MySQL Master – Slave Replication

# Server Information

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| Private IP | 99.88.0.96 | 99.88.0.81 |
| Public IP | 138.2.105.93 | 152.69.210.93 |
| Hostname | mysqlcirebon | mysqlmojokerto |
| OS Version | Oracle Linux Server 8.8 | Oracle Linux Server 8.8 |
| Hypervisor vendor | KVM | KVM |
| CPU Threads | 2 | 2 |
| RAM in GB | 15.32 | 15.32 |
| SWAP in GB | 4 | 4 |
| MySQL Version | 8.0.32 Community | 8.0.32 Community |

# Edit hosts

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| [miiadm@mysqlcirebon ~]$ sudo vi /etc/hosts; cat /etc/hosts;  127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4  ::1 localhost localhost.localdomain localhost6 localhost6.localdomain6  99.88.0.96 mysqlcirebon.sub07280429360.vcnmii.oraclevcn.com mysqlcirebon  99.88.0.81 mysqlmojokerto.sub07280429360.vcnmii.oraclevcn.com mysqlmojokerto  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo vi /etc/hosts; cat /etc/hosts;  127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4  ::1 localhost localhost.localdomain localhost6 localhost6.localdomain6  99.88.0.96 mysqlcirebon.sub07280429360.vcnmii.oraclevcn.com mysqlcirebon  99.88.0.81 mysqlmojokerto.sub07280429360.vcnmii.oraclevcn.com mysqlmojokerto  [miiadm@mysqlmojokerto ~]$ |

