

TaurusDB

Getting Started

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Huawei Cloud Computing Technologies Co., Ltd.

Address: Huawei Cloud Data Center Jiaoxinggong Road
Qianzhong Avenue
Gui'an New District
Gui Zhou 550029
People's Republic of China

Website: <https://www.huaweicloud.com/intl/en-us/>

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1 Buying a DB Instance and Connecting to It Using the mysql Client

After buying a DB instance, you can connect to it using a Linux ECS with the mysql client installed over a private network. This section describes how to access a DB instance from an ECS using the mysql client.

Operation Process

Process	Description
Preparations	Sign up for a HUAWEI ID, enable Huawei Cloud services, make sure you have a valid payment method configured, create IAM users, and grant them specific TaurusDB permissions.
Step 1: Buy a DB Instance	Configure information required for instance creation.
Step 2: Buy an ECS	<p>If you want to use the mysql client to connect to a DB instance, you need to prepare a server, install the mysql client on the server, and run the connection command.</p> <p>Purchase a Linux ECS that is in the same region and VPC as your DB instance.</p> <p>If you have purchased a Windows ECS, you can connect to the DB instance using MySQL-Front. For details, see Buying a DB Instance and Connecting to It Using MySQL-Front.</p>
Step 3: Test Connectivity and Install the mysql Client	Test the network connectivity between the ECS and the private IP address and port of the DB instance, and install the mysql client on the ECS.
Step 4: Connect to the DB Instance Using the mysql Client	Use a command-line interface (CLI) to connect to the DB instance using the private IP address and port.

Preparations

1. [Sign up for a HUAWEI ID and enable Huawei Cloud services.](#)
2. Before buying DB instances, ensure that your account balance is sufficient. [Top up your account](#) if required.
3. For fine-grained permissions management on Huawei Cloud resources, use Identity and Access Management (IAM) to create a user or user group and grant it specific operation permissions. For details, see [Creating a User and Granting TaurusDB Permissions.](#)

Step 1: Buy a DB Instance

1. Go to the [Buy DB Instance](#) page.
2. Configure instance information and click **Next**.

Figure 1-1 Selecting a DB engine version

The screenshot shows the configuration interface for a TaurusDB instance. The settings are as follows:

- 计费模式 (Billing Mode):** 包年/包月 (Annual/Subscription), **按需计费 (Pay-as-you-go)**, Serverless
- 区域 (Region):** [Dropdown menu]
- 实例名称 (Instance Name):** Taurusdb-8562
- 数据库引擎版本 (Database Engine Version):** TaurusDB V2.0
- 实例类型 (Instance Type):** **集群 (Cluster)**, 单机 (Single Node)
- 存储类型 (Storage Type):** **DL6**, DL5
- 可用区类型 (Availability Zone Type):** 单可用区 (Single AZ), **多可用区 (Multi-AZ)**
- 主可用区 (Main Availability Zone):** **可用区一 (AZ1)**, 可用区三 (AZ3), 可用区七 (AZ7)
- 时区 (Time Zone):** [Dropdown menu]

Additional text in the image: "不同区域的资源之间内网互不相通。请选择靠近您业务的区域，可以降低网络时延，提高访问速度。" (Resources in different regions are not connected via the intranet. Please select a region close to your business to reduce network latency and improve access speed.)

Parameter	Example Value	Description
Billing Mode	Pay-per-use	<p>The billing mode of an instance.</p> <ul style="list-style-type: none"> • Yearly/Monthly: A prepaid billing mode in which you pay for resources before using it. Bills are settled based on the subscription period. The longer the subscription, the bigger the discount. This mode is a good option for long-term, stable services. • Pay-per-use: A postpaid billing mode. You pay as you go and just pay for what you use. The DB instance usage is calculated by the second but billed every hour. This mode allows you to adjust resource usage easily. You neither need to prepare for resources in advance, nor end up with excessive or insufficient preset resources.
Region	AP-Singapore	<p>The region where an instance is located.</p> <p>NOTE You cannot change the region of an instance once it is purchased.</p>
DB Instance Name	Taurusdb-8293	The DB instance name.
DB Engine Version	TaurusDB V2.0	The DB engine and version.

Parameter	Example Value	Description
DB Instance Type	Cluster	A cluster instance can contain one primary node and up to 15 read replicas. The primary node processes read and write requests, and the read replicas process only read requests. If the primary node becomes unavailable, TaurusDB automatically fails over to a read replica. Cluster instances apply to medium- and large-sized enterprises in the Internet, taxation, banking, and insurance sectors.
Storage Type	DL6	The original Shared storage . The default storage type of TaurusDB instances created before July 2024 is Shared storage , while that of TaurusDB instances created in July 2024 and beyond is DL6 . DL6-based instances achieve zero RPO with a 3-AZ deployment and deliver better performance and higher peak throughput. They are suitable for core application systems that are sensitive to performance and have demanding requirements on storage I/O during peak hours, such as those in finance, e-commerce, government, and gaming.
AZ Type	Multi-AZ	If your workloads require cross-AZ DR or are insensitive to cross-AZ latency, you are advised to deploy the primary node and read replicas in different AZs to achieve higher availability and reliability.
Primary AZ	AZ1	The primary AZ of an instance.

Parameter	Example Value	Description
Time Zone	(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi	You need to select a time zone for your instance based on the region hosting your instance. The time zone is selected during instance creation and cannot be changed after the instance is created.

