

TencentDB for MariaDB

Getting Started

Product Documentation



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Getting Started

Creating Instance

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This document describes how to create an instance in the TencentDB for MariaDB console.

Directions

1. Log in and go to the [TencentDB for MariaDB purchase page](#), select configuration items based on your actual needs, confirm that everything is correct, and click **Buy Now**.

Billing Mode: Monthly subscription and pay-as-you-go.

Region: Select a region where the instance will be deployed. We recommend that you use the same region as that of the CVM instance to be connected to.

AZ:

Primary AZ: The AZ where the primary node will be deployed. AZs are physical IDCs whose electric power facilities and networks are independent from each other within the same region. We recommend that you use the same AZ as that of the CVM instance to be connected to.

Replica AZ: The AZ where the replica node will be deployed. As cross-AZ access is supported, the replica AZ can be different from the primary AZ, and in this case, we recommend that you select the same AZ as that of your standby business system.

Network type: Select a network where the instance will be deployed. We recommend that you use the same network as the CVM instance to be connected to. Once selected, a VPC cannot be changed. For more information on VPC operations, see [Creating VPC](#).

Architecture: For more information, see [Instance Architecture](#). The more the replicas, the higher the availability.

Database Version: MySQL 8.0.18 (fully compatible with MySQL 8.0), Percona 5.7.17 (fully compatible with MySQL 5.7), and MariaDB 10.1.9 (fully compatible with MySQL 5.6).

Instance Specs: This represents different performance levels and basic prices. For more information, see [Billing Overview](#).

Disk: SSD disk (local disk) is used by default.

Project: If instances need to be managed by different teams, assign the instances to the projects of different teams accordingly.

Quantity: This represents the number of instances that can be purchased at a time. To avoid faulty operations, an upper limit has been set for this parameter. If you want to purchase more instances, make multiple purchases.

2. Verify all the information is correct in the pop-up window and click **Buy Now** to purchase.

3. After making the payment, return to the instance list. After the status of the instance changes to **Running**, it can be used normally.

Managing Account

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You can create an account for connection to a TencentDB for MariaDB instance. This document describes how to create an account in the TencentDB for MariaDB console and modify account permissions.

Note:

The account cannot be created or modified through command lines `insert into mysql.user` , `grant` , or `drop` currently.

Creating an account

1. Log in to the [TencentDB for MariaDB console](#). Click an instance ID or **Manage** in the **Operation** column to enter the instance management page.
2. On the instance management page, select **Account Management** and click **Create Account**.
3. In the pop-up dialog box, enter the account name, primary server, password, and remarks, and click **Confirm and Go Next**.

Create as Read-Only Account: If you check this option, the account can only use read-only requests (select).

Note:

You need to set permissions separately for different primary server IPs under the same account. You can use the **Clone Account** feature in account management to quickly clone similar accounts and set their permissions.

****Primary Server**:** It is similar to a host, and supports IP, IP range, and %. % means all the IP addresses within a range. For example, to support all IPs from 10.10.10.1 to 10.10.10.254, enter `10.10.10.%` .


Maximum Connections: The number of concurrent connections under this account, which is subjected to the maximum connections of the instance and can be set when creating an account for TencentDB for MariaDB 5.7 and 8.0.


Create ✕



Account Name *
The account name contain 1-32 letters, digits, or symbols (_), and must start with a letter.

Create as Read-Only Account Yes No
If yes, you can set the parameters of the read-only account after clicking OK.

Host *
It is in the format of an IP ending with %. You can also enter % or 127.0.0.1.

Set Password * 
The password must contain 8-32 characters in all of the following four types: lowercase letters, uppercase letters, digits, and symbols (0~!@#\$%^&*~+=_[]:;<>.,?/). It cannot start with a slash (/).

Confirm Password * 
The password must contain 8-32 characters in all of the following four types: lowercase letters, uppercase letters, digits, and symbols (0~!@#\$%^&*~+=_[]:;<>.,?/). It cannot start with a slash (/).

Maximum Connections  
If left empty or `0` is passed in, the "max_connections" parameter will take effect.