# MySQL Software Installation

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| [miiadm@mysqlcirebon ~]$ sudo dnf install -y mysql-server  Last metadata expiration check: 1:51:46 ago on Fri 14 Jul 2023 05:04:11 AM GMT.  Dependencies resolved.  =================================================================================================================  Package Arch Version Repository Size  =================================================================================================================  Installing:  mysql-server x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 32 M  Installing dependencies:  mariadb-connector-c-config noarch 3.1.11-2.el8\_3 ol8\_appstream 15 k  mecab x86\_64 0.996-2.module+el8.8.0+21055+76bd398b ol8\_appstream 394 k  mysql x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 15 M  mysql-common x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 137 k  mysql-errmsg x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 629 k  protobuf-lite x86\_64 3.5.0-15.el8 ol8\_appstream 149 k  Enabling module streams:  mysql 8.0  Transaction Summary  =================================================================================================================  Install 7 Packages  Total download size: 48 M  Installed size: 245 M  Downloading Packages:  (1/7): mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64.rpm 3.4 MB/s | 394 kB 00:00  (2/7): mariadb-connector-c-config-3.1.11-2.el8\_3.noarch.rpm 84 kB/s | 15 kB 00:00  (3/7): mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 1.5 MB/s | 137 kB 00:00  (4/7): mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 39 MB/s | 15 MB 00:00  (5/7): mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 2.9 MB/s | 629 kB 00:00  (6/7): protobuf-lite-3.5.0-15.el8.x86\_64.rpm 2.0 MB/s | 149 kB 00:00  (7/7): mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 37 MB/s | 32 MB 00:00  -----------------------------------------------------------------------------------------------------------------  Total 45 MB/s | 48 MB 00:01  Running transaction check  Transaction check succeeded.  Running transaction test  Transaction test succeeded.  Running transaction  Preparing : 1/1  Installing : mariadb-connector-c-config-3.1.11-2.el8\_3.noarch 1/7  Installing : mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 2/7  Installing : mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 3/7  Installing : mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 4/7  Installing : protobuf-lite-3.5.0-15.el8.x86\_64 5/7  Installing : mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64 6/7  Running scriptlet: mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64 6/7  Running scriptlet: mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 7/7  Installing : mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 7/7  Running scriptlet: mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 7/7  ValueError: File context for /var/log/mysql(/.\*)? already defined  Verifying : mariadb-connector-c-config-3.1.11-2.el8\_3.noarch 1/7  Verifying : mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64 2/7  Verifying : mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 3/7  Verifying : mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 4/7  Verifying : mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 5/7  Verifying : mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 6/7  Verifying : protobuf-lite-3.5.0-15.el8.x86\_64 7/7  Installed:  mariadb-connector-c-config-3.1.11-2.el8\_3.noarch  mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64  mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  protobuf-lite-3.5.0-15.el8.x86\_64  Complete!  [miiadm@mysqlcirebon ~]$ sudo dnf info mysql-server  Last metadata expiration check: 1:52:46 ago on Fri 14 Jul 2023 05:04:11 AM GMT.  Installed Packages  Name : mysql-server  Version : 8.0.32  Release : 1.module+el8.8.0+21055+76bd398b  Architecture : x86\_64  Size : 159 M  Source : mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.src.rpm  Repository : @System  From repo : ol8\_appstream  Summary : The MySQL server and related files  URL : http://www.mysql.com  License : GPLv2 with exceptions and LGPLv2 and BSD  Description : MySQL is a multi-user, multi-threaded SQL database server. MySQL is a  : client/server implementation consisting of a server daemon (mysqld)  : and many different client programs and libraries. This package contains  : the MySQL server and some accompanying files and directories.  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo dnf install -y mysql-server  Last metadata expiration check: 1:53:40 ago on Fri 14 Jul 2023 05:02:17 AM GMT.  Dependencies resolved.  =================================================================================================================  Package Arch Version Repository Size  =================================================================================================================  Installing:  mysql-server x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 32 M  Installing dependencies:  mariadb-connector-c-config noarch 3.1.11-2.el8\_3 ol8\_appstream 15 k  mecab x86\_64 0.996-2.module+el8.8.0+21055+76bd398b ol8\_appstream 394 k  mysql x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 15 M  mysql-common x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 137 k  mysql-errmsg x86\_64 8.0.32-1.module+el8.8.0+21055+76bd398b ol8\_appstream 629 k  protobuf-lite x86\_64 3.5.0-15.el8 ol8\_appstream 149 k  Enabling module streams:  mysql 8.0  Transaction Summary  =================================================================================================================  Install 7 Packages  Total download size: 48 M  Installed size: 245 M  Downloading Packages:  (1/7): mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64.rpm 2.7 MB/s | 394 kB 00:00  (2/7): mariadb-connector-c-config-3.1.11-2.el8\_3.noarch.rpm 92 kB/s | 15 kB 00:00  (3/7): mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 1.4 MB/s | 137 kB 00:00  (4/7): mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 34 MB/s | 15 MB 00:00  (5/7): mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 2.2 MB/s | 629 kB 00:00  (6/7): protobuf-lite-3.5.0-15.el8.x86\_64.rpm 2.4 MB/s | 149 kB 00:00  (7/7): mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64.rpm 34 MB/s | 32 MB 00:00  -----------------------------------------------------------------------------------------------------------------  Total 40 MB/s | 48 MB 00:01  Running transaction check  Transaction check succeeded.  Running transaction test  Transaction test succeeded.  Running transaction  Preparing : 1/1  Installing : mariadb-connector-c-config-3.1.11-2.el8\_3.noarch 1/7  Installing : mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 2/7  Installing : mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 3/7  Installing : mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 4/7  Installing : protobuf-lite-3.5.0-15.el8.x86\_64 5/7  Installing : mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64 6/7  Running scriptlet: mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64 6/7  Running scriptlet: mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 7/7  Installing : mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 7/7  Running scriptlet: mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 7/7  ValueError: File context for /var/log/mysql(/.\*)? already defined  Verifying : mariadb-connector-c-config-3.1.11-2.el8\_3.noarch 1/7  Verifying : mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64 2/7  Verifying : mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 3/7  Verifying : mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 4/7  Verifying : mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 5/7  Verifying : mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64 6/7  Verifying : protobuf-lite-3.5.0-15.el8.x86\_64 7/7  Installed:  mariadb-connector-c-config-3.1.11-2.el8\_3.noarch  mecab-0.996-2.module+el8.8.0+21055+76bd398b.x86\_64  mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  mysql-common-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  mysql-errmsg-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  mysql-server-8.0.32-1.module+el8.8.0+21055+76bd398b.x86\_64  protobuf-lite-3.5.0-15.el8.x86\_64  Complete!  [miiadm@mysqlmojokerto ~]$ sudo dnf info mysql-server  Last metadata expiration check: 1:54:40 ago on Fri 14 Jul 2023 05:02:17 AM GMT.  Installed Packages  Name : mysql-server  Version : 8.0.32  Release : 1.module+el8.8.0+21055+76bd398b  Architecture : x86\_64  Size : 159 M  Source : mysql-8.0.32-1.module+el8.8.0+21055+76bd398b.src.rpm  Repository : @System  From repo : ol8\_appstream  Summary : The MySQL server and related files  URL : http://www.mysql.com  License : GPLv2 with exceptions and LGPLv2 and BSD  Description : MySQL is a multi-user, multi-threaded SQL database server. MySQL is a  : client/server implementation consisting of a server daemon (mysqld)  : and many different client programs and libraries. This package contains  : the MySQL server and some accompanying files and directories.  [miiadm@mysqlmojokerto ~]$ |

