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云原生数据库 PolarDB-O Pricing

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Document conventions

Style	Description	Example
<u> Danger</u>	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 cd /d C:/window command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	bae log listinstanceid 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}

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1. Specifications and pricing

This topic describes the specifications and pricing of PolarDB-O, including billing methods, billing items, and the pricing of compute nodes, storage space, data backups, and SQL Explorer.

Billing methods

PolarDB supports the following billing methods:

Subscription

If you use the subscription billing method, you must pay for a compute cluster when you create the cluster. The compute cluster consists of one primary node and one read-only node. You are charged for the consumed storage space by hour. The charges are deducted from your account balance on an hourly basis.

• Pay-as-you-go

If you use the pay-as-you-go billing method, you pay for the resources after you use them. You are charged for the compute clusters and the consumed storage space by hour. The charges are deducted from your account balance on an hourly basis.

Billing items

The following table describes the billing items of PolarDB clusters.

Billing item	Description
Compute cluster that has a primary node and one or more read-only nodes	Subscription or pay-as-you-go.
Storage space	 Pay-as-you-go. You can also purchase storage packages by using the subscription billing method. For more information, see Purchase a storage plan.
SQL Explorer	After you enable SQL Explorer, the billing method is specified as pay-as-you-go. For more information, see SQL Explorer.
Data backup	In PolarDB, the backup feature is available for free. You are charged for only the storage of backup files. For more information, see Back up data.

Compute node pricing

All the nodes in PolarDB clusters are dedicated nodes. The CPU, memory, storage, and I/O resources allocated to a node are dedicated to this node. This improves the stability and reliability of the node. The following table describes the node specifications that are available in PolarDB.

PolarDB-O node specifications

Node type	CPU and memory	Maximum storage capacity	Maximum number of connectio ns	Internal bandwid th	Maximu m number of IOPS	I/O bandwid th
polar.o.x4.medium	2 cores 8 GB	5 TB	400	1 Gbps	16,000	1 Gbps
polar.o.x4.large	4 cores 16 GB	10 TB	800	10 Gbps	64,000	4 Gbps
polar.o.x4.xlarge	8 cores 32 GB	10 TB	1,600	10 Gbps	128,000	8 Gbps
polar.o.x8.xlarge	8 cores 64 GB	30 TB	3,200	10 Gbps	160,000	10 Gbps
polar.o.x8.2xlarge	16 cores 128 GB	50 TB	6,400	10 Gbps	256,000	16 Gbps
polar.o.x8.4xlarge	32 cores 256 GB	50 TB	12,800	10 Gbps	384,000	24 Gbps
polar.o.x8.8xlarge	64 cores 512 GB	100 TB	25,600	10 Gbps	409,600	24 Gbps
polar.o.x8.12xlarge	88 cores 710 GB	100 TB	36,000	25 Gbps	512,000	32 Gbps

? Note

- A cluster that has 2 CPU cores and 8 GB memory provides the basic specifications that are required in tests, trials, and other light load scenarios. We recommend that you do not use the clusters of this type in heavy-load production environments. In production environments, we recommend that you use a cluster that has 8 CPU cores and 32 GB memory or higher specifications.
- If you have higher storage requirements, you can submit a ticket to contact after-sales services to increase the maximum storage capacity to 100 TB.

