

TencentDB for MariaDB

Getting Started

Product Documentation



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Getting Started

Creating Instance

Last updated : 2021-04-29 15:01:16

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:** 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.
 - Availability zones (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 you select the same AZ as that of your standby business system.
 - **Network:** select a network where the instance will be deployed. We recommend that you use the same network as that of the CVM instance to be connected to. Once selected, a VPC cannot be changed. For more information on VPC operations, see [Managing VPC Instances](#).
 - **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, please 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, wait for the instance status to become **Uninitialized**, and initialize the instance.

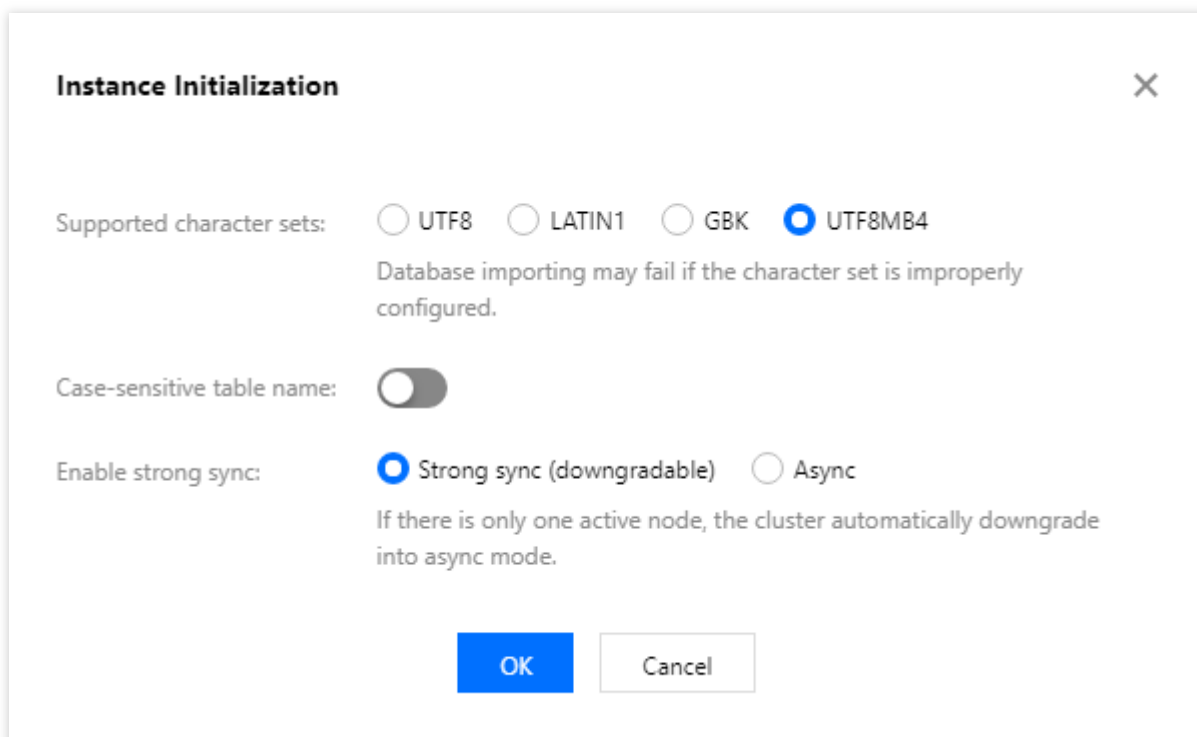
Initializing Instance

Last updated : 2020-12-02 17:09:13

This document describes how to initialize an instance in the TencentDB for MariaDB Console.

Directions

1. Log in to the [TencentDB for MariaDB Console](#), select an instance in **Uninitialized** status in the instance list, and select **More > Initialize** in the "Operation" column.
2. In the pop-up dialog box, configure initialization parameters and click **OK** to start initialization.
 - Supported Character Set: select the character set supported by the MariaDB database.
 - Table Name Case Sensitivity: specify whether a table name is case-sensitive, which is "yes" by default.
 - Enable Strong Sync: enable strong sync to ensure data consistency in the slave in case the master fails.



Instance Initialization ✕

Supported character sets: UTF8 LATIN1 GBK UTF8MB4

Database importing may fail if the character set is improperly configured.

Case-sensitive table name:

Enable strong sync: Strong sync (downgradable) Async

If there is only one active node, the cluster automatically downgrade into async mode.

OK Cancel

3. Return to the instance list. After the status of the instance changes to **Running**, it is initialized successfully.

<input type="checkbox"/>	Instance ID / Name	Running Sta...	Region	Instance Type	Project	Shard Count	Configuration	Database Version	Private IP	Billing Mode
<input type="checkbox"/>		Running	South China (Guangzhou)	Master Instance	DEFAULT PROJECT	2	Standard Edition (1 master-1 slave) High IO Edition - 8-core, 16 GB memory/1000 GB storage space Classic Network			Pay as you go Creation Time: 2020-09-04 15:04:59

Managing Account

Last updated : 2020-12-02 17:06:29

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 [MariaDB Console](#) and click the instance name or **Manage** in the "Operation" column to enter the instance management page.
2. Select the **Manage Account** tab and click **Create**.
3. In the pop-up dialog box, enter the account name, primary server, password, and remarks, and click **Confirm and Go Next**.
 - **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.%` .
 - **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.