# Disable selinux

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| [miiadm@mysqlcirebon ~]$ sudo vi /etc/selinux/config; cat /etc/selinux/config;  # This file controls the state of SELinux on the system.  # SELINUX= can take one of these three values:  # enforcing - SELinux security policy is enforced.  # permissive - SELinux prints warnings instead of enforcing.  # disabled - No SELinux policy is loaded.  SELINUX=disabled  # SELINUXTYPE= can take one of these three values:  # targeted - Targeted processes are protected,  # minimum - Modification of targeted policy. Only selected processes are protected.  # mls - Multi Level Security protection.  SELINUXTYPE=targeted  [miiadm@mysqlcirebon ~]$ sudo setenforce 0  [miiadm@mysqlcirebon ~]$ sudo getenforce  Permissive  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo vi /etc/selinux/config; cat /etc/selinux/config;  # This file controls the state of SELinux on the system.  # SELINUX= can take one of these three values:  # enforcing - SELinux security policy is enforced.  # permissive - SELinux prints warnings instead of enforcing.  # disabled - No SELinux policy is loaded.  SELINUX=disabled  # SELINUXTYPE= can take one of these three values:  # targeted - Targeted processes are protected,  # minimum - Modification of targeted policy. Only selected processes are protected.  # mls - Multi Level Security protection.  SELINUXTYPE=targeted  [miiadm@mysqlmojokerto ~]$ sudo setenforce 0  [miiadm@mysqlmojokerto ~]$ sudo getenforce  Permissive  [miiadm@mysqlmojokerto ~]$ |

# Create /mysqldata Directory

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| --- |
| [miiadm@mysqlcirebon ~]$ sudo mkdir -p /mysqldata  [miiadm@mysqlcirebon ~]$ sudo mkdir -p /mysqldata/log\_bin  [miiadm@mysqlcirebon ~]$ sudo mkdir -p /mysqldata/tmpdir  [miiadm@mysqlcirebon ~]$ sudo mkdir -p /mysqldata/mysql  [miiadm@mysqlcirebon ~]$ sudo chown -R mysql:mysql /mysqldata;  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo mkdir -p /mysqldata  [miiadm@mysqlmojokerto ~]$ sudo mkdir -p /mysqldata/log\_bin  [miiadm@mysqlmojokerto ~]$ sudo mkdir -p /mysqldata/tmpdir  [miiadm@mysqlmojokerto ~]$ sudo mkdir -p /mysqldata/mysql  [miiadm@mysqlmojokerto ~]$ sudo chown -R mysql:mysql /mysqldata;  [miiadm@mysqlmojokerto ~]$ |

# Backup Original my.cnf

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| [miiadm@mysqlcirebon ~]$ sudo rsync -vrah /etc/my.cnf /etc/my\_20230714.cnf  sending incremental file list  my.cnf  sent 288 bytes received 35 bytes 646.00 bytes/sec  total size is 202 speedup is 0.63  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo rsync -vrah /etc/my.cnf /etc/my\_20230714.cnf  sending incremental file list  my.cnf  sent 288 bytes received 35 bytes 646.00 bytes/sec  total size is 202 speedup is 0.63  [miiadm@mysqlmojokerto ~]$ |

