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1 REM Author :
2 REM Date :
3 REM Objective : Chapter 14. DCL in MySQL
4 REM Environment : Ubuntu Server 20.04 LTS, HeidiSQL 10.2.0, MySQL Community Server 5.7.34.0
5
6
7 REM Before you begin
8 1. All commands are executed inside the MySQL shell as root or administrative user.
9 2. The minimum privileges required to create user accounts and define their privileges is CREATE USER and GRANT.
10 3. To access the MySQL shell type the following command and enter your MySQL root user password when prompted:
11 $ mysql -u root -p
12
13
14 REM Create a new MySQL User Account
15 1. A user account in MySQL consists of two parts: user name and host name.
16 2. To create a new MySQL user account, run the following command:
17 mysql>CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'user_password';
18
19 3. To grant access from another host, change the hostname part with the remote machine IP.
20 -For example, to grant access from a machine with IP 10.8.0.5 you would run:
21 mysql>CREATE USER 'newuser'@'10.8.0.5' IDENTIFIED BY 'user_password';
22
23 4. To create a user that can connect from any host, use the '%' wildcard as a host part:
24 mysql>CREATE USER 'newuser'@'%' IDENTIFIED BY 'user_password';
25
26
27 REM Grant Privileges to a MySQL User Account
28 1. There are multiple types of privileges that can be granted to a user account.
29 2. The most commonly used privilege are:
30 1)ALL PRIVILEGES – Grants all privileges to a user account.
31 2)CREATE – The user account is allowed to create databases and tables.
32 3)DROP – The user account is allowed to drop databases and tables.
33 4)DELETE – The user account is allowed to delete rows from a specific table.
34 5)INSERT – The user account is allowed to insert rows into a specific table.
35 6)SELECT – The user account is allowed to read a database.
36 7)UPDATE – The user account is allowed to update table rows.
37
38 3. To grant specific privileges to a user account, use the following syntax:
39 mysql>GRANT permission1, permission2 ON database_name.table_name TO 'database_user'@'localhost';
40
41 4. Examples:
42 1)Grant all privileges to a user account over a specific database:
43 mysql>GRANT ALL PRIVILEGES ON database_name.* TO 'database_user'@'localhost';
44
45 2)Grant all privileges to a user account on all databases:
46 mysql>GRANT ALL PRIVILEGES ON *.* TO 'database_user'@'localhost';
47
48 3)Grant all privileges to a user account over a specific table from a database:
49 mysql>GRANT ALL PRIVILEGES ON database_name.table_name TO 'database_user'@'localhost';
50
51 4)Grant multiple privileges to a user account over a specific database:
52 mysql>GRANT SELECT, INSERT, DELETE ON database_name.* TO database_user@'localhost';
53
54
55 REM Display MySQL User Account Privileges
56 -To find the privilege(s) granted to a specific MySQL user account, use the SHOW GRANTS statement:
57 mysql>SHOW GRANTS FOR 'database_user'@'localhost';
58
59
60 REM Revoke Privileges from a MySQL User Account
61 -To revoke all privileges from a user account over a specific database, run the following command:
62 mysql>REVOKE ALL PRIVILEGES ON database_name.* FROM 'database_user'@'localhost';
63
64
65 REM Remove an Existing MySQL User Account
66 -To delete a MySQL user account use the DROP USER statement:
67 mysql>DROP USER 'user'@'localhost'
68
69
70 REM ALTER USER
71 1. The ALTER USER statement modifies MySQL accounts.
72 2. Syntax

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73 ALTER USER [IF EXISTS] user IDENTIFIED BY 'password_string';
74
75
76 REM User Check
77 mysql>SELECT host, user, plugin, authentication_string, password_last_changed FROM mysql.user;
78
79
80 REM Saving Your Changes
81 -As a final step following any updates to the user privileges, be sure to save the changes by issuing the FLUSH
PRIVILEGES command from the mysql prompt:
82 mysql>FLUSH PRIVILEGES;
83
```