SQL Databases FAQ

For cPanel & WHM version 56

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When I try to load a large SQL dump, why do I receive the following error: ERROR 2006: MySQL Server has gone away?

To address this issue, perform the following steps:

1. Open the `/etc/my.cnf` file with your preferred text editor.
2. Enter `max_allowed_packet=#` in the `[mysqld]` section. Replace # with a number.
3. Save the file.
4. Restart MySQL® with the `/scripts/restartsrv_mysql` script.

For more information, read the Version 5.5 or Version 5.6 documentation.

How can I configure a MySQL database for remote connection?

1. Determine the IP address to use to connect to the database.
2. Add this IP address to the *Host* text box in cPanel's *Remote MySQL* interface (*Home >> Databases >> Remote MySQL*).

I want to use programs directly from my computer to connect to a MySQL database. Which port can I use to connect to a MySQL database?

Use port `3306` to connect to a remote MySQL server.

How can I create a new SQL database?

You can add a database in cPanel's *Databases* section (*Home >> Databases*).

Why does MySQL give an access denied error for `root@localhost`?

To avoid this issue, ensure that the MySQL `root` password is in the `/root/.my.cnf` file on the `password` line. If the MySQL `root` password is not in the `/root/.my.cnf` file, chose one of the following methods to reset the `mysqld` `root` password:

> **Important:**
>
> Only perform **one** of the following methods.

In the WHM interface:

1. Navigate to WHM's *MySQL Root Password* interface (*Home >> SQL Services >> MySQL Root Password*).
2. In the *Password* text box, enter your new password.
3. In the *Password Again* text box, enter you new password again.
4. Click *Change Password*.

From the command line:

1. Stop the `tailwatchd` daemon and temporarily disable it:

```
touch /etc/tailwatchddisable
killall tailwatchd
```

2. Stop the `mysqld` daemon:

```
/scripts/restartsrv_mysql --stop
```

3. Start the `mysqld` daemon:

```
mysqld_safe --skip-grant-tables
```

4. Change the MySQL `root` password:

```
mysql -u root mysql -e "UPDATE user SET Password=PASSWORD('new_password') WHERE user='root'; FLUSH
PRIVILEGES;"
```

> **Note:**
>
> Replace `new_password` with your new desired password.

5. Kill all of the server's current MySQL processes:

```
killall mysqld
```

6. Restart your MySQL server:

```
/scripts/restartsrv_mysql
```

7. Delete the `tailwatchddisable` file that you created:

```
rm /etc/tailwatchddisable
```

8. Restart the `tailwatchd` server:

```
/scripts/restartsrv_tailwatchd
```

Can I assign users privileges to a certain number of MySQL databases and a different number of PostgreSQL® databases?

No. However, packages allow you to set the maximum number of total databases that a user can create for each database type.

For example, if you set the *Max SQL Databases* option to 5, users can create the following databases:

- Up to five MySQL databases.
- Up to five PostgreSQL databases.

You can use the following interfaces to set or modify this value:

- The *Max SQL Databases* text box in WHM's *Create a New Account* interface (*Home >> Account Functions >> Create a New Account*).
- The *SQL Databases* text box in WHM's *Modify an Account* interface (*Home >> Account Functions >> Modify an Account*).
- The *Max Databases* text box in WHM's *Add a Package* interface (*Home >> Packages >> Add a Package*).
- The *Max Databases* text box in WHM's *Edit a Package* interface (*Home >> Packages >> Edit a Package*).

What does the Max Databases setting represent?

The *Max Databases* setting (*Max SQL Databases* or *SQL Databases* in some interfaces) represents the number of databases that an account can create for each available type of database.

If a system administrator sets this value to 5 and allows both MySQL and PostgreSQL databases, the account may create up to five MySQL databases and up to five PostgreSQL databases. In this scenario, the cPanel interface will display *10* as the *Max Databases* value.

You can use the following interfaces to set or modify this value:

- The *Max SQL Databases* text box in WHM's *Create a New Account* interface (*Home >> Account Functions >> Create a New Account*).
- The *SQL Databases* text box in WHM's *Modify an Account* interface (*Home >> Account Functions >> Modify an Account*).
- The *Max Databases* text box in WHM's *Add a Package* interface (*Home >> Packages >> Add a Package*).
- The *Max Databases* text box in WHM's *Edit a Package* interface (*Home >> Packages >> Edit a Package*).

How can I back up a MySQL database?

Run any of the following commands:

```
/path/to/bin/mysqldump -u root -p my_database > my_database_backup.sql
```

- This command prompts you for the MySQL `root` user's password before you back up the `my_database` database to the `my_database_backup.sql` file.

```
/path/to/bin/mysqldump my_database > my_database_backup.sql
```

- This command uses the password configuration in the `~/.my.cnf` file to connect before you back up the `my_database` database to the `my_database_backup.sql` file.

```
mysqldump -u $user -p database > backup_file
```

- This command prompts you for the MySQL `root` user's password before you back up the `my_database` database to the `my_database_backup.sql` file.

  Note

  Replace `$user` with your MySQL username.

How can I import data into MySQL?

Use the command line to import data into MySQL. The type and format of the data that you want to import determines how you import it.