# Edit Parameter File

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| --- |
| [miiadm@mysqlcirebon ~]$ sudo vi /etc/my.cnf.d/mysql-server.cnf  [miiadm@mysqlcirebon ~]$ cat /etc/my.cnf.d/mysql-server.cnf  #  # This group are read by MySQL server.  # Use it for options that only the server (but not clients) should see  #  # For advice on how to change settings please see  # http://dev.mysql.com/doc/refman/en/server-configuration-defaults.html  # Settings user and group are ignored when systemd is used.  # If you need to run mysqld under a different user or group,  # customize your systemd unit file for mysqld according to the  # instructions in http://fedoraproject.org/wiki/Systemd  [mysqld]  #datadir=/var/lib/mysql  socket=/var/lib/mysql/mysql.sock  #log-error=/var/log/mysql/mysqld.log  pid-file=/run/mysqld/mysqld.pid  user=mysql  tmpdir=/mysqldata/tmpdir  datadir=/mysqldata/mysql  log-error=/mysqldata/mysql/mysqld.log  log-bin=/mysqldata/log\_bin  server-id=98  default-storage-engine=InnoDB  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo vi /etc/my.cnf.d/mysql-server.cnf  [miiadm@mysqlmojokerto ~]$ cat /etc/my.cnf.d/mysql-server.cnf  #  # This group are read by MySQL server.  # Use it for options that only the server (but not clients) should see  #  # For advice on how to change settings please see  # http://dev.mysql.com/doc/refman/en/server-configuration-defaults.html  # Settings user and group are ignored when systemd is used.  # If you need to run mysqld under a different user or group,  # customize your systemd unit file for mysqld according to the  # instructions in http://fedoraproject.org/wiki/Systemd  [mysqld]  #datadir=/var/lib/mysql  socket=/var/lib/mysql/mysql.sock  #log-error=/var/log/mysql/mysqld.log  pid-file=/run/mysqld/mysqld.pid  user=mysql  tmpdir=/mysqldata/tmpdir  datadir=/mysqldata/mysql  log-error=/mysqldata/mysql/mysqld.log  log-bin=/mysqldata/log\_bin  server-id=99  default-storage-engine=InnoDB  [miiadm@mysqlmojokerto ~]$ |

# Start mysqld

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| [miiadm@mysqlcirebon ~]$ sudo systemctl start mysqld  [miiadm@mysqlcirebon ~]$ sudo systemctl status mysqld  ● mysqld.service - MySQL 8.0 database server  Loaded: loaded (/usr/lib/systemd/system/mysqld.service; disabled; vendor preset: disabled)  Active: active (running) since Fri 2023-07-14 08:15:33 GMT; 1min 10s ago  Process: 107135 ExecStopPost=/usr/libexec/mysql-wait-stop (code=exited, status=0/SUCCESS)  Process: 107332 ExecStartPost=/usr/libexec/mysql-check-upgrade (code=exited, status=0/SUCCESS)  Process: 107246 ExecStartPre=/usr/libexec/mysql-prepare-db-dir mysqld.service (code=exited, status=0/SUCCESS)  Process: 107221 ExecStartPre=/usr/libexec/mysql-check-socket (code=exited, status=0/SUCCESS)  Main PID: 107284 (mysqld)  Status: "Server is operational"  Tasks: 38 (limit: 99872)  Memory: 375.6M  CGroup: /system.slice/mysqld.service  └─107284 /usr/libexec/mysqld --basedir=/usr  Jul 14 08:15:32 mysqlcirebon systemd[1]: Starting MySQL 8.0 database server...  Jul 14 08:15:33 mysqlcirebon systemd[1]: Started MySQL 8.0 database server.  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo systemctl start mysqld  [miiadm@mysqlmojokerto ~]$ sudo systemctl status mysqld  ● mysqld.service - MySQL 8.0 database server  Loaded: loaded (/usr/lib/systemd/system/mysqld.service; disabled; vendor preset: disabled)  Active: active (running) since Fri 2023-07-14 08:15:33 GMT; 1min 10s ago  Process: 107231 ExecStopPost=/usr/libexec/mysql-wait-stop (code=exited, status=0/SUCCESS)  Process: 107443 ExecStartPost=/usr/libexec/mysql-check-upgrade (code=exited, status=0/SUCCESS)  Process: 107359 ExecStartPre=/usr/libexec/mysql-prepare-db-dir mysqld.service (code=exited, status=0/SUCCESS)  Process: 107333 ExecStartPre=/usr/libexec/mysql-check-socket (code=exited, status=0/SUCCESS)  Main PID: 107396 (mysqld)  Status: "Server is operational"  Tasks: 38 (limit: 99872)  Memory: 373.5M  CGroup: /system.slice/mysqld.service  └─107396 /usr/libexec/mysqld --basedir=/usr  Jul 14 08:15:32 mysqlmojokerto systemd[1]: Starting MySQL 8.0 database server...  Jul 14 08:15:33 mysqlmojokerto systemd[1]: Started MySQL 8.0 database server.  [miiadm@mysqlmojokerto ~]$ |