Prices of compute nodes

Specificat	ion		China	US	Singa	Malay sia	Indon	Germ		
Node type	CPU and memo ry	Mainl and China	(Hon g Kong)	(Silic on Valle y)	pore (Sing apor e)	(Kual a Lump ur)	esia (Jakar ta)	any (Fran kfurt)	India (Mumbai)	Japan (Toky o)
polar.o. x4.medi um	2 cores 8 GB	USD 57/m onth USD 0.12/ hour	USD 99/m onth USD 0.21/ hour	USD 81/m onth USD 0.17/ hour	USD 99/m onth USD 0.21/ hour	USD 99/m onth USD 0.21/ hour	USD 96/m onth USD 0.21/ hour	USD 87/m onth USD 0.19/ hour	USD 79/mon th USD 0.17/ho ur	USD 83/m onth USD 0.18/ hour
polar.o. x4.large	4 cores 16 GB	USD 202/ mont h USD 0.42/ hour	USD 384/ mont h USD 0.80/ hour	USD 312/ mont h USD 0.65/ hour	USD 384/ mont h USD 0.80/ hour	USD 384/ mont h USD 0.80/ hour	USD 352/ mont h USD 0.74/ hour	USD 343/ mont h USD 0.72/ hour	USD 303/mo nth USD 0.64/ho ur	USD 322/ mont h USD 0.68/ hour
polar.o. x4.xlarg e	8 cores 32 GB	USD 403/ mont h USD 0.84/ hour	USD 766/ mont h USD 1.60/ hour	USD 624/ mont h USD 1.30/ hour	USD 766/ mont h USD 1.60/ hour	USD 766/ mont h USD 1.60/ hour	USD 705/ mont h USD 1.47/ hour	USD 685/ mont h USD 1.43/ hour	USD 624/mo nth USD 1.30/ho ur	USD 645/ mont h USD 1.35/ hour
polar.o. x8.xlarg e	8 cores 64 GB	USD 645/ mont h USD 1.35/ hour	USD 966/ mont h USD 2.02/ hour	USD 806/ mont h USD 1.68/ hour	USD 966/ mont h USD 2.02/ hour	USD 966/ mont h USD 2.02/ hour	USD 896/ mont h USD 1.87/ hour	USD 846/ mont h USD 1.77/ hour	785 USD 785/mo nth USD 1.64/ho ur	USD 826/ mont h USD 1.72/ hour

Specificat	ion		China	US	Singa	Malay sia	Indon	Germ		
Node type	CPU and memo ry	Mainl and China	(Hon g Kong)	(Silic on Valle y)	pore (Sing apor e)	(Kual a Lump ur)	esia (Jakar ta)	any (Fran kfurt)	India (Mumbai)	Japan (Toky o)
polar.o. x8.2xlar ge	16 cores 128 GB	USD 1,288 /mon th USD 2.69/ hour	USD 1,932 /mon th USD 4.03/ hour	USD 1,611 /mon th USD 3.36/ hour	USD 1,932 /mon th USD 4.03/ hour	USD 1,932 /mon th USD 4.03/ hour	USD 1,791 /mon th USD 3.74/ hour	USD 1,691 /mon th USD 3.53/ hour	USD 1,570/m onth USD 3.28/ho ur	USD 1,651 /mon th USD 3.44/ hour
polar.o. x8.4xlar ge	32 cores 256 GB	2,577 USD 2,577 /mon th USD 5.37/ hour	USD 3,864 /mon th USD 8.05/ hour	USD 3,220 /mon th USD 6.71/ hour	USD 3,864 /mon th USD 8.05/ hour	USD 3,864 /mon th USD 8.05/ hour	USD 3,538 /mon th USD 7.47/ hour	USD 3,381 /mon th USD 7.05/ hour	USD 3,140/m onth USD 6.55/ho ur	USD 3,301 /mon th USD 6.88/ hour
polar.o. x8.8xlar ge	64 cores 512 GB	USD 5,152 /mon th USD 10.74 /hour	USD 7,727 /mon th USD 16.10 /hour	USD 6,439 /mon th USD 13.42 /hour	USD 7,727 /mon th USD 16.10 /hour	USD 7,727 /mon th USD 16.10 /hour	USD 7,164 /mon th USD 14.93 /hour	USD 7,439 /mon th USD 15.50 /hour	USD 6,907/m onth USD 14.39/h our	USD 7,262 /mon th USD 15.13 /hour
polar.o. x8.12xla rge	88 cores 710 GB	USD 7,084 /mon th USD 14.76 /hour	USD 10,62 5/mo nth USD 22.14 /hour	USD 8,854 /mon th USD 18.45 /hour	USD 10,62 5/mo nth USD 22.14 /hour	USD 10,62 5/mo nth USD 22.14 /hour	USD 9,850 /mon th USD 20.53 /hour	USD 9,398 /mon th USD 19.58 /hour	USD 8,632/m onth USD 17.99/h our	9,075 USD 9,075 /mon th USD 18.91 /hour