Figure 1-2 Selecting specifications

The screenshot displays the configuration interface for selecting instance specifications. It includes the following elements:

- 性能规格 (Performance Type):** Two tabs are visible: "独享型" (Dedicated) and "通用型" (General). A note below states: "独享型实例完全独享CPU和内存，性能长期稳定。通用型实例与同一物理机上的其他通用型实例共享CPU和内存，性价比最高。"
- CPU架构 (CPU Architecture):** Two tabs are visible: "x86" and "鲲鹏" (ARM). A note below states: "x86实例使用Intel® Xeon® Scalable处理器，具有稳健且稳定的计算性能。当在高性能网络中工作时，实例提供企业级应用所需的额外性能和稳定性。"
- 规格列表 (Specifications List):** A table lists various configurations with their maximum connection counts.

vCPUs 内存	最大连接数
32 vCPUs 128 GB	30,000
32 vCPUs 256 GB	30,000
48 vCPUs 192 GB	45,000
48 vCPUs 384 GB	60,000
60 vCPUs 256 GB	60,000
64 vCPUs 512 GB	60,000
- 当前选择规格 (Current Selection):** 独享型 | x86 | 2 vCPUs | 8 GB
- 节点数量 (Node Count):** A numeric input field set to 2.
- 存储设置 (Storage Settings):** A note: "无类选择存储容量，存储费用按照实际使用量每小时计费。"
- 备份空间 (Backup Space):** A note: "免费赠送与实际使用存储空间等量的备份空间，超出免费空间部分将按需计费。"

Parameter	Example Value	Description
Instance Specifications	Dedicated 2 vCPUs 8 GB	The vCPUs and memory of an instance.
CPU Architecture	x86	x86 instances use Intel® Xeon® Scalable processors and feature robust and stable computing performance. When working on high-performance networks, the instances provide the additional performance and stability that enterprise-class applications demand.
Nodes	2	This parameter is mandatory for cluster instances.

Parameter	Example Value	Description
Storage Space (GB)	-	It contains the system overhead required for inodes, reserved blocks, and database operations.
Backup Space	-	TaurusDB provides free backup space equal to the amount of your used storage. After the free backup space is used up, you will be billed for the additional space on a pay-per-use basis.

Figure 1-3 Configuring a network



Parameter	Example Value	Description
VPC	default_vpc	The virtual network in which your instance is located. A VPC can isolate networks for different workloads. If no VPC is available, click Create VPC . After a VPC is created, click . For details, see Creating a VPC and Subnet . NOTICE After a TaurusDB instance is created, the VPC cannot be changed.
Subnet	default_subnet	A subnet provides dedicated network resources that are logically isolated from other networks for network security.

Parameter	Example Value	Description
Security Group	default	The security group enhances security by controlling access to TaurusDB from other services.

Figure 1-4 Setting a password

Administrator

Administrator Password Keep your password secure. The system cannot retrieve your password.

Confirm Password

Parameter Template [View Parameter Template](#)

Table Name This option cannot be changed later.

Enterprise Project [Create Enterprise Project](#)

Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

Quantity The total number of DB Instances cannot exceed 999. [Increase quota](#)

Parameter	Example Value	Description
Administrator	root	The username of the database administrator account. The default username is root .

Parameter	Example Value	Description
Administrator Password	-	<p>Must consist of 8 to 32 characters and contain at least three of the following: uppercase letters, lowercase letters, digits, and special characters (~!@#%^*_-=+?,)&\$.). Enter a strong password and periodically change it to improve security, preventing security risks such as brute force cracking.</p> <p>Keep your password secure because you cannot retrieve it from the system. After a DB instance is created, you can reset this password. For details, see Resetting the Administrator Password.</p>
Confirm Password	-	Enter the administrator password again.
Parameter Template	Default-GaussDB-for-MySQL 8.0	A parameter template contains engine configuration values that can be applied to one or more instances.
Table Name	Case insensitive	<p>Specifies whether table names are case sensitive. This option cannot be changed later.</p> <ul style="list-style-type: none"> ● Case sensitive: Table names are case sensitive. ● Case insensitive: Table names are case insensitive and are stored in lowercase letters by default.

Parameter	Example Value	Description
Enterprise Project	-	If your account has been associated with an enterprise project, select the target project from the Enterprise Project drop-down list. For more information about enterprise projects, see Enterprise Management User Guide .
Tag	-	Tags a DB instance. This parameter is optional. Adding tags helps you better identify and manage your DB instances. Each DB instance can have up to 20 tags.
Quantity	1	You can buy DB instances in batches. The default value is 1 . The value ranges from 1 to 10.

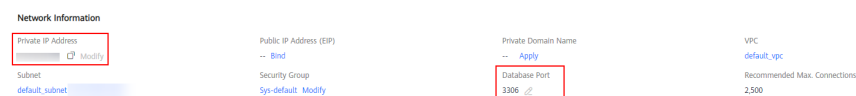
3. Check the purchased DB instance.

Figure 1-5 Checking that the DB instance is created



4. Click the DB instance name to go to the **Basic Information** page.
5. In the **Network Information** area, obtain the private IP address and database port.