# Open Port MySQL

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| [miiadm@mysqlcirebon ~]$ sudo firewall-cmd --zone=public --add-port=3306/tcp --permanent  success  [miiadm@mysqlcirebon ~]$ sudo firewall-cmd --reload  success  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo firewall-cmd --zone=public --add-port=3306/tcp --permanent  success  [miiadm@mysqlmojokerto ~]$ sudo firewall-cmd --reload  success  [miiadm@mysqlmojokerto ~]$ |

# Securing Initial MySQL

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| [miiadm@mysqlcirebon ~]$ sudo mysql\_secure\_installation  Securing the MySQL server deployment.  Connecting to MySQL using a blank password.  VALIDATE PASSWORD COMPONENT can be used to test passwords  and improve security. It checks the strength of password  and allows the users to set only those passwords which are  secure enough. Would you like to setup VALIDATE PASSWORD component?  Press y|Y for Yes, any other key for No: Y  There are three levels of password validation policy:  LOW Length >= 8  MEDIUM Length >= 8, numeric, mixed case, and special characters  STRONG Length >= 8, numeric, mixed case, special characters and dictionary file  Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 1  Please set the password for root here.  New password: **HEYtayo#789**  Re-enter new password: **HEYtayo#789**  Estimated strength of the password: 100  Do you wish to continue with the password provided?(Press y|Y for Yes, any other key for No) : Y  By default, a MySQL installation has an anonymous user,  allowing anyone to log into MySQL without having to have  a user account created for them. This is intended only for  testing, and to make the installation go a bit smoother.  You should remove them before moving into a production  environment.  Remove anonymous users? (Press y|Y for Yes, any other key for No) : Y  Success.  Normally, root should only be allowed to connect from  'localhost'. This ensures that someone cannot guess at  the root password from the network.  Disallow root login remotely? (Press y|Y for Yes, any other key for No) : Y  Success.  By default, MySQL comes with a database named 'test' that  anyone can access. This is also intended only for testing,  and should be removed before moving into a production  environment.  Remove test database and access to it? (Press y|Y for Yes, any other key for No) : N  ... skipping.  Reloading the privilege tables will ensure that all changes  made so far will take effect immediately.  Reload privilege tables now? (Press y|Y for Yes, any other key for No) : Y  Success.  All done!  [miiadm@mysqlcirebon ~]$  [miiadm@mysqlmojokerto ~]$ sudo mysql\_secure\_installation  Securing the MySQL server deployment.  Connecting to MySQL using a blank password.  VALIDATE PASSWORD COMPONENT can be used to test passwords  and improve security. It checks the strength of password  and allows the users to set only those passwords which are  secure enough. Would you like to setup VALIDATE PASSWORD component?  Press y|Y for Yes, any other key for No: Y  There are three levels of password validation policy:  LOW Length >= 8  MEDIUM Length >= 8, numeric, mixed case, and special characters  STRONG Length >= 8, numeric, mixed case, special characters and dictionary file  Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 1  Please set the password for root here.  New password: **HEYtayo#789**  Re-enter new password: **HEYtayo#789**  Estimated strength of the password: 100  Do you wish to continue with the password provided?(Press y|Y for Yes, any other key for No) : Y  By default, a MySQL installation has an anonymous user,  allowing anyone to log into MySQL without having to have  a user account created for them. This is intended only for  testing, and to make the installation go a bit smoother.  You should remove them before moving into a production  environment.  Remove anonymous users? (Press y|Y for Yes, any other key for No) : Y  Success.  Normally, root should only be allowed to connect from  'localhost'. This ensures that someone cannot guess at  the root password from the network.  Disallow root login remotely? (Press y|Y for Yes, any other key for No) : Y  Success.  By default, MySQL comes with a database named 'test' that  anyone can access. This is also intended only for testing,  and should be removed before moving into a production  environment.  Remove test database and access to it? (Press y|Y for Yes, any other key for No) : N  ... skipping.  Reloading the privilege tables will ensure that all changes  made so far will take effect immediately.  Reload privilege tables now? (Press y|Y for Yes, any other key for No) : Y  Success.  All done!  [miiadm@mysqlmojokerto ~]$ |