? Note

- The preceding table lists the prices of a single node. By default, a PolarDB cluster consists of a primary node and a read-only node.
- You can select a node type for the primary node when you create a cluster. The same type will be automatically applied to read-only nodes.
- The maximum number of input/output operations per second (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 for the cluster does not change.
- If you require higher computing performance and larger storage space, for example, 100
 TB,you can submit a ticket to contact after-sales services.

Storage space pricing

Storage space refers to the space that is occupied by data files, index files, log files, and temporary files. Log files are divided into online logs and archived logs.

(?) **Note** After you purchase a PolarDB cluster, the system automatically generates the files that are required for regular database operations. The files include the preceding files and occupy some storage space.

Pay-as-you-go

Storage resources are provisioned in a serverless architecture. Therefore, you do not need to specify the storage capacity when you create clusters. The storage capacity of the clusters is automatically increased when the amount of data increases. You are charged for only the storage space that you use. On the **Overview** page in the PolarDB console, you can view the storage space that you use.

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

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

Subscription

If the data size is large, we recommend that you purchase storage packages. Compared with the pay-as-you-go billing method, subscription-based storage packages offer additional discounts. Higher discounts are provided for larger storage packages. To purchase a storage package, click Purchase a storage package.

Data backup pricing

The backup and restoration features of PolarDB are free. Only storage fees are charged. In PolarDB, the storage fees are calculated based on the storage space that is occupied by the backup files of data and logs and the retention periods of these backup files.

Pricing

Region	Level-1 backup	Level-2 backup	Log backup
Mainland China	USD 0.000464/GB/hour	USD 0.0000325/GB/hour	USD 0.0000325/GB/hour
Hong Kong (China) and regions outside China	USD 0.000650/GB/hour	USD 0.0000455/GB/hour	USD 0.0000455/GB/hour

Backup type	Free quota	Billing method
Level-1 backups	Used database storage space × 50% You can view the used database storage space of a cluster on the Overview page of the cluster in the PolarDB console.	Storage fee per hour = (Total physical storage of level-1 backups - Free quota) × Unit price per hour • You can use level-1 backups for free within the free quota. • Figure 1 shows the total physical storage of level-1 backups. Bickup Logs Logs
Level-2 backups	None	Storage fee per hour = Total physical storage of level-2 backups × Unit price per hour For example, if the total physical storage 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 = USD 0.0325.
Log backup	100 GB	Storage fee per hour = (Total physical storage of log backups - 100 GB) × Unit price per hour For example, if the total physical storage of log backups is 1,000 GB, the storage fee per hour is USD 0.02925. The fee is calculated based on the following formula: (1,000 GB - 100 GB) × USD 0.0000325 = USD 0.02925.

SQL Explorer pricing

You are charged for SQL Explorer based on the storage space that is consumed by audit logs.

- Mainland China: USD 0.0013/GB/hour
- China (Hong Kong) and regions outside China: USD 0.0019/GB/hour

Note The storage space that is consumed by audit logs is billed on only a pay-as-you-go basis.

FAO

What is the price if I add a read-only node?
 The price of a read-only node is the same as that of the primary node. For more information, see
 Compute node pricing.

• 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 where computing is decoupled from storage. The read-only nodes that you purchase are used for computing. If you add read-only nodes to your cluster, the storage capacity of the cluster does not change.

