

ownership and permissions if necessary using `chown`, `chmod`, or similar commands, so that the objects are accessible to the running server.

Example command line for offline migration between two keyring plugins (enter the command on a single line):

```
mysqld --defaults-file=/usr/local/mysql/etc/my.cnf
--keyring-migration-source=keyring_file.so
--keyring-migration-destination=keyring_encrypted_file.so
--keyring_encrypted_file_password=password
```

Example command line for online migration between two keyring plugins:

```
mysqld --defaults-file=/usr/local/mysql/etc/my.cnf
--keyring-migration-source=keyring_file.so
--keyring-migration-destination=keyring_encrypted_file.so
--keyring_encrypted_file_password=password
--keyring-migration-host=127.0.0.1
--keyring-migration-user=root
--keyring-migration-password=root_password
```

To perform a migration when the destination is a keyring component rather than a keyring plugin, specify the `--keyring-migration-to-component` option, and name the component as the value of the `--keyring-migration-destination` option.

Example command line for offline migration from a keyring plugin to a keyring component:

```
mysqld --defaults-file=/usr/local/mysql/etc/my.cnf
--keyring-migration-to-component
--keyring-migration-source=keyring_file.so
--keyring-migration-destination=component_keyring_encrypted_file.so
```

Notice that in this case, no `keyring_encrypted_file_password` value is specified. The password for the component data file is listed in the component configuration file.

Example command line for online migration from a keyring plugin to a keyring component:

```
mysqld --defaults-file=/usr/local/mysql/etc/my.cnf
--keyring-migration-to-component
--keyring-migration-source=keyring_file.so
--keyring-migration-destination=component_keyring_encrypted_file.so
--keyring-migration-host=127.0.0.1
--keyring-migration-user=root
--keyring-migration-password=root_password
```

The key migration server performs a migration operation as follows:

1. (Online migration only) Connect to the running server using the connection options.
2. (Online migration only) Disable `keyring_operations` on the running server.
3. Load the keyring plugin/component libraries for the source and destination keystores.
4. Copy keys from the source keystore to the destination.
5. Unload the keyring plugin/component libraries for the source and destination keystores.
6. (Online migration only) Enable `keyring_operations` on the running server.
7. (Online migration only) Disconnect from the running server.

If an error occurs during key migration, the destination keystore is restored to its premigration state.