storage plan. If the amount of the stored data increases to approximately 5 TB, we recommend that you upgrade the storage plan to a 5-TB storage plan. For more information, see Upgrade a storage plan.

Supported clusters

- Can multiple clusters share a storage plan?

  Yes, a storage plan can be shared by all clusters in the regions that are specified by the **Plan Type** parameter. You can set Plan Type to Mainland China or China (Hong Kong) and regions outside China. For more information, see Purchase a storage plan.

- Can the clusters that use different engines share a storage plan?

  Yes, clusters that use different engines can share a storage plan. A storage plan can be shared by clusters.

Eligibility

- Are storage plans used to offset only storage fees?

  Storage plans can be used to offset the following fees:

  - Storage fees
  - Fees of level-1 backups that exceed the free quota

    For more information, see Pricing of data backups that exceed the free quota.

- Are storage plans applied to different resources in an order? Can I apply a storage plan to clusters first?

  A storage plan is first applied to PolarDB clusters. Then, the remaining capacity of the storage plan is automatically used to offset the storage that exceeds the free quota for level-1 backups.

- What is the offset ratio when I use a storage plan to offset the storage of level-1 backups?

The ratio is 1:1.6. In this case, every 1 GB of the storage plan is used to offset 1.6 GB of level-1 backup storage. For example, you purchase a storage plan of 100 GB in size. After you apply the storage plan, 50 GB is left in the storage plan. Level-1 backups consume 50 GB of storage, which exceeds the free quota. In this case, 31.25 GB (50/1.6 = 31.25) of the storage plan is automatically used to offset the overage of the level-1 backups. After the storage plan is applied to the level-1 backups, 18.75 GB is left in the storage plan.

Renewal and upgrade

- What can I do if the storage capacity of my storage plan is insufficient or exhausted? Can I purchase another storage plan of the same type?

  No, you cannot purchase another storage plan of the same type. You can purchase only one storage plan of each type. If the storage capacity of your storage plan is insufficient or is exhausted, you can upgrade the storage plan. For more information, see Renew or upgrade a storage plan.

- How am I charged for the storage that exceeds the storage capacity of my storage plan?

  You are charged for the storage that exceeds the storage capacity of your storage plan based on the pay-as-you-go billing method. For more information, see Storage pricing.

- How can I renew my storage plan if the storage plan is due to expire?

  You can renew your storage plan in the user center. For more information, see Renew a storage plan.

- What do I do if the storage capacity of a storage plan is insufficient to offset the storage of level-1 backups that exceeds the free quota?

  If the remaining capacity of the storage plan is insufficient to offset the storage of level-1 backups, the overage is charged on a pay-as-you-go basis. You can also upgrade the storage plan. For more information, see Upgrade a storage plan.

6.2. Scale-out and scale-in

This topic provides answers to frequently asked questions about the pricing of scale-out and scale-in of PolarDB clusters.

- What is the price if I add a read-only node?

  The price of a read-only node is the same as that of a primary node. For more information, see Pricing of compute nodes.

- Is the storage capacity doubled after I add a read-only node?

  No, the storage capacity is not doubled after you add a read-only node. PolarDB uses an architecture in which computing is decoupled from storage. The read-only node that you purchase is used as a computing resource. Therefore, the storage capacity is not increased.

  A serverless architecture is used for storage. Therefore, you do not need to specify the storage capacity when you purchase clusters. The storage capacity is automatically scaled out when the amount of data increases. You are charged only for the storage that you use. Each type of cluster specifications has the corresponding maximum storage capacity. To increase the maximum storage capacity, Change specifications.