Figure 1-6 Viewing the private IP address and database port

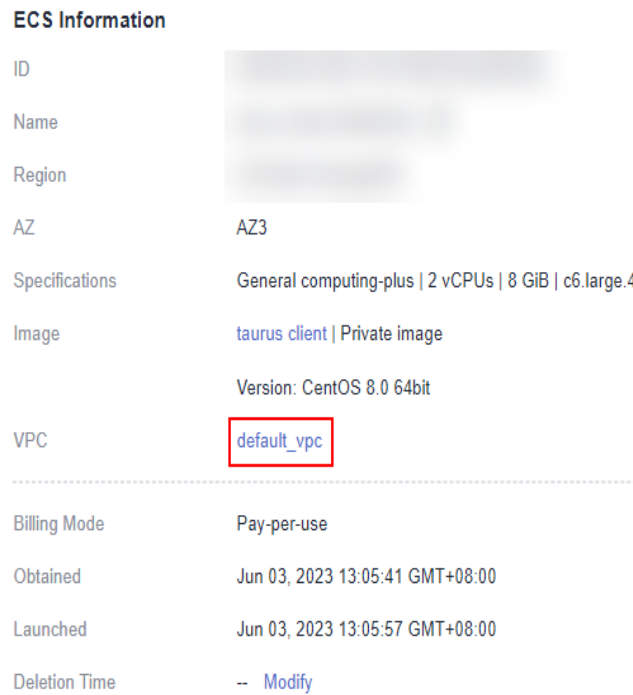


Step 2: Buy an ECS

1. **Log in to the management console** and check whether there is an ECS available.
 - If there is a Linux ECS, go to **3**.
 - If there is a Windows ECS, see [Buying a DB Instance and Connecting to It Using MySQL-Front](#).

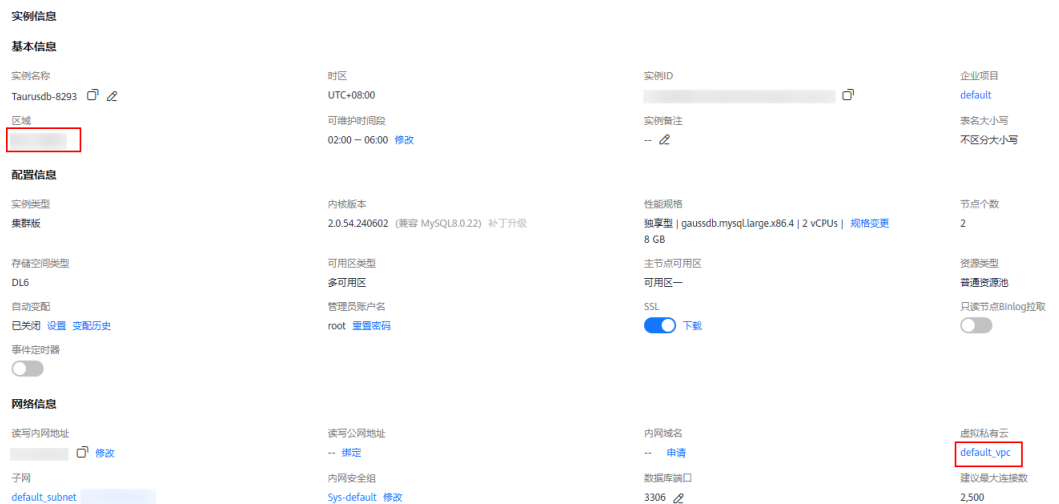
- If no ECS is available, go to [2](#).
- 2. Buy an ECS and select Linux (for example, CentOS) as its OS.
To download the mysql client to the ECS, bind an EIP to the ECS. The ECS must be in the same region, VPC, and security group as the DB instance for mutual communications.
For details about how to purchase a Linux ECS, see [Purchasing an ECS in Elastic Cloud Server Getting Started](#).
- 3. On the **ECS Information** page, view the region and VPC of the ECS.

Figure 1-7 Viewing basic information about the ECS



- 4. On the **Basic Information** page of the DB instance, view the region and VPC of the DB instance.

Figure 1-8 Viewing the region and VPC of the DB instance



5. Check whether the ECS and DB instance are in the same region and VPC.
 - If they are in the same region and VPC, go to [Step 3: Test Connectivity and Install the mysql Client](#).
 - If they are in different regions, buy another ECS or DB instance. The ECS and DB instance in different regions cannot communicate with each other. To reduce network latency, deploy your DB instance in the region nearest to your workloads.
 - If they are in different VPCs, change the VPC of the ECS to that of the DB instance. For details, see [Changing a VPC](#).

Step 3: Test Connectivity and Install the mysql Client

1. Log in to the ECS. For details, see [Logging In to a Linux ECS Using VNC](#) in *Elastic Cloud Server User Guide*.
2. On the ECS, check whether it can connect to the DB instance using the private IP address and port obtained in [5](#).

telnet *private_IP_address port*

NOTE

If the message "command not found" is displayed, install the Telnet tool based on the OS used by the ECS.

- If the ECS can connect to the DB instance, no further action is required.
- If the ECS cannot connect to the DB instance, check the security group rules.
 - If in the security group associated with the ECS, there is no outbound rule with **Destination** set to **0.0.0.0/0** and **Protocol & Port** set to **All**, add the private IP address and port of the DB instance to the outbound rules.
 - Add the private IP address and port of the ECS to the inbound rules in the security group associated with the DB instance.