Storage resources are provisioned in a serverless architecture. Therefore, you do not need to specify the storage capacity when you create clusters. The storage capacity of the clusters is automatically increased when the amount of data increases. You are charged for only the storage space that you use. The maximum storage capacity for each cluster varies based on the cluster specifications. If you need to increase the maximum storage capacity, upgrade your cluster specifications. For more information, see Change the specifications of a cluster.

Pricing·Renewal 云原生数据库 PolarDB-O

2.Renewal

You can extend the subscriptions of the cluster and storage planthat you purchased.

Pay-as-you-go clusters are billed based on the actual usage and never expire. You do not need to renew pay-as-you-go clusters. However, you must make sure that your account balance is sufficient.

Billing

For more information, see Specifications and pricing.

Deduction date

- Auto renewal: Fees are first deducted at 08:00 on the ninth day before a subscription cluster expires. If the deduction fails, the system attempts to deduct fees once a day until fees are deducted or the expiration date arrives. You must make sure that your Alibaba Cloud account balance is sufficient. If your cluster is about to expire the next day, renew the cluster manually.
- Manual renewal: Pay manually if you want to renew a subscription cluster.

Related topics

- Manual renewal
- Automatically renew the subscription of a cluster

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3.Switch the billing method from pay-as-you-go to subscription

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

Prerequisites

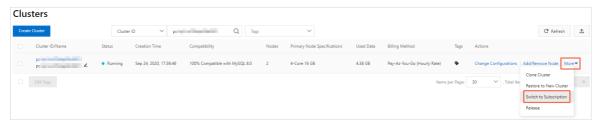
- Your cluster is in the Running state.
- Your cluster has no pending orders for changing the billing method from pay-as-you-go to subscription. If pending orders exist, you must pay for or cancel them on the Orders page.
- If a cluster uses a specification that is no longer available, you cannot change the billing method to subscription. In this case, you must change the cluster specification before you change the billing method to subscription. For more information, see Change configurations.

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



4. On the **Switch to Subscription** page, confirm the cluster information and the value of the **Purchase Plan** parameter. Then, read the terms of the service agreement, select the check box, and then click **Buy Now**.



- 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 to subscription
 before you complete the payment. In this case, you must pay for or cancel this order.

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
Upgrade specificatio ns or add	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.
nodes	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 \times 50 \times 24) - (USD 7,200/30/24 \times 50 \times 24) = USD 12,000.
	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).
Downgrade specificatio ns or delete nodes	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 1000 - USD 800 = USD 200.
	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.

FAO

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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-O: Change the specifications of a cluster

5. Expiration or overdue payments

A PolarDB-O cluster is locked after the cluster expires or a payment becomes overdue. You can top up your account or renew the cluster to unlock the cluster. This topic describes how to unlock expired or overdue clusters.

• Warning The system sends you notifications when a cluster expires or a payment becomes overdue. To avoid suspended service, 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 period of 1-15 days after expiration.	You can renew the cluster to		
Subscri ption cluster	The cluster is in the locked state during the period of 16-30 days after expiration. You cannot connect to the locked cluster.	prevent the cluster from being released after expiration. For more information, see Renewal.		
	At 00:00 on the 31st day after expiration, the cluster is released and all data of the cluster is deleted.	You cannot restore the cluster data.		
	If your Alibaba Cloud account has an overdue payment, all pay-as-you-go clusters that belong to your account become overdue.			
Pay-as-	The cluster remains in the running state during the period of 1-15 days after a payment becomes overdue.	Before the cluster is released, check the payment method of your Alibaba Cloud account in the Billing Management console.		
you-go cluster	The cluster is in the locked state during the period of 16-30 days after the payment becomes overdue. You cannot connect to the locked cluster.	Management consule.		
	At 00:00 on the 31st day after the payment becomes overdue, the cluster is released and all data of the cluster is deleted.	You cannot restore the cluster data.		

Suggestions

- To avoid possible service interruptions, we recommend that you manually renew the cluster or enable auto-renewal before your subscription cluster expires.
- Make sure that your account balance is sufficient.

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6.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 Billing overview, Bills, and Billing details.

