CONFIGURATION GUIDES › DATABASES

Configuring SQL Mode for MySQL in Applicare

Applicare 10.0 · Updated October 9, 2024 · mysql · **Pending technical review**

Windows

1. Open **Services** application and **stop the MySQL service**.

2. Navigate to the directory **C:\ProgramData\MySQL\MySQL Server <version>**.

3. Create a backup of the current **my.ini** file.

4. Launch notepad as an administrator, then go to **File -> Open** and select the **C:\ProgramData\MySQL\MySQL Server <version>\my.ini** file.

5. Comment out the **existing sql-mode line** and add the new **sql-mode line** as specified.

```
TEXT
sql-mode="STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION"
```

File Edit View

```
# The current server SQL mode, which can be set dynamically.
# Modes affect the SQL syntax MySQL supports and the data validation checks it performs. This
# makes it easier to use MySQL in different environments and to use MySQL together with other
# database servers.
# sql-
mode="ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,
NO_ENGINE_SUBSTITUTION"
sql-mode="STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION"

# General and Slow logging.
log-output=FILE

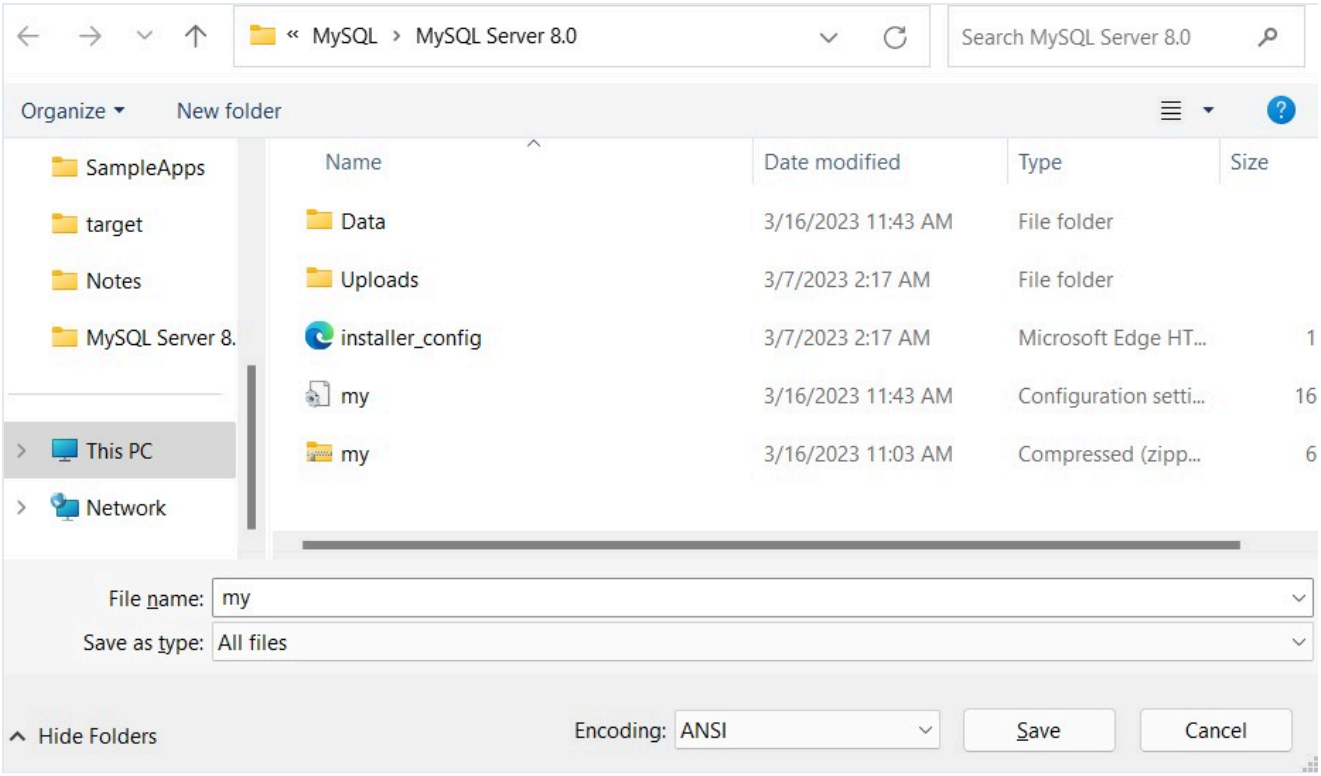
general-log=0

general_log_file="DESKTOP-L0HKKIU.log"

slow-query-log=1
```

6. Go to **File -> Save as**

- Change **Save as type** to **All files.**
- Change **Encoding** to **ANSI**.
- Click **Save**.



7. Open the **Services** application and **start the MySQL service**.

Linux

1. Stop the MySQL service.

2. Backup of the existing **my.cnf or my.ini** file.

3. Locate the MySQL configuration file: The file is typically named **my.cnf** or **my.ini** and can be found in the MySQL installation directory or the etc directory. Use the following command to search for the file.

```bash
sudo find / -name my.cnf
```

4. Open the MySQL configuration file: Once located, open it with a text editor.

5. Comment out the existing sql-mode line and add the following sql-mode line.

```text
sql-mode="STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION"
```

```
# The current server SQL mode, which can be set dynamically.
# Modes affect the SQL syntax MySQL supports and the data validation checks it performs. This
# makes it easier to use MySQL in different environments and to use MySQL together with other
# database servers.
# sql-
mode="ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,
NO_ENGINE_SUBSTITUTION"
sql-mode="STRICT_TRANS_TABLES,NO_ENGINE_SUBSTITUTION"

# General and Slow logging.
log-output=FILE

general-log=0

general_log_file="DESKTOP-L0HKKIU.log"

slow-query-log=1
```

6. Save the changes to the configuration and **start** the MySQL services.

In production environments and when the expected data is huge, it is recommended to increase memory for mysql.

key_buffer_size innodb_buffer_pool_size

When a separate machine is dedicated to the MySql then we can set these values in the range as below.

RAM size	`key_buffer_size`	`innodb_buffer_pool_size`
16GB	2GB	12GB
32GB	4GB	24GB
64GB	8GB	48GB

7. The user which we create should have all the privileges.

Syntax: GRANT ALL PRIVILEGES ON *.* TO '**username**'@'%' IDENTIFIED BY '**password**'; FLUSH PRIVILEGES;

Example: GRANT ALL PRIVILEGES ON *.* TO '**root**'@'%' IDENTIFIED BY '**testuserpass**'; FLUSH PRIVILEGES;