Remarks
Up to 256 characters for remarks

4. To set the account permission as Read-Only, you need to set the connection of the read-only account.

5. In the pop-up dialog box, set the database permissions and click **Save Settings**, or click **Set Later**.

Setting permissions

1. On the account management page, click **Modify Permissions** in the "Operation" column.

| Account Name | Master Server | Account Type | Creation Time | Update Time |
|--------------|---------------|-----------------|---------------------|---------------------|
| | | General Account | 2020-07-16 10:38:05 | 2020-07-16 10:38:05 |

2. In the pop-up dialog box, grant permissions based on your needs and click **Save Settings**.

The permissions of MariaDB are defined at the object level, including 19 permissions of database. You can set permissions for objects such as tables, views, functions and triggers.

Note:

You need to create a database before setting the object-level permissions.

Modify Permissions

Set Database permission [Refresh](#)

Global Privileges

Object Level Privilege

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> ALTER | <input type="checkbox"/> ALTER ROUTI |
| <input checked="" type="checkbox"/> CREATE | <input type="checkbox"/> CREATE ROU |
| <input checked="" type="checkbox"/> CREATE TEMPORARY TABLES | <input type="checkbox"/> CREATE VIEW |
| <input type="checkbox"/> DELETE | <input type="checkbox"/> DROP |
| <input type="checkbox"/> EVENT | <input type="checkbox"/> EXECUTE |
| <input type="checkbox"/> INDEX | <input type="checkbox"/> INSERT |
| <input type="checkbox"/> LOCK TABLES | <input type="checkbox"/> PROCESS |
| <input type="checkbox"/> REFERENCES | <input type="checkbox"/> REPLICATION |
| <input type="checkbox"/> REPLICATION SLAVE | <input type="checkbox"/> SELECT |
| <input type="checkbox"/> SHOW DATABASES | <input type="checkbox"/> SHOW VIEW |
| <input type="checkbox"/> TRIGGER | <input type="checkbox"/> UPDATE |

Select All

Save Settings

Set Later

Accessing Instance

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Access Methods

TencentDB for MariaDB can be accessed in the following ways:

Private network access: You can use a CVM instance to access the private network address that is automatically assigned to a TencentDB instance. Both instances should reside in the same region, be under the same account, and use the same type of networks (both in the classic network or in the same [VPC](#)).

Public network access: You can install a database client on a Windows or Linux server in the public network and use it to access the public network address of the TencentDB for MariaDB instance .

Currently, public network access can be enabled in Guangzhou, Shanghai, Beijing, Chengdu, and Nanjing regions.

For public network access, the public IP of the database instance needs to be enabled, which may expose your database service to attacks or intrusions on the public network. Therefore, it is recommended to log in to the database over the private network.

To enable public network access, you need to associate the instance with a security group. You also need to configure the necessary policies in advance, such as configuring the information database access source in the inbound rules of the security group and opening the protocol ports (both the private and public network ports) as instructed in [Security Group Configuration](#).

Prerequisites

No matter whether you access the instance from the private or public network, you need to [create an account](#) first.

Database Access

Private network access

1. For more information on how to log in to a CVM instance, see [Customizing Windows CVM Configurations](#) or [Customizing Linux CVM Configurations](#).
2. Select the connection method based on the CVM operating system.

Login on Windows

- (1) Download and install a MariaDB client. [SQLyog](#) is recommended.

(2) Open SQLyog, enter the private IP, port number of the TencentDB for MariaDB instance, the database account, and the password.

MySQL Host Address: Private IP.

Username: Username created in the prerequisites section.

Password: Password of the username.

