

How to Restore the Database in MariaDB?

written by sysadmin | 24 September 2025

[The previous articles](#) have explained how to perform a database backup in MariaDB. This article will explain how to perform a database restore in MariaDB.

Problem

How to restore the database in MariaDB?

Solution

There are several methods to perform the database restore in MariaDB:

1. Restore the entire database

To restore the backup file of the entire database, use the format below:

```
mysql -u username -p < backup_file.sql
```

Use the command below if your backup file name is backup_all_databases.sql:

```
mysql -u root -p < backup_all_databases.sql
```

After you run the above command, the database will be restored in MariaDB as shown in the image below:

```

sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
sysadmin@ubuntu2404:~$ mysql -u root -p < backup_all_databases.sql
Enter password:
sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
+-----+
| SCHEMA_NAME |
+-----+
| nodes       |
| instances   |
+-----+
sysadmin@ubuntu2404:~$

```

Restore all databases in MariaDB

2. Restore a database

Use the following format to restore a database's backup file:

```
mysql -u username -p -e'create database new_database;' < backup_file.sql
```

If you want to restore the nodes database, then you can use the command below:

```
mysql -uroot -p -e'create database nodes;' < backup_nodes_db.sql
```

After you run the command above, MariaDB will restore the database like in the image below:

```

sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
sysadmin@ubuntu2404:~$ mysql -uroot -p -e'create database nodes;' < backup_nodes_db.sql
Enter password:
sysadmin@ubuntu2404:~$
sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
+-----+
| SCHEMA_NAME |
+-----+
| nodes       |
+-----+
sysadmin@ubuntu2404:~$

```

Restore a database in MariaDB

3. Restore the table(s)

If you want to restore the table(s), you can follow the format below:

```
mysql -u username -p db_name < table_backup_file.sql
```

So, use the command below if you want to restore the tables

in the nodes database:

```
mysql -u root -p nodes < table_backup_file.sql
```

4. Restore a compressed backup file

There are two methods to restore a compressed backup file:

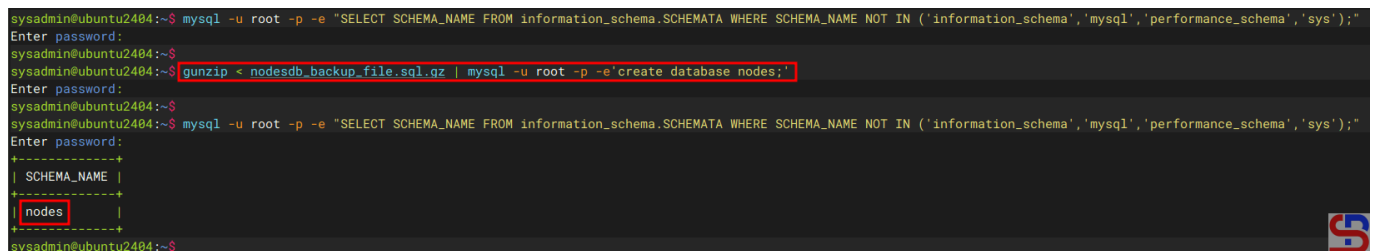
a. Restore the .gz backup file

If you want to restore a .gz backup file, use the format below:

```
gunzip < database.sql.gz | mysql -u username -p -e'create database new_database;'
```

For example, if you want to restore a database that uses .gz compression, then use the command below:

```
gunzip < nodes_backup_db.sql.gz | mysql -u root -p -e'create database nodes;'
```

A terminal window screenshot showing the restoration of a database. The user runs a command to gunzip a file and pipe it into mysql. The mysql prompt shows the user is root and the database is nodes. The user then runs a command to select schema names from the information schema, excluding information_schema, mysql, performance_schema, and sys. The output shows a table with one row: nodes.

```
sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
sysadmin@ubuntu2404:~$ gunzip < nodesdb_backup_file.sql.gz | mysql -u root -p -e'create database nodes;'
Enter password:
sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
+-----+
| SCHEMA_NAME |
+-----+
| nodes       |
+-----+
```

Restore a database that is compressed using .gz compression

b. Restore the .bz2 backup file

If you want to restore a .bz2 backup file, use the format below (but make sure your server has already installed the bzip2 package):

```
bunzip2 < database.sql.bz2 | mysql -u username -p -e'create database new_database;'
```

For example, if you want to restore a database that uses .bz2 compression, then use the command below:

```
bunzip2 < nodes.sql.bz2 | mysql -u root -p -e'create database nodes;'
```

```
sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
sysadmin@ubuntu2404:~$ bunzip2 < nodes_backup_db.sql.bz2 | mysql -u root -p -e 'create database nodes;'
Enter password:
sysadmin@ubuntu2404:~$
sysadmin@ubuntu2404:~$ mysql -u root -p -e "SELECT SCHEMA_NAME FROM information_schema.SCHEMATA WHERE SCHEMA_NAME NOT IN ('information_schema','mysql','performance_schema','sys');"
Enter password:
+-----+
| SCHEMA_NAME |
+-----+
| nodes       |
+-----+
sysadmin@ubuntu2404:~$
```

Restore a database that is compressed using .bz2 compression

Note

You can restore a database backup file that is compressed using method number 4, whether you compress when backing up the database or after backing up the database.

References

mariadb.com
stackoverflow.com
serverfault.com
bitbook.io