Create ✕

Account Name *

Account ID must be a combination of 1-32 chars comprised of digits, letters and special chars. It should start with a letter. The special chars are underscores and hyphens.

Create as read-only account * Yes No

If yes, you can set the parameters of the read-only account after clicking OK.

Master Server *

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

Set Password *

The password should be a combination of 8-32 chars comprised of at least two of the following types: uppercase/lowercase letters, digits, and special symbols (_ , + , - , & , = , ! , @ , # , \$, % , ^ , * , ()).

Confirm Password *

The password should be a combination of 8-32 chars comprised of at least two of the following types: uppercase/lowercase letters, digits, and special symbols (_ , + , - , & , = , ! , @ , # , \$, % , ^ , * , ()).

Remarks

Up to 256 chars

- 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	Remarks	Operation
		General Account	2020-07-16 10:38:05	2020-07-16 10:38:05		Modify Permissions Clone Account More ▾

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](#)
[Reset](#)

Global Privileges

[+](#) Object Level Privilege

<input checked="" type="checkbox"/> ALTER	<input type="checkbox"/> ALTER ROUTINE
<input checked="" type="checkbox"/> CREATE	<input type="checkbox"/> CREATE ROUTINE
<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 CLIENT
<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

Last updated : 2020-12-16 17:42:41

Access Methods

TencentDB for MariaDB can be accessed in the following ways:

- **Private network access:** a CVM instance can be used 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 basic network or in the same [VPC](#)).
- **Public network access:** on a Windows or Linux server in the public network, install a database client to access the public network address of the TencentDB for MariaDB instance.

Note :

For public network access, the database instance's public IP 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.

Prerequisites

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

Accessing a Database

Private network access

1. Log in to the CVM instance. For more information, please see [Getting Started with Windows CVM](#) or [Getting Started with Linux CVM](#).
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, and database account/password of the

TencentDB for MariaDB instance.

- 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, the following page will appear, where you can view the modes and objects of the TencentDB for MariaDB instance, create tables, and perform **operations** such as data insertion and query.

Login on Linux

1) In the following example, the CVM instance runs on CentOS 7.2 64-bit. You can use Yum, the package manager built in CentOS, to download and install the MySQL client from the Tencent Cloud image source.

Install the client by running the following command:

```
yum install mysql
```

The command is executed as shown below:

```
CentOS Linux 7 (Core)
Kernel 3.10.0-327.36.3.el7.x86_64 on an x86_64
UM_135_34_centos login: root Log in to the CVM instance
Password:
root@UM_135_34_centos ~]# yum install mysql Install the MySQL client
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        Size
=====
Installing:
mariadb                                x86_64        1:5.5.52-1.el7   os                8.7 M
Updating for dependencies:
mariadb-libs                            x86_64        1:5.5.52-1.el7   os                761 k

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 00:00:00
(2/2): mariadb-5.5.52-1.el7.x86_64.rpm      | 8.7 MB 00:00:01
-----
Total                                     8.1 MB/s | 9.5 MB 00:00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Updating : 1:mariadb-libs-5.5.52-1.el7.x86_64 1/3
  Installing : 1:mariadb-5.5.52-1.el7.x86_64 2/3
  Cleanup    : 1:mariadb-libs-5.5.50-1.el7_2.x86_64 3/3
Installed:
  mariadb.x86_64 1:5.5.52-1.el7

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

Complete! If this message is displayed, the MySQL client is installed successfully
root@UM_135_34_centos ~]# _
```

2) Log in to the TencentDB for MariaDB instance by using the MySQL command line tool.

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

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

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

Take `show databases;` for example as below:

```
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 the instance.
 - 1) Log in to the [TencentDB for MariaDB Console](#) and click an instance name or **Manage** in the "Operation" column.
 - 2) On the instance details page, click **Enable** after the public network address to enable it.
 - 3) After the public network address is enabled successfully, it will be displayed.
2. Log in to the instance.

Login on Windows

- 1) Download and install a MariaDB client. [SQLyog](#) is recommended.
- 2) Open SQLyog. Enter the public network domain name, port number, and database account/password of the TencentDB for MariaDB instance.
 - MySQL Host Address: 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, the following page will appear, where you can view the modes and objects of the TencentDB for MariaDB instance, create tables, and perform operations such as data insertion and query.

Login on Linux

- 1) In the following example, the CVM instance runs on CentOS 7.2 64-bit. Download the MySQL client from the official website and install it with the following command:

```
yum install mysql
```

2) Log in to the TencentDB for MariaDB instance by using the MySQL command line tool. The command is as follows:

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

Replace "hostname" with the public network domain name of the target TencentDB for MariaDB instance, replace "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 TencentDB
for MariaDB instance**

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

Take `show databases;` for example as below:

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