# Configure Master

|  |
| --- |
| [miiadm@mysqlcirebon ~]$ sudo mysql -uroot -p  Enter password:  Welcome to the MySQL monitor. Commands end with ; or \g.  Your MySQL connection id is 9  Server version: 8.0.32 Source distribution  Copyright (c) 2000, 2023, Oracle and/or its affiliates.  Oracle is a registered trademark of Oracle Corporation and/or its  affiliates. Other names may be trademarks of their respective  owners.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  mysql> select user,host from mysql.user;  +------------------+-----------+  | user | host |  +------------------+-----------+  | mysql.infoschema | localhost |  | mysql.session | localhost |  | mysql.sys | localhost |  | root | localhost |  +------------------+-----------+  4 rows in set (0.00 sec)  mysql> create user 'rpl'@'%' identified by 'HEYtayo#789';  Query OK, 0 rows affected (0.01 sec)  mysql> grant replication slave on \*.\* to 'rpl'@'%';  Query OK, 0 rows affected (0.01 sec)  mysql> flush privileges;  Query OK, 0 rows affected (0.00 sec)  mysql> show master status;  +----------------+----------+--------------+------------------+-------------------+  | File | Position | Binlog\_Do\_DB | Binlog\_Ignore\_DB | Executed\_Gtid\_Set |  +----------------+----------+--------------+------------------+-------------------+  | log\_bin.000004 | 825 | | | |  +----------------+----------+--------------+------------------+-------------------+  1 row in set (0.00 sec)  mysql> select host,user from mysql.user;  +-----------+------------------+  | host | user |  +-----------+------------------+  | % | rpl |  | localhost | mysql.infoschema |  | localhost | mysql.session |  | localhost | mysql.sys |  | localhost | root |  +-----------+------------------+  5 rows in set (0.00 sec)  mysql> exit  Bye  [miiadm@mysqlcirebon ~]$ |