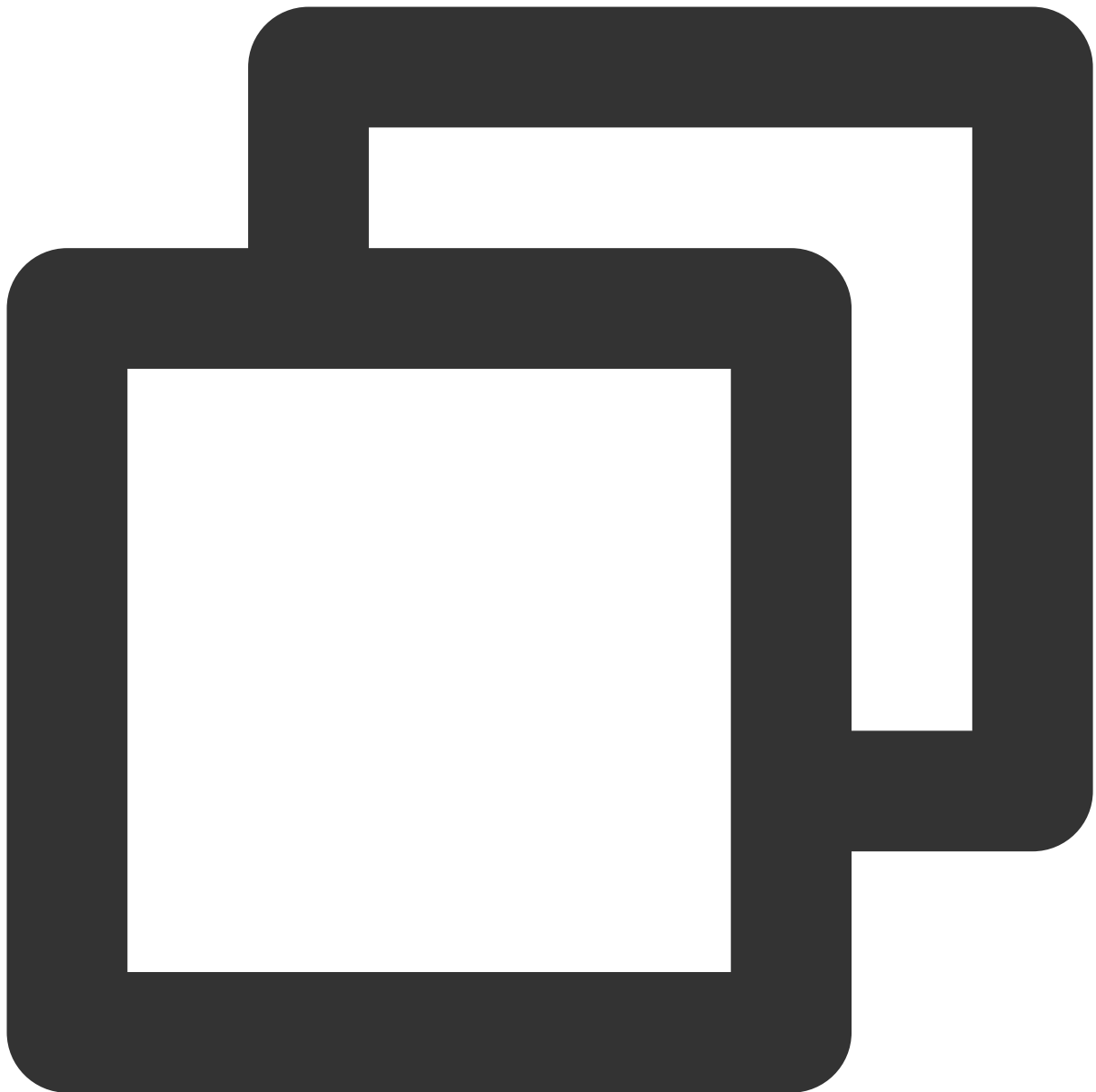
Port: Port corresponding to the private IP.

(3) After successful login, a page will appear, where you can view the modes and objects of the MariaDB database, create tables, and perform operations such as data insertion and query.

Login on Linux

(1) Taking CentOS 7.2_64, you can use the built-in package manager YUM to download and install the MySQL client from the Tencent Cloud image source.

