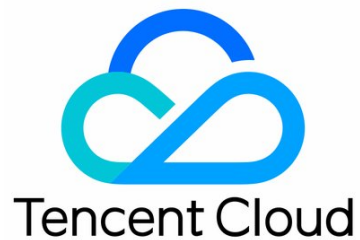


TencentDB for MariaDB

Getting Started



Copyright Notice

©2013–2023 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

Trademark Notice

 Tencent Cloud

All trademarks associated with Tencent Cloud and its services are owned by Tencent Cloud Computing (Beijing) Company Limited and its affiliated companies. Trademarks of third parties referred to in this document are owned by their respective proprietors.

Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

Contents

Getting Started

Creating Instance

Managing Account

Connecting to Instance

Getting Started

Creating Instance

Last updated: 2023-08-30 16:20:52

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

Instructions

1. Log in to the [TencentDB for MariaDB purchase page](#), select the database instance information as needed, confirm the details, and click **Buy Now**.
 - **Billing Mode:** monthly subscription and pay-as-you-go billing are supported.
 - **Region:** select a region where the instance will be deployed. We recommend that you use the same region as the CVM instance to be connected to.
 - **Availability Zone:**
 - **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 you select the same AZ as that of your standby business system.
 - **Network Type:** select the network for the instance. We recommend that you use the same network as the CVM instance to be connected to. The VPC network cannot be changed once selected. For VPC-related operations, see [Managing Private Networks](#).
 - **Instance Version:** For more information, see [Instance Architecture](#). The more replicas, the higher the availability.
 - **Database Version:** Three versions are currently supported: 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 Specification:** Instance specifications represent different performance levels and pricing bases. For more information, see [Billing Overview](#).
 - **Disk:** SSD (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, please make multiple purchases.
2. On the confirmation page, review the details and click **Submit Order** to proceed with the payment.
3. After completing the payment, return to the instance list. Once the instance status changes to **Running**, you can proceed with subsequent operations.

Managing Account

Last updated: 2023-08-30 16:21:15

Create an account to connect to a MariaDB instance. This document describes how to create an account and modify its permissions through the TencentDB for MariaDB console.

Note

Currently, creating and modifying accounts through command lines such as `insert into mysql.user` , `grant` , and `drop` are not supported.

Create account

1. Log in to the [TencentDB for MariaDB console](#) . In the instance list, click an instance ID or **Manage** in the **Operation** column to enter the instance management page.
2. On the instance management page, select the **Account Management** tab and click **Create Account**.
3. In the pop-up window, enter the account name, host, password, and remarks. Click **Confirm**, **Next**.
 - **Create as read-only account**: Select **Yes** to indicate that the account can only use read requests (select).

Note

For the same account name with different host IPs, permissions need to be set independently. You can quickly clone similar accounts and set permissions using the **Clone Account** feature in Account Management.

- **Host**: Can be understood as HOST, supporting IP, IP range, and % formats. The % symbol represents a wildcard. For example, to support all host IPs from 10.10.10.1 to 10.10.10.254, you can enter 10.10.10.%.
- **Connection Limit**: MariaDB versions 5.7 and 8.0 support setting the maximum concurrent connection limit for an account during account creation. The maximum number of connections for an account is subject to the instance's maximum connection limit.

Create ×

Account Name *

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 *

Host

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

Set Password *

Enter the 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 *

Please enter confirm pas: 

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

—

0

+

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

Remarks

Enter remarks

Up to 256 characters for remarks

Confirm and Go Next

Cancel

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

Read-Only Account Settings

Account Name

cycloneli

Host

%

Read-Only Request Allocation Policy *

☒ Primary Server
 ☐ Report Errors
 ☐ Read Only from Replica Server

If "Primary Server" is selected, read from the primary server when the delay of replica server times out.

If "Report Errors" is selected, report errors for the replica delay.

If "Read Only from Replica Server" is selected, ignore the delay parameter and always read from replica server (generally used to fetch binlog for sync).

If your instance architecture is 1-source-1-replica, please select "Read Only from Replica Server" carefully to avoid the impact on the backup tasks and availability of the replica server by high-load tasks such as large transactions.

Specified Read-Only Replica Server *

☒

When the specified read-only replica server is enabled, the read-only requests will be automatically disconnected and will not be switched to another replica server if the source-replica delay exceeds the delay parameter.

When the specified read-only replica server is disabled, another available replica server will be automatically selected if the source-replica delay exceeds the delay parameter.

Read-Only Replica Server Delay Parameter *

-

10

+

sec

If the replica server delay exceeds this parameter value, the replica server is considered faulty. We recommend that you set this parameter to a value larger than 10.

OK

Cancel

5. In the pop-up window, configure the database permissions and click **Save Settings**, or you can choose to **Set Later**.

Configure permissions

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

Instance Details	Shard Management	Monitoring and Alarms	Parameter Settings	Account Management	Data Security	Backup and Restoration	Performance Optimization
Create Account							
Account Name	Host	Account Type	Read-Only Request Alloca...	Creation Time	Update Time	Remarks	Operation
	%	General Account	None				Modify Permissions Clone Account More ▾

2. In the pop-up dialog, allocate permissions as needed and click **Save Settings** to complete the permission assignment. MariaDB permissions are object-level permissions, including 19 common database permissions. 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.

