

Users and permissions

# Agenda

- Creating and Managing Users
- Granting and Revoking Permissions

# Creating and Managing Users

# Creating and Managing Users

- Multiple users can be created within the database with the `CREATE USER` command

- Example:

```
create user 'sample'@'localhost' identified by '123';  
create user 'test'@'%' identified by '123';
```

# Creating and Managing Users

- General form for creating a user:

```
CREATE USER [user]@[host]  
IDENTIFIED WITH [auth_plugin] [AS 'auth_string']  
IDENTIFIED BY [PASSWORD]
```

# Creating and Managing Users

- You can change the password of a user using the SET PASSWORD command

Example:

```
SET PASSWORD FOR HRM = PASSWORD('123');
```

# Creating and Managing Users

- Users can be renamed using the `RENAME USER` command
- Users can be dropped with the `DROP USER` command
- Example:

```
RENAME USER 'sample'@'%' TO 'new_sample'@'127.0.0.1';  
DROP USER 'new_sample'@'127.0.0.1';
```

# Granting and Revoking Permissions



# Granting and revoking permissions

- Permissions are certain privileges that can be assigned to users
- Permissions are given with the `GRANT` command
- Permissions are removed with the `REVOKE` command

# Granting and revoking permissions

- Different types of permissions:

- Global Privileges
- Database Privileges
- Table Privileges
- Column Privileges
- Stored Routine Privileges

# Granting and revoking permissions

- General syntax for the GRANT command:

```
GRANT
[priv_type] [(column_list)]
[, priv_type [(column_list)]] ...
ON [object_type] [priv_level]
TO [user] [, user] ...
[REQUIRE {NONE | ssl_option [[AND] ssl_option]
...}]
[WITH [with_option] ...]
```

```
grant select on employees to
'new_sample'@'127.0.0.1' with grant option;
```

# Granting and revoking permissions

- Resource limitations for users can also be set using the GRANT command
- Example:

```
GRANT USAGE ON *.* TO hrm WITH  
MAX_QUERIES_PER_HOUR 500 MAX_UPDATES_PER_HOUR  
100;
```

# Granting and revoking permissions

- General syntax for the REVOKE command:

```
REVOKE  
[priv_type] [(column_list)]  
[, priv_type [(column_list)]] ...  
ON [object_type] [priv_level]  
FROM user [, user] ...
```

- Example:

```
revoke select on employees from  
'new_sample'@'127.0.0.1';
```

Questions ?