

Users and Privileges

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User Management

- ▶ User management is the process of **controlling** which users are allowed to connect to the MySQL server and what permissions they have on each database.
- ▶ **PhpMyAdmin** does not handle user management, rather it passes the username and password on to MySQL, which then determines whether a user is permitted to perform a particular action. Within phpMyAdmin, administrators have full control over creating users, viewing and editing privileges for existing users, and removing users.
- ▶ Within **phpMyAdmin**, user management is controlled via the Users link from the main page or via the commands. Users can be created, edited, and removed.

Creating a New User Account

- ▶ A user account in MySQL consists of two parts: **username** and **host** name.
- ▶ **Syntax:**

```
CREATE USER 'username'@'localhost' IDENTIFIED BY 'user_password';
```

Deleting a User Account

- ▶ A user account in MySQL consists of two parts: **username** and **host** name.
- ▶ **Syntax:**

```
DROP USER 'username'@'Localhost';
```

Listing All Users

► List all user accounts.

► **Syntax:**

```
SELECT user, host FROM mysql.user;
```

Or

```
SELECT * FROM mysql.user;
```

Grant Privileges to User Account

► There are multiple types of privileges that can be granted to a user account. You can find a full list of privileges supported by MySQL <https://dev.mysql.com/doc/refman/5.7/en/grant.html>

► The most commonly used privileges are:

- **ALL PRIVILEGES** – Grants all privileges to a user account.
- **CREATE** – The user account is allowed to create databases and tables.
- **DROP** - The user account is allowed to drop databases and tables.
- **DELETE** - The user account is allowed to delete rows from a specific table.
- **INSERT** - The user account is allowed to insert rows into a specific table.
- **SELECT** – The user account is allowed to read a database.
- **UPDATE** - The user account is allowed to update table rows.

► To grant specific privileges to a user account, use the following syntax:

```
GRANT permission1, permission2 ON database_name.table_name TO 'database_user'@'localhost';
```

Display User Account Privileges

► To find the privilege(s) granted to a specific MySQL user account, use the SHOW GRANTS statement.

► **Syntax:**

```
SHOW GRANTS FOR 'database_user'@'localhost';
```

Revoke Privileges from User Account

▶ The syntax to revoke one or more privileges from a user account is almost identical as when granting privileges.

▶ **Syntax:**

```
REVOKE permission1, permission2 ON database_name.* FROM 'database_user'@'localhost';
```