Mysql (mariadb) Backups and Failovers

Create a Mysql User

1. Login to the mysql server
    a. `> mysql -u root -p`
2. Run the command to create a user
    a. `> GRANT ALL PRIVILEGES ON *.<database> TO ‘<username>’@’<host>’ IDENTIFIED BY <password>;`

Change a Mysql User’s password

1. Login to the mysql server as root
    a. `> mysql -u root -p`
2. Run the SQL command to change the user’s password
    a. `> SET PASSWORD FOR ‘<user>’@’<host>’ = “<new password>”;` (from mysql shell)
3. Flush mysql privileges to make sure that the change is initiated
    a. `> FLUSH PRIVILEGES;` (from mysql shell)
4. Update any dependent services with the new credentials

Backup with mysqldump

Mysql dump is a utility to download data from an active mysql server as sql statements. It isn’t the most efficient way to back things up, but it will do the job. It usually comes installed with mariadb.

Manual

- To backup the data (gziped)
    - `> mysqldump -u <user> -p <database> --quick --single-transaction | gzip > backup.sql.gz`

- To restore the data
    - Login to the server
        - `> mysql -u root -p`
    - Switch to the database you want to restore, or create it if it is gone
        - `> use <my database>;` (from mysql shell)

        - `> create database <my database>;` (from mysql shell)
    - Load the sql dump
        - `source <backup_file.sql>;` (from mysql shell in same dir as backup)

Automatic With Chron

Run a redundant install

Mariadb supports a clustering mechanism known as “Galera”. It allows you to run a live server that automatically downloads backups from the “master” server. If the master server fails, you can instantly switch to the live backup with little to no downtime for your services.

Caveats

- All mariadb servers must be running on Linux or FreeBSD
- This will require an uninstall and reinstall of mariadb
- Cannot be done with a live server

Install Galera Enabled Versions CentOS

Install Master and initiate

Install slave