Install the client by running the following command:



```
sudo yum install mysql
```

The details are as follows:

```
CentOS Linux 7 (Core)
Kernel 3.10.0-327.36.3.el7.x86_64 on an x86_64

UM_135_34_centos login: root
Password:
[root@UM_135_34_centos ~]# yum install mysql
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
Resolving Dependencies
--> Running transaction check
--> Package mariadb.x86_64 1:5.5.52-1.el7 will be installed
--> Processing Dependency: mariadb-libs(x86-64) = 1:5.5.52-1.el7 for package: 1:mariadb-5.5.52-1.el7.x86_64
--> Running transaction check
--> Package mariadb-libs.x86_64 1:5.5.50-1.el7_2 will be updated
--> Package mariadb-libs.x86_64 1:5.5.52-1.el7 will be an update
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository
=====
Installing:
mariadb x86_64 1:5.5.52-1.el7 os
Updating for dependencies:
mariadb-libs x86_64 1:5.5.52-1.el7 os

Transaction Summary
=====
Install 1 Package
Upgrade ( 1 Dependent package)

Total download size: 9.5 M
Is this ok [y/d/N]: y
Downloading packages:
Delta RPMs disabled because /usr/bin/applydeltarpm not installed.
(1/2): mariadb-libs-5.5.52-1.el7.x86_64.rpm | 761 kB 00:
(2/2): mariadb-5.5.52-1.el7.x86_64.rpm | 8.7 MB 00:
-----
Total 8.1 MB/s | 9.5 MB 00:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Updating : 1:mariadb-libs-5.5.52-1.el7.x86_64
  Installing : 1:mariadb-5.5.52-1.el7.x86_64
  Cleanup : 1:mariadb-libs-5.5.50-1.el7_2.x86_64

Installed:
mariadb.x86_64 1:5.5.52-1.el7

Dependency Updated:
mariadb-libs.x86_64 1:5.5.52-1.el7

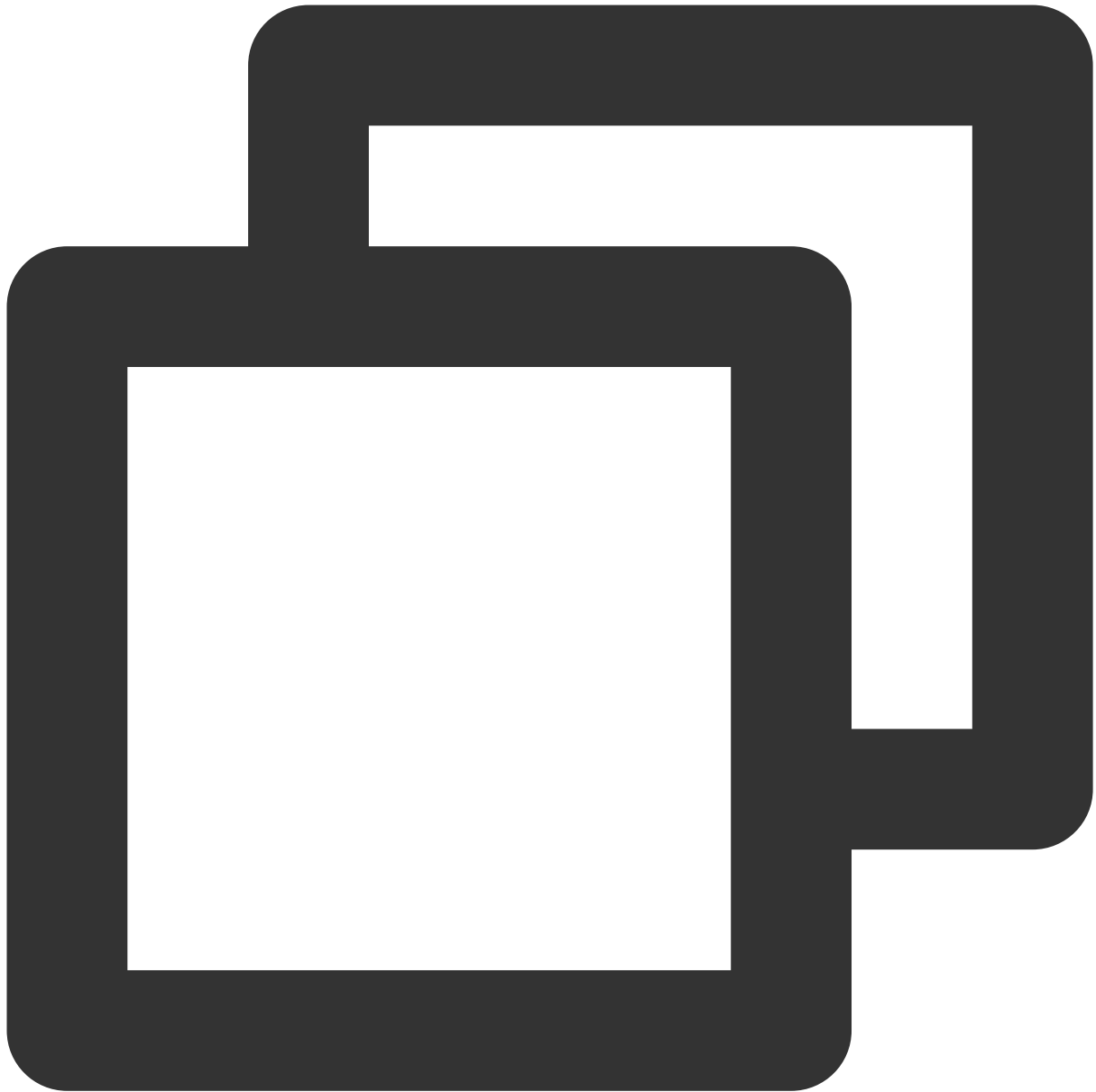
Complete!
[root@UM_135_34_centos ~]#
```