3. Download the mysql client installation package for the Linux ECS.

You are advised to use a mysql client running a version later than that of the DB instance.

wget https://dev.mysql.com/get/mysql-community-client-8.0.21-1.el6.x86_64.rpm

4. Run the following command to install the mysql client:

rpm -ivh --nodeps mysql-community-client-8.0.21-1.el6.x86_64.rpm

NOTE

- If any conflicts occur during the installation, add the **replacefiles** parameter to the command and install the client again.

rpm -ivh --replacefiles mysql-community-client-8.0.21-1.el6.x86_64.rpm

- If a message is displayed prompting you to install a dependency package during the installation, add the **nodeps** parameter to the command and install the client again.

rpm -ivh --nodeps mysql-community-client-8.0.21-1.el6.x86_64.rpm

Step 4: Connect to the DB Instance Using the mysql Client

1. Run the following command on the ECS to connect to the DB instance:

mysql -h <host> -P <port> -u <userName> -p

Example:

mysql -h 192.*.* -P 3306 -u root -p

Table 1-1 Parameter description

Parameter	Description
<host>	The private IP address obtained in 5.
<port>	The database port obtained in 5. The default value is 3306.
<userName>	The administrator account root .

2. Enter the password of the database account if the following information is displayed:

Enter password:

Figure 1-9 Connection succeeded

```
[root@ecs-e5d6-test ~]# ll
total 56000
-rw-r--r-- 1 root root 57424168 Nov  1 20:05 mysql-community-client-8.0.26-1.el6.x86_64.rpm
[root@ecs-e5d6-test ~]# mysql -h 192.168.1.10 -P 3306 -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 108609
Server version: 8.0.21-5 MySQL Community Server - (GPL)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

3. Create database **db_test**.
create database db_test;

Figure 1-10 Creating a database

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.01 sec)

mysql> create database db_test;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| db_test |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.00 sec)

mysql>
```

4. Create table `t_test`.
`create table t_test(id int(4), name char(20), age int(4));`

Figure 1-11 Creating a table

```
mysql> use db_test;
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql> create table t_test(id int(4),name char(20),age int(4));
Query OK, 0 rows affected, 2 warnings (0.03 sec)

mysql> desc t_test;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id | int | YES | | NULL | |
| name | char(20) | YES | | NULL | |
| age | int | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

5. Insert a data record into the table.
`insert into t_test(id, name, age) values(1, 'zhangsan', 30);`

Figure 1-12 Inserting data

```
mysql> insert into t_test(id, name, age) values(1, 'zhangsan', 30);
Query OK, 1 row affected (0.01 sec)
```


6. Query data in the table.

```
select * from t_test;
```

Figure 1-13 Querying data

```
mysql> select * from t_test;
+-----+-----+-----+
| id  | name      | age  |
+-----+-----+-----+
| 1   | zhangsan  | 30   |
+-----+-----+-----+
1 row in set (0.01 sec)

mysql>
```

7. Update the value of **age** for the data record whose **id** is 1 in the table.

```
update t_test set age=31 where id=1;
```

Figure 1-14 Updating data

```
mysql> update t_test set age=31 where id=1;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

8. Query the updated data in the table.

```
select * from t_test where id=1;
```

Figure 1-15 Querying the updated data

```
mysql> select * from t_test where id=1;
+-----+-----+-----+
| id  | name      | age  |
+-----+-----+-----+
| 1   | zhangsan  | 31   |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

9. Delete the data record whose **id** is 1 from the table.

```
delete from t_test where id=1;
```

Figure 1-16 Deleting table data

```
mysql> delete from t_test where id=1;
Query OK, 1 row affected (0.01 sec)

mysql> select * from t_test;
Empty set (0.00 sec)

mysql>
```

10. Delete the table schema.

```
drop table t_test;
```

Figure 1-17 Deleting a table schema

```
mysql> drop table t_test;
Query OK, 0 rows affected (0.01 sec)

mysql> show tables;
Empty set (0.00 sec)

mysql> █
```

11. Delete the database.

drop database db_test;

Figure 1-18 Deleting a database

```
mysql> drop database db_test;
Query OK, 0 rows affected (0.01 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.00 sec)