Account name: cycloneli@%

Modify the database permissions for one or more objects

Global Privileges

Object Level Privilege

☒ ALTER

☐ ALTER ROUTINE

☐ CREATE

☐ CREATE ROUTINE

☐ CREATE TEMPORARY TABLES

☐ CREATE VIEW

☐ DELETE

☐ DROP

☐ EVENT

☐ EXECUTE

☐ INDEX

☐ Select All

Objects selected and permissions modified

Global Privileges

☒ ALTER

☐ ALTER ROUTINE

☐ CREATE

☐ CREATE ROUTINE

☐ CREATE TEMPORARY TABLES

☐ CREATE VIEW

☐ DELETE

☐ DROP

☐ EVENT

☐ EXECUTE

☐ INDEX

Refresh Reset

Modify

Cancel Modification

Connecting to Instance

Last updated: 2023-08-31 15:15:14

Access type

TencentDB for MariaDB can be accessed in the following ways:

- **Private Network Access:** Access the private network address automatically assigned to TencentDB for MariaDB using a CVM instance. The CVM and TencentDB instances must be in the same region, under the same account, and have the same network type (either both in the classic network or both in the same [Virtual Private Cloud \(VPC\)](#)).
- **Public Network Access:** Install a database client on a Windows or Linux host in the public network to access the public network address of TencentDB for MariaDB.

Note

- Currently, public network access is supported in the following regions: Guangzhou, Shanghai, Beijing, Chengdu, Nanjing, Hong Kong, Chongqing, Singapore, Silicon Valley (USA), Seoul, Japan, Frankfurt, and Virginia.
- Enabling public network access for your database instance exposes the service to the public network, which may lead to potential intrusions or attacks. It is recommended to use private network access for logging into the database.
- To enable public network access, you must bind a security group and configure the appropriate policies in advance. Configure the database access source information in the security group's inbound rules and open the protocol ports (both private and public network ports). For more information, see [Configuring Security Group for TencentDB](#).

Preparations

Regardless of whether you are accessing from a private or public network, you must first [create an account](#).

Database Access

Private network access

1. To log in to a CVM, please refer to [Getting Started with Windows CVM](#) or [Getting Started with Linux CVM](#).
2. Choose the connection method based on the CVM's operating system.

Log in from a Windows system

3. Download and install the MariaDB client, we recommend [downloading SQLyog](#).
4. Open SQLyog and enter the private IP and port number of the TencentDB for MariaDB instance, along with the database username and password.
 - MySQL host address: Private IP.
 - Username: Username created in the prerequisites section.
 - Password: Password of the username.
 - Port: The port corresponding to the private IP address.
5. Upon successful login, the interface will appear. You can view various modes and objects of the MariaDB database. You can start creating tables, inserting data, and performing queries, among other operations.

Log in from a Linux System

6. Using a CVM instance with CentOS 7.2 64-bit operating system as an example, the built-in package manager Yum is utilized to download and install the MySQL client from Tencent Cloud's image repository.
Execute the following command to install the client:

```
sudo yum install mysql
```

See below:

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

UM_213_43_centos login: root
Password:
[root@UM_213_43_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]:
```

7. Use the MySQL command-line tool to log in to the MariaDB database.

```
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:".

8. At the MySQL> prompt, you can send SQL statements to the MariaDB server you want to execute. For specific command lines, please refer to [this website](#).

In the following example, we use the `show databases;` command:

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

Internet access

1. Get the public network address of database.
2. Log in to the [TencentDB for MariaDB console](#). In the instance list, click an **instance ID** or **Manage** in the **Operation** column.
3. On the instance details page, click **Enable** next to the public network address to enable public network access.
4. Upon successful activation, the public network address will be visible.
5. Log in to the database.

Log in from a Windows system

6. Download and install the MariaDB client. We recommend you to [download SQLyog](#).
7. Open SQLyog and enter the public domain name and port number of the MariaDB database instance, along with the database account and password.
 - MySQL Host Address: Enter the public domain name.
 - Username: Username created in the prerequisites section.

- Password: Password of the username.
- Port: Port number corresponding to the public network domain name.

8. Upon successful login, the interface will appear as shown in the figure. On this page, you can view various modes and objects of the MariaDB database. You can begin creating tables, inserting data, and performing queries, among other operations.

Log in from a Linux System

9. Using a CentOS 7.2 64-bit CVM as an example, download and install the MySQL client from the official website. The specific command is:

```
sudo yum install mysql
```

10. Use the MySQL command-line tool to log in to the MariaDB database. The relevant command is:

```
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@VM_3_86_centos ~]# mysql -hcdcdbt-1234567890.myqcloud.com -P12 -uexample1 -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 493901845
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)]> show databases;
+-----+
| Database |
+-----+
| SysDB    |
| information_schema |
| mysql    |
| performance_schema |
| test     |
+-----+
5 rows in set (0.01 sec)

MySQL [(none)]> _
```

11. At the MySQL > prompt, you can send SQL statements to the MariaDB server you want to execute. For specific command lines, please refer to [this website](#).

In the following example, we use the `show databases;` command:

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