Log in to the CVM instance

Install the MySQL client

If this message is displayed, the MySQL client is installed successfully

(2) Use the MySQL command line tool to log in to the TencentDB for MariaDB



```
mysql -h hostname -u username -p
```

Replace "hostname" with the private IP address of the target TencentDB for MariaDB instance and "username" with the username previously created, and enter its password when prompted with "Enter password:".

(3) Under the "MySQL>" prompt, you can send a SQL statement to the MariaDB server for execution. For specific command lines, see [here](#).

Below uses `show databases;` as an example:

```
MySQL [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| test |
+-----+
4 rows in set (0.00 sec)
```

Public network access

1. Get the public network address of database.

(1) Log in to the [TencentDB for MariaDB console](#). Click an instance ID or **Manage** in the **Operation** column.

(2) On the instance details page, click **Enable** after the public network address to enable it.

(3) Once enabled successfully, the public IP can be viewed.

2. Log in to the database

Login on Windows

(1) Download and install a MariaDB client. [SQLyog](#) is recommended.

(2) Open SQLyog, enter the public network domain name, port number of the TencentDB for MariaDB instance, the database account, and the password.

MySQL Host Address: Enter the public network domain name.

Username: Username created in the prerequisites section.

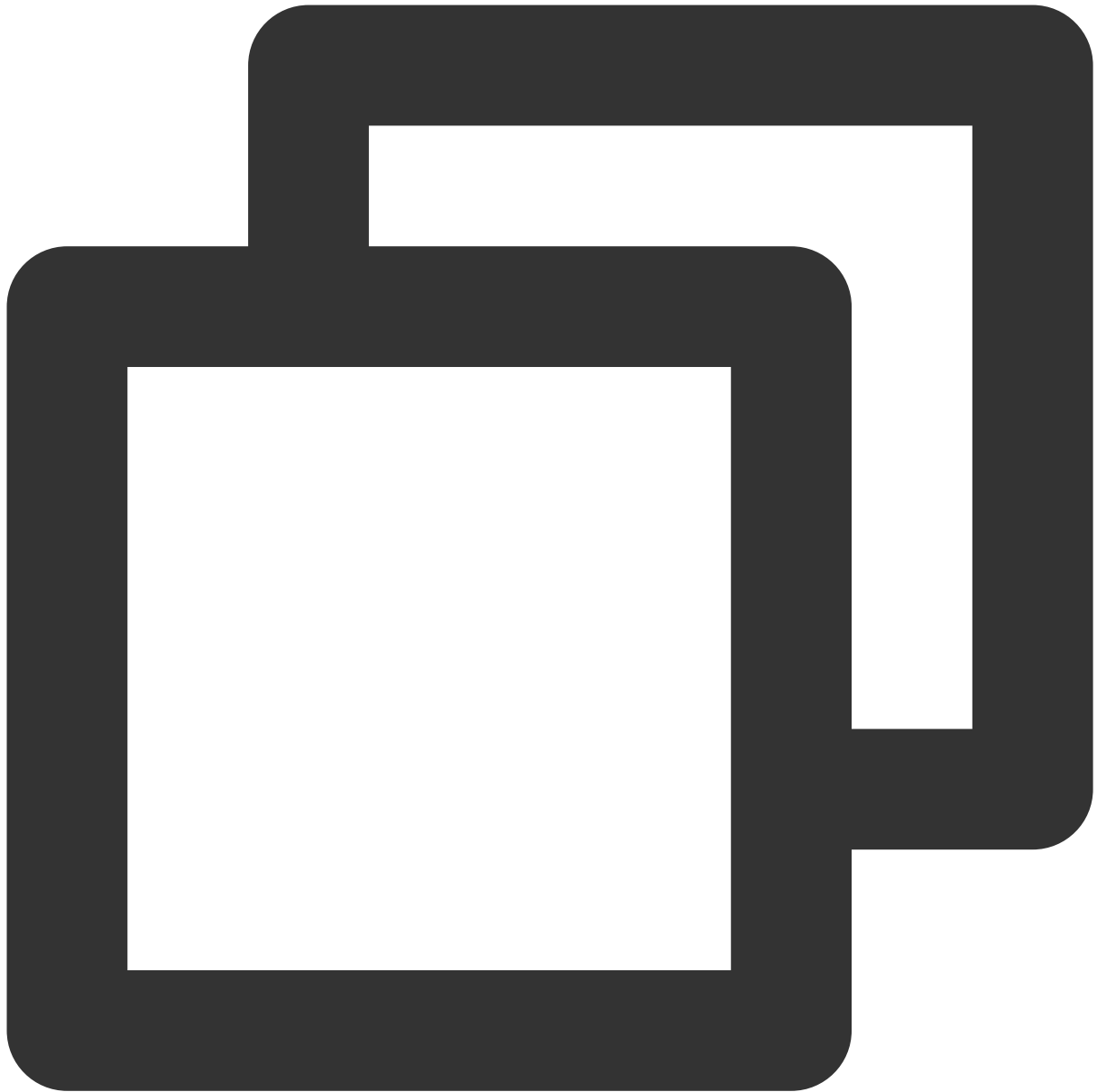
Password: Password of the username.

Port: Port number corresponding to the public network domain name.

(3) After successful login, a page will appear, where you can view the modes and objects of the MariaDB database, create tables, and perform operations such as data insertion and query.

Login on Linux

(1) Taking CentOS 7.2_64, you can download MySQL client at the official website and install it.



```
sudo yum install mysql
```

(2) Use the MySQL command line tool to log in to the TencentDB for MariaDB. Commands:



```
mysql -h hostname -P port -u username -p
```

Replace "hostname" with the public network domain name of the target TencentDB for MariaDB instance and "username" with the username previously created, and enter its password when prompted with "Enter password:".

```
[root@UM_0_9_centos ~]# mysql -h tdsq1-6gy3mopk.gz.cdb.myqcloud.com -P 114 -u test123 -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 559397151
Server version: 10.0.10-proxy Source distribution

Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]>
```

Log in to the Tencent
for MariaDB instar

(3) Under the “MySQL>” prompt, you can send a SQL statement to the MariaDB server for execution. For specific command lines, see [here](#).

Below uses `show databases;` as an example:

```
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+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| test |
+-----+
4 rows in set (0.00 sec)
```