mysql> █
```

2 Buying a DB Instance and Connecting to It Using MySQL-Front

After buying a DB instance, you can log in to a Windows ECS, install MySQL-Front on the ECS, and use a private IP address to connect to the DB instance through MySQL-Front.

Operation Process

Process	Description
Preparations	Sign up for a HUAWEI ID, enable Huawei Cloud services, make sure you have a valid payment method configured, create IAM users, and grant them specific TaurusDB permissions.
Step 1: Buy a DB Instance	Configure information required for instance creation.
Step 2: Buy an ECS	Purchase a Windows ECS that is in the same region and VPC as your DB instance.
Step 3: Test Connectivity and Install MySQL-Front	Test the network connectivity between the ECS and the private IP address and port of the DB instance, and install MySQL-Front on the ECS.
Step 4: Use MySQL-Front to Connect to the DB Instance	Use MySQL-Front to connect to the DB instance using the private IP address and port.

Preparations

1. [Sign up for a HUAWEI ID and enable Huawei Cloud services.](#)
2. Before buying DB instances, ensure that your account balance is sufficient. [Top up your account](#) if required.
3. For fine-grained permissions management on Huawei Cloud resources, use Identity and Access Management (IAM) to create a user or user group and

grant it specific operation permissions. For details, see [Creating a User and Granting TaurusDB Permissions](#).

Step 1: Buy a DB Instance

1. Go to the [Buy DB Instance](#) page.
2. Configure instance information and click **Next**.

Figure 2-1 Selecting a DB engine version

The screenshot displays the configuration interface for purchasing a TaurusDB instance. The settings are as follows:

- 计费模式 (Billing Mode):** 包年/包月 (Subscription), 按需计费 (Pay-as-you-go), Serverless.
- 区域 (Region):** A dropdown menu with a help icon.
- 实例名称 (Instance Name):** Taurusdb-8562. A note below states: "购买多个数据库实例时，名称自动按序增加4位数字后缀。例如输入Instance，从Instance-0001开始命名；若已有Instance-0010，从Instance-0011开始命名。"
- 数据库引擎版本 (Database Engine Version):** TaurusDB V2.0.
- 实例类型 (Instance Type):** 集群 (Cluster), 单机 (Single Node).
- 存储类型 (Storage Type):** DL6, DL5.
- 可用区类型 (Availability Type):** 单可用区 (Single AZ), 多可用区 (Multi-AZ).
- 主可用区 (Primary Availability Zone):** 可用区一 (AZ1), 可用区三 (AZ3), 可用区七 (AZ7).
- 时区 (Time Zone):** A dropdown menu.

A link "查看规格分布情况" (View specification distribution) is located below the availability type options.

Parameter	Example Value	Description
Billing Mode	Pay-per-use	<p>The billing mode of an instance.</p> <ul style="list-style-type: none">• Yearly/Monthly: A prepaid billing mode in which you pay for resources before using it. Bills are settled based on the subscription period. The longer the subscription, the bigger the discount. This mode is a good option for long-term, stable services.• Pay-per-use: A postpaid billing mode. You pay as you go and just pay for what you use. The DB instance usage is calculated by the second but billed every hour. This mode allows you to adjust resource usage easily. You neither need to prepare for resources in advance, nor end up with excessive or insufficient preset resources.
Region	AP-Singapore	<p>The region where an instance is located.</p> <p>NOTE You cannot change the region of an instance once it is purchased.</p>
DB Instance Name	Taurusdb-8293	The DB instance name.
DB Engine Version	TaurusDB V2.0	The DB engine and version.

Parameter	Example Value	Description
DB Instance Type	Cluster	A cluster instance can contain one primary node and up to 15 read replicas. The primary node processes read and write requests, and the read replicas process only read requests. If the primary node becomes unavailable, TaurusDB automatically fails over to a read replica. Cluster instances apply to medium- and large-sized enterprises in the Internet, taxation, banking, and insurance sectors.
Storage Type	DL6	The original Shared storage . The default storage type of TaurusDB instances created before July 2024 is Shared storage , while that of TaurusDB instances created in July 2024 and beyond is DL6 . DL6-based instances achieve zero RPO with a 3-AZ deployment and deliver better performance and higher peak throughput. They are suitable for core application systems that are sensitive to performance and have demanding requirements on storage I/O during peak hours, such as those in finance, e-commerce, government, and gaming.
AZ Type	Multi-AZ	If your workloads require cross-AZ DR or are insensitive to cross-AZ latency, you are advised to deploy the primary node and read replicas in different AZs to achieve higher availability and reliability.
Primary AZ	AZ1	The primary AZ of an instance.

Parameter	Example Value	Description
Time Zone	(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi	You need to select a time zone for your instance based on the region hosting your instance. The time zone is selected during instance creation and cannot be changed after the instance is created.

Figure 2-2 Selecting specifications

The screenshot displays the configuration interface for selecting instance specifications. It includes the following elements:

- 性能规格 (Performance Type):** Two tabs are visible: "独享型" (Dedicated) and "通用型" (General). A note below states: "独享型实例完全独享CPU和内存，性能长期稳定。通用型实例与同一物理机上的其他通用型实例共享CPU和内存，性价比最高。"
- CPU架构 (CPU Architecture):** Two tabs are visible: "x86" and "鲲鹏" (ARM). A note below states: "x86实例使用Intel® Xeon® Scalable处理器，具备稳健且稳定的计算性能。在高性能网络环境下工作时，实例可提供企业级应用所需的额外性能和稳定性。"
- 规格列表 (Specifications List):** A table lists various configurations with their maximum connection counts.

vCPUs 内存	最大连接数
32 vCPUs 128 GB	30,000
32 vCPUs 256 GB	30,000
48 vCPUs 192 GB	45,000
48 vCPUs 384 GB	60,000
60 vCPUs 256 GB	60,000
64 vCPUs 512 GB	60,000
- 当前选择规格 (Current Selection):** 独享型 | x86 | 2 vCPUs | 8 GB
- 节点数量 (Node Count):** A numeric input field set to 2.
- 存储设置 (Storage Settings):** A note: "无类选择存储容量，存储费用按照实际使用量每小时计费。"