To determine the best method, use one of the following MySQL manuals:

- Version 5.5
- Version 5.6

Why do I get this MySQL error: Can't connect to local MySQL server through socket '/var/lib/mysql/mysql.sock' (2) 0?

To avoid this issue, verify that the `mysqld` daemon is functional. If it is, verify that the `mysqld` daemon points to the correct Unix socket.

For example:

```
# netstat -ax |grep mysql
unix  2      [ ACC ]     STREAM     LISTENING     362783486 /var/lib/mysql/mysql.sock
```

Note:

If you have one socket and an application points to the other socket, make a symbolic link to point it to the correct socket.

Why does the MySQL version display a different version in the `phpinfo` file than what is installed on the server?

The API version that you see in the `phpinfo` file is the built-in MySQL API that PHP includes.

If the `buildapache` application used the MySQL libraries and headers on the server itself, and you change the MySQL version, Apache cannot function correctly. Because cPanel & WHM updates MySQL RPMs whenever Red Hat releases updates, this could automatically break thousands of servers in a matter of a few hours. For this reason, cPanel always builds Apache and PHP with the `-builtin` option.

Why does PostgreSQL display a `Password authentication failed for user` error?

To resolve this issue, ensure that the password is in the `/root/.pgpass` file. PostgreSQL passwords use the following format: `*:*:*:postgres:PASSWORD`

If the password is not in the `/root/.pgpass` file, you must modify the `/var/lib/pgsql/data/pg_hba.conf` file.

To do this, perform the following steps:

1. Run the `touch /etc/tailwatchddisable` command to disable the `tailwatchd` daemon.
2. Run the `killall tailwatchd` command to stop all `tailwatchd` processes on the server.
3. Edit the `/var/lib/pgsql/data/pg_hba.conf` file to change `md5` to `trust`.
4. Run the `/scripts/restartsrv_postgresql restart` command to restart PostgreSQL.
5. Run the following commands:

```
postgres=# alter user postgres with encrypted password =new_pass
postgres=# \q
```

6. Edit the `/var/lib/pgsql/data/pg_hba.conf` file and change `trust` to `md5`.
7. Run the `rm /etc/tailwatchddisable` command.
8. Run the `/scripts/restartsrv_tailwatchd` command to restart the `tailwatchd` daemon.

Note:

Previously, the system stored passwords in the `/var/lib/pgsql/.pgpass` file. If the `/root/.pgpass` file does not exist, the system copies the `.pgpass` file to the `/root/.pgpass` file.

How does a remote MySQL host impact MySQL services?

If you run a remote MySQL host, you will experience little to no impact.

- A remote MySQL setup functions the same as a local setup. You configure all of your customer connections to occur over TCP, but the connection string differs.
- On the backend, the only applications that connect with domain sockets are Horde, SquirrelMail, and phpMyAdmin. The system uses your configuration's variables to build these connections dynamically.
- All service status information displays normally.

How can I remove support for InnoDB?

If you only use `MyISAM`-formatted databases in MySQL, disable InnoDB to reduce the amount of memory that MySQL uses.

To remove InnoDB support, you **must** make changes to MySQL and RoundCube. As the `root` user, perform the following steps:

1. For every cPanel account, run the `/scripts/convert_roundcube_mysql2sqlite account` script, where `account` is the cPanel account username.)
2. Open the MySQL configuration file in your preferred text editor. By default, this file is the `/etc/my.cnf` file.
3. Add the following text to the `[mysqld]` section of the file:
    - `skip-innodb`
    - `innodb=OFF`
    - `default_storage_engine=MyISAM`
4. Save the `my.cnf` file.
5. Restart MySQL.

Notes:

- If any other applications require the use of InnoDB, configure those applications to use `MyISAM`, or disable them entirely.
- Convert any databases that currently use the InnoDB engine to use the `MyISAM` engine.

To confirm that InnoDB is disabled, perform the following steps:

1. Navigate to WHM's *phpMyAdmin* interface (*Home >> SQL Services >> phpMyAdmin*).
2. Select the *Engines* tab.
3. InnoDB reports its status on the server.

I cannot access my PostgreSQL databases

If you cannot access your PostgreSQL databases, reset your cPanel account's password.

To reset your account's password, perform the following steps:

1. Click *Change Password* in the user menu to navigate to cPanel's *Password & Security* interface (*Home >> Preferences >> Password & Security*).
2. Enter the appropriate passwords in the text boxes.
3. Select the *Synchronize MySQL password* checkbox.
4. Click *Change your password now!*

Warning:

Some versions of PostgreSQL are ANSI SQL-92 compliant and do not support recursive grants, wildcard grants, or future grants. To allow multiple users to access your PostgreSQL tables, click *Synchronize Grants* in cPanel's *PostgreSQL Databases* interface *(Home >> Databases >> PostgreSQL Databases)* after you add a table.

Does the maximum number of database setting represent the maximum number of databases total for an account or the maximum number of each available type of database?

The maximum number of databases setting represents the number of databases that an account can create of each available type of database. Therefore, if a system administrator sets this value to 5 and allows MySQL and PostgreSQL databases, the account may create up to five MySQL databases and up to five PostgreSQL databases.