

When an upgraded member joins a group which has any member running an earlier MySQL Server version, the upgraded member joins with `super_read_only=on`. This ensures that no writes are made to upgraded members until all members are running the newer version. In a multi-primary mode group, when the upgrade has been completed successfully and the group is ready to process transactions, members that are intended as writeable primaries must be set to read-write mode. From MySQL 8.0.17, when all members of a group have been upgraded to the same release, they all change back to read-write mode automatically. For earlier releases you must set each member manually to read-write mode. Connect to each member and issue:

```
SET GLOBAL super_read_only=OFF;
```

### 18.8.3.3 Group Replication Online Upgrade Methods

Choose one of the following methods of upgrading a Group Replication group:

#### Rolling In-Group Upgrade

This method is supported provided that servers running a newer version are not generating workload to the group while there are still servers with an older version in it. In other words servers with a newer version can join the group only as secondaries. In this method there is only ever one group, and each server instance is removed from the group, upgraded and then rejoined to the group.

This method is well suited to single-primary groups. When the group is operating in single-primary mode, if you require the primary to remain the same throughout (except when it is being upgraded itself), it should be the last member to be upgraded. The primary cannot remain as the primary unless it is running the lowest MySQL Server version in the group. After the primary has been upgraded, you can use the `group_replication_set_as_primary()` function to reappoint it as the primary. If you do not mind which member is the primary, the members can be upgraded in any order. The group elects a new primary whenever necessary from among the members running the lowest MySQL Server version, following the election policies described in [Section 18.1.3.1, “Single-Primary Mode”](#).

For groups operating in multi-primary mode, during a rolling in-group upgrade the number of primaries is decreased, causing a reduction in write availability. This is because if a member joins a group when it is running a higher MySQL Server version than the lowest version that the existing group members are running, it automatically remains in read-only mode (`super_read_only=ON`). Note that members running MySQL 8.0.17 or higher take into account the patch version of the release when checking this, but members running MySQL 8.0.16 or lower, or MySQL 5.7, only take into account the major version. When all members have been upgraded to the same release, from MySQL 8.0.17, they all change back to read-write mode automatically. For earlier releases, you must set `super_read_only=OFF` manually on each member that should function as a primary following the upgrade.

For full information on version compatibility in a group and how this influences the behavior of a group during an upgrade process, see [Section 18.8.1, “Combining Different Member Versions in a Group”](#).

#### Rolling Migration Upgrade

In this method you remove members from the group, upgrade them and then create a second group using the upgraded members. For groups operating in multi-primary mode, during this process the number of primaries is decreased, causing a reduction in write availability. This does not impact groups operating in single-primary mode.

Because the group running the older version is online while you are upgrading the members, you need the group running the newer version to catch up with any transactions executed while the members were being upgraded. Therefore one of the servers in the new group is configured as a replica of a primary from the older group. This ensures that the new group catches up with the older group. Because this method