- 备份空间 (Backup Space):** A note: "免费赠送与实际使用存储空间等量的备份空间，超出免费空间部分将按量计费。"

Parameter	Example Value	Description
Instance Specifications	Dedicated 2 vCPUs 8 GB	The vCPUs and memory of an instance.
CPU Architecture	x86	x86 instances use Intel® Xeon® Scalable processors and feature robust and stable computing performance. When working on high-performance networks, the instances provide the additional performance and stability that enterprise-class applications demand.
Nodes	2	This parameter is mandatory for cluster instances.

Parameter	Example Value	Description
Storage Space (GB)	-	It contains the system overhead required for inodes, reserved blocks, and database operations.
Backup Space	-	TaurusDB provides free backup space equal to the amount of your used storage. After the free backup space is used up, you will be billed for the additional space on a pay-per-use basis.

Figure 2-3 Configuring a network



Parameter	Example Value	Description
VPC	default_vpc	The virtual network in which your instance is located. A VPC can isolate networks for different workloads. If no VPC is available, click Create VPC . After a VPC is created, click . For details, see Creating a VPC and Subnet . NOTICE After a TaurusDB instance is created, the VPC cannot be changed.
Subnet	default_subnet	A subnet provides dedicated network resources that are logically isolated from other networks for network security.

Parameter	Example Value	Description
Security Group	default	The security group enhances security by controlling access to TaurusDB from other services.

Figure 2-4 Setting a password

Administrator

Administrator Password Keep your password secure. The system cannot retrieve your password.

Confirm Password

Parameter Template [View Parameter Template](#)

Table Name This option cannot be changed later.

Enterprise Project [Create Enterprise Project](#)

Tag It is recommended that you use TMS's predefined tag function to add the same tag to different cloud resources. [View predefined tags](#)

You can add 20 more tags.

Quantity The total number of DB Instances cannot exceed 999. [Increase quota](#)

Parameter	Example Value	Description
Administrator	root	The username of the database administrator account. The default username is root .

Parameter	Example Value	Description
Administrator Password	-	<p>Must consist of 8 to 32 characters and contain at least three of the following: uppercase letters, lowercase letters, digits, and special characters (~!@#%^*_-=+?,)&\$.). Enter a strong password and periodically change it to improve security, preventing security risks such as brute force cracking.</p> <p>Keep your password secure because you cannot retrieve it from the system. After a DB instance is created, you can reset this password. For details, see Resetting the Administrator Password.</p>
Confirm Password	-	Enter the administrator password again.
Parameter Template	Default-GaussDB-for-MySQL 8.0	A parameter template contains engine configuration values that can be applied to one or more instances.
Table Name	Case insensitive	<p>Specifies whether table names are case sensitive. This option cannot be changed later.</p> <ul style="list-style-type: none"> ● Case sensitive: Table names are case sensitive. ● Case insensitive: Table names are case insensitive and are stored in lowercase letters by default.

Parameter	Example Value	Description
Enterprise Project	-	If your account has been associated with an enterprise project, select the target project from the Enterprise Project drop-down list. For more information about enterprise projects, see Enterprise Management User Guide .
Tag	-	Tags a DB instance. This parameter is optional. Adding tags helps you better identify and manage your DB instances. Each DB instance can have up to 20 tags.
Quantity	1	You can buy DB instances in batches. The default value is 1 . The value ranges from 1 to 10.

3. Check the purchased DB instance.

Figure 2-5 Checking that the DB instance is created



4. Click the DB instance name to go to the **Basic Information** page.
5. In the **Network Information** area, obtain the private IP address and database port.

Figure 2-6 Viewing the private IP address and database port

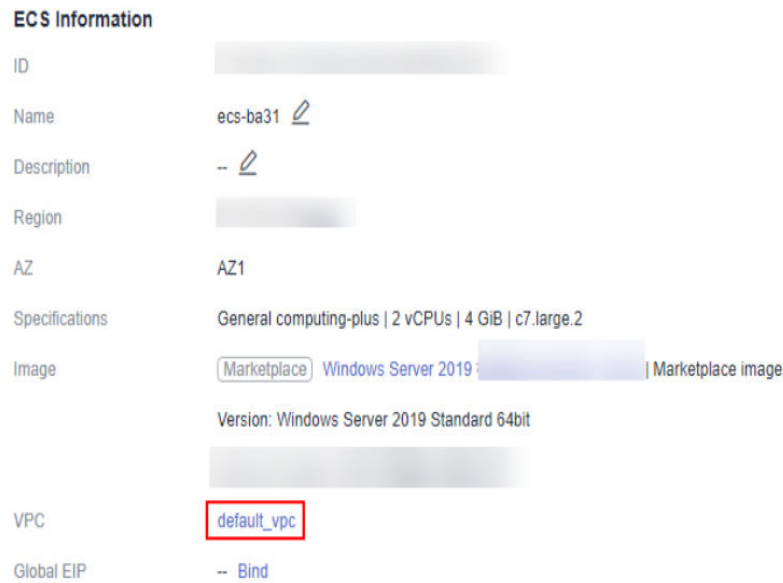


Step 2: Buy an ECS

1. **Log in to the management console** and check whether there is an ECS available.
 - If there is a Linux ECS, see [Buying a DB Instance and Connecting to It Using the mysql Client](#).
 - If there is a Windows ECS, go to **3**.

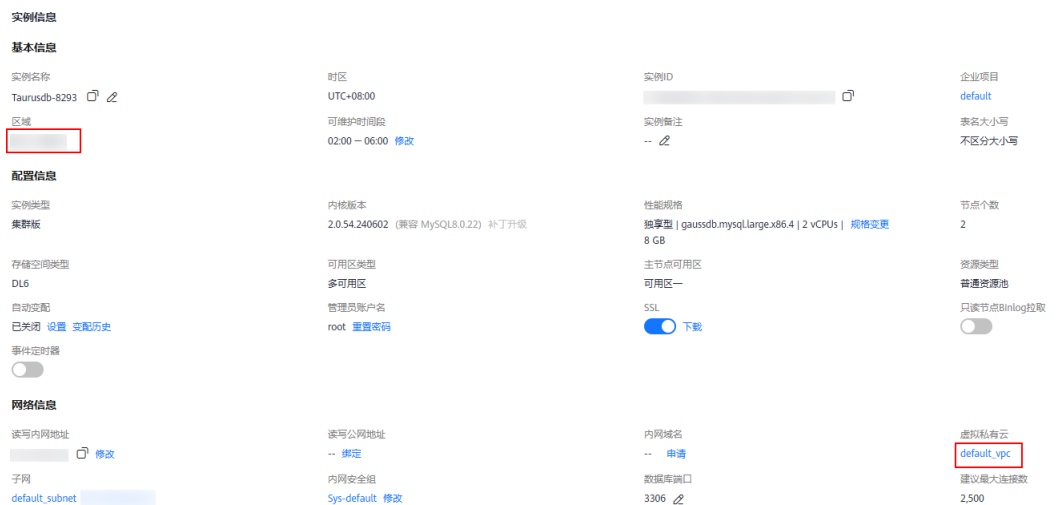
- If no ECS is available, go to [2](#).
- 2. Buy an ECS and select Windows as its OS.
To download the mysql client to the ECS, bind an EIP to the ECS. The ECS must be in the same region, VPC, and security group as the DB instance for mutual communications.
For details about how to purchase a Windows ECS, see [Purchasing an ECS in Elastic Cloud Server Getting Started](#).
- 3. On the **ECS Information** page, view the region and VPC of the ECS.

Figure 2-7 Viewing basic information about the ECS



- 4. On the **Basic Information** page of the DB instance, view the region and VPC of the DB instance.

Figure 2-8 Viewing the region and VPC of the DB instance



- 5. Check whether the ECS and DB instance are in the same region and VPC.

- If they are in different regions, buy another ECS or DB instance. The ECS and DB instance in different regions cannot communicate with each other. To reduce network latency, deploy your DB instance in the region nearest to your workloads.
- If they are in different VPCs, change the VPC of the ECS to that of the DB instance. For details, see [Changing a VPC](#).

Step 3: Test Connectivity and Install MySQL-Front

1. Log in to the ECS. For details, see [Logging In to a Windows ECS Using VNC](#) in *Elastic Cloud Server User Guide*.
2. On the ECS, check whether it can connect to the DB instance using the private IP address and port obtained in 5.

```
telnet private_IP_address port
```

NOTE

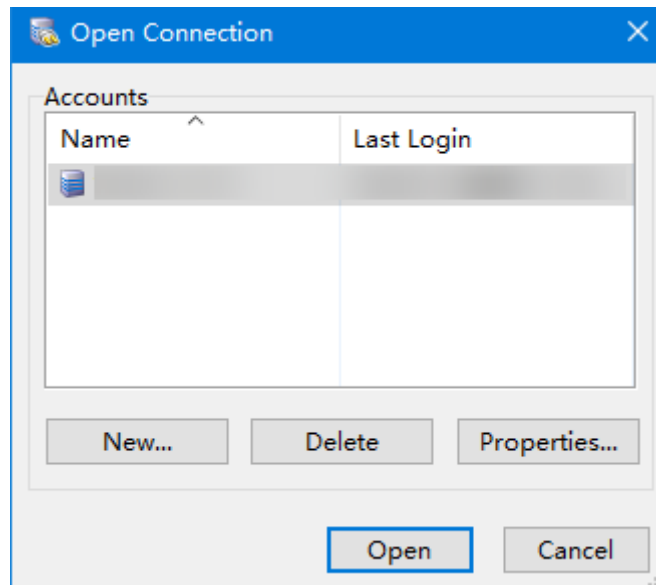
If the message "command not found" is displayed, install the Telnet tool based on the OS used by the ECS.

- If the ECS can connect to the DB instance, no further action is required.
 - If the ECS cannot connect to the DB instance, check the security group rules.
 - If in the security group associated with the ECS, there is no outbound rule with **Destination** set to **0.0.0.0/0** and **Protocol & Port** set to **All**, add the private IP address and port of the DB instance to the outbound rules.
 - Add the private IP address and port of the ECS to the inbound rules in the security group associated with the DB instance.
3. Open a browser, and download and install the MySQL-Front tool on the ECS (version 5.4 is used as an example).

Step 4: Use MySQL-Front to Connect to the DB Instance

1. Start MySQL-Front.
2. In the displayed dialog box, click **New**.

Figure 2-9 Creating a connection



3. Enter the information about the DB instance to be connected and click **Ok**.

Figure 2-10 Adding an account

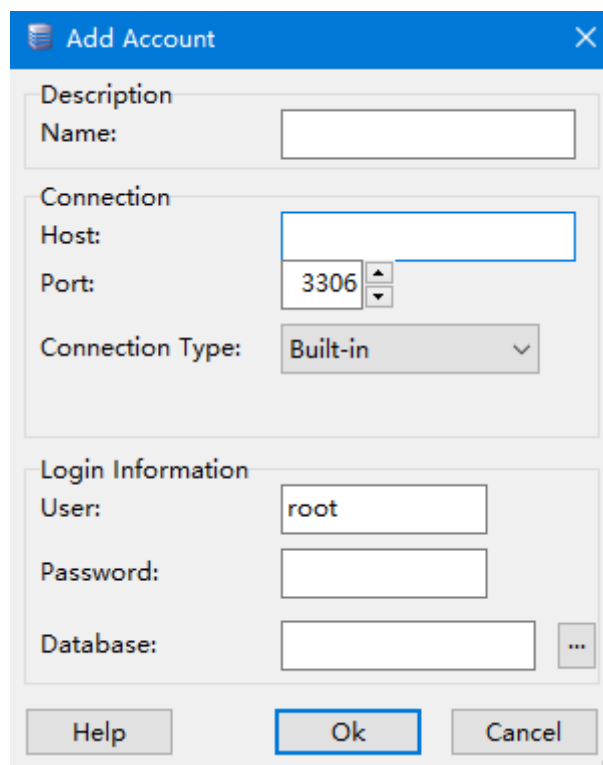
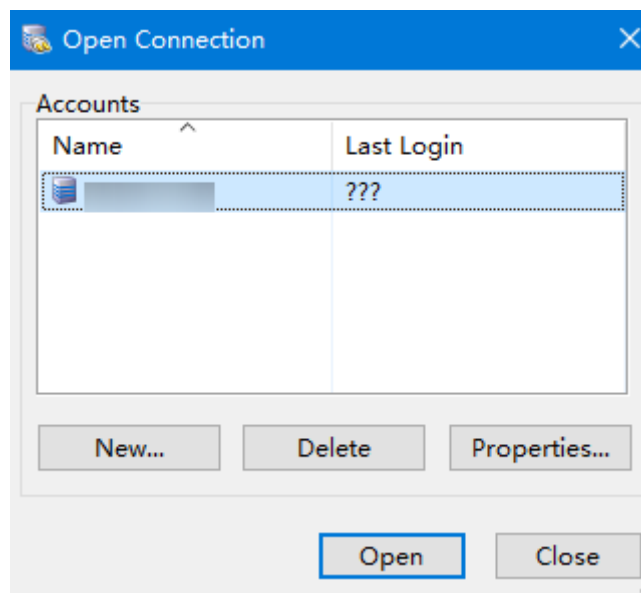


Table 2-1 Parameter description

Parameter	Description
Name	The name of a task for connecting to a database. If you do not specify this parameter, it will be the same as that configured for Host by default.
Host	The private IP address.
Port	The database port. The default value is 3306 .
User	The username used for accessing an instance. The default value is root .
Password	The password used for accessing an instance.

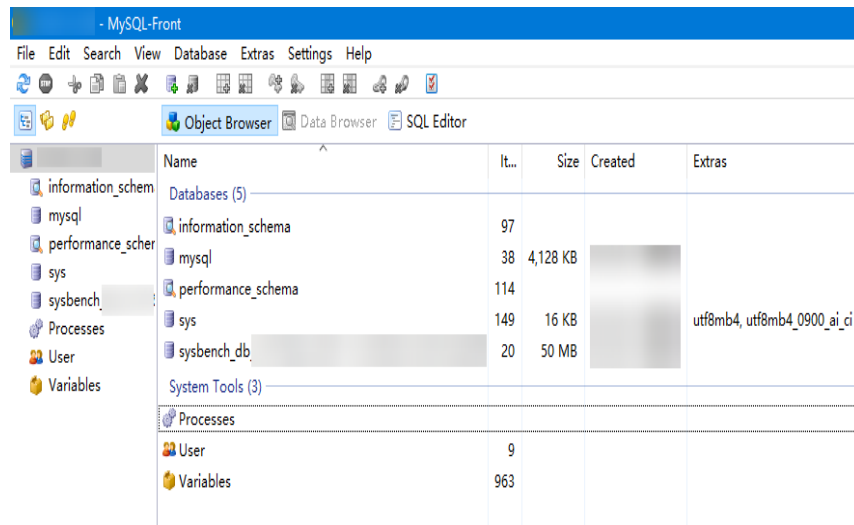
4. In the displayed window, select the connection that you created and click **Open**.

Figure 2-11 Opening a connection



5. If the connection information is correct, the DB instance is successfully connected.

Figure 2-12 Login succeeded



3 Getting Started with Common Practices

After purchasing and connecting to a TaurusDB instance, you can view common practices to better use TaurusDB.

Table 3-1 Common practices

Practice		Description
Read/ Write splitting	How to Use a Proxy Instance to Enable Read/Write Splitting	This practice describes how to enable read/write splitting, so that read and write requests can be automatically routed through a proxy address.
	Enabling Transaction Splitting for a Proxy Instance	This practice describes how to configure transaction splitting for a database proxy instance. With this function enabled, TaurusDB can route the read requests prior to write operations in a transaction to read replicas, reducing the pressure on the primary node.
	Changing Read Weights of Nodes	This practice describes how to configure read weights of the primary node and read replicas after read/write splitting is enabled.
Data backups	Configuring a Same-Region Backup Policy	This practice describes how TaurusDB automatically creates backups for a DB instance during a backup window and saves the backups based on the configured retention period.
	Creating a Manual Backup	This practice describes how to create manual backups for a DB instance. These backups can be used to restore data for improved reliability.

Practice		Description
	Configuring a Cross-Region Backup Policy	This practice describes how to store backups in a different region from the DB instance for disaster recovery. If a DB instance in one region fails, backups from another region can be used to restore the data to a new DB instance.
Data restorations	Restoring a DB Instance from Backups	This practice describes how to use an automated or manual backup to restore a DB instance to how it was when the backup was created. The restoration is at the instance level.
	Restoring a DB Instance to a Point in Time	This practice describes how to use an automated backup to restore instance data to a specified point in time.
	Restoring Tables to a Point in Time	This practice describes how to use an automated backup to restore table data to a specified point in time.
Data migration	From MySQL to TaurusDB	This practice describes how to use Data Replication Service (DRS) to migrate table, database, or instance data of the source to the destination TaurusDB.
	Migrating Data to TaurusDB Using mysqldump	This practice describes how to use mysqldump to copy data of the source to the destination TaurusDB.
	From ECS-hosted MySQL to TaurusDB	This practice describes how to use DRS to migrate data from ECS-hosted MySQL databases to TaurusDB.
	From Other Cloud MySQL to TaurusDB	This practice describes how to use DRS to migrate data from MySQL databases on other clouds to TaurusDB.