# Create Backup Script on Master

|  |
| --- |
| [miiadm@mysqlcirebon ~]$ sudo mkdir /backup  [miiadm@mysqlcirebon ~]$ sudo vi /backup/fullbackup.sh  [miiadm@mysqlcirebon ~]$ cat /backup/fullbackup.sh  #!/bin/bash  datecr=`date +"\_%T"`;  datecrly=`date +"%Y%m%d"`;  mkdir -p /backup/mysql/${datecrly};  cd /backup/mysql/${datecrly};  echo ""; echo "####### CURRENTLY TIME"; date;  echo ""; echo "####### PHASE01 - MASTER STATUS BEFORE BACKUP-";  mysql -uroot -pHEYtayo#789 -e"show master status;";  echo ""; echo "####### PHASE02 - FLUSH BACKUP";  mysql -uroot -pHEYtayo#789 -e"flush logs;";  echo ""; echo "####### PHASE03 - EXEC BACKUP-"; date;  mysqldump -uroot -pHEYtayo#789 --all-databases --single-transaction --master-data=2 > FULL\_DUMP\_${datecrly}.dmp;  date;  echo ""; echo "####### PHASE04 - CURRENT MASTER STATUS AFTER BACKUP-";  mysql -uroot -pHEYtayo#789 -e"show master status;";  echo ""; echo "####### PHASE05 - BINARY LOGS.";  mysql -uroot -pHEYtayo#789 -e "show binary logs;"  echo ""; echo "####### DONE";  [miiadm@mysqlcirebon ~]$ sudo mkdir -p /backup/mysql  [miiadm@mysqlcirebon ~]$ sudo chown -R mysql:mysql /backup; sudo chmod -R 775 /backup; ls -lh /backup;  total 4.0K  -rwxrwxr-x. 1 mysql mysql 771 Jul 14 09:09 fullbackup.sh  drwxrwxr-x. 2 mysql mysql 6 Jul 14 09:10 mysql  [miiadm@mysqlcirebon ~]$ |

# Run Backup Script on Master

|  |
| --- |
| [mysql@mysqlcirebon backup]$ ./fullbackup.sh  ####### CURRENTLY TIME  Fri Jul 14 09:25:38 GMT 2023  ####### PHASE01 - MASTER STATUS BEFORE BACKUP-  mysql: [Warning] Using a password on the command line interface can be insecure.  +----------------+----------+--------------+------------------+-------------------+  | File | Position | Binlog\_Do\_DB | Binlog\_Ignore\_DB | Executed\_Gtid\_Set |  +----------------+----------+--------------+------------------+-------------------+  | log\_bin.000007 | 157 | | | |  +----------------+----------+--------------+------------------+-------------------+  ####### PHASE02 - FLUSH BACKUP  mysql: [Warning] Using a password on the command line interface can be insecure.  ####### PHASE03 - EXEC BACKUP-  Fri Jul 14 09:25:38 GMT 2023  mysqldump: [Warning] Using a password on the command line interface can be insecure.  WARNING: --master-data is deprecated and will be removed in a future version. Use --source-data instead.  Fri Jul 14 09:25:38 GMT 2023  ####### PHASE04 - CURRENT MASTER STATUS AFTER BACKUP-  mysql: [Warning] Using a password on the command line interface can be insecure.  +----------------+----------+--------------+------------------+-------------------+  | File | Position | Binlog\_Do\_DB | Binlog\_Ignore\_DB | Executed\_Gtid\_Set |  +----------------+----------+--------------+------------------+-------------------+  | log\_bin.000008 | 157 | | | |  +----------------+----------+--------------+------------------+-------------------+  ####### PHASE05 - BINARY LOGS.  mysql: [Warning] Using a password on the command line interface can be insecure.  +----------------+-----------+-----------+  | Log\_name | File\_size | Encrypted |  +----------------+-----------+-----------+  | log\_bin.000001 | 180 | No |  | log\_bin.000002 | 180 | No |  | log\_bin.000003 | 637 | No |  | log\_bin.000004 | 870 | No |  | log\_bin.000005 | 202 | No |  | log\_bin.000006 | 180 | No |  | log\_bin.000007 | 202 | No |  | log\_bin.000008 | 157 | No |  +----------------+-----------+-----------+  ####### DONE  [mysql@mysqlcirebon backup]$ cd mysql/20230714/; ls -lh  total 1.3M  -rw-r--r--. 1 mysql mysql 1.3M Jul 14 09:25 FULL\_DUMP\_20230714.dmp  [mysql@mysqlcirebon 20230714]$ |

# Check Position Binlog Dump

|  |
| --- |
| [mysql@mysqlcirebon 20230714]$ head FULL\_DUMP\_20230714.dmp -n80 | grep -i master\_log\_pos  -- CHANGE MASTER TO MASTER\_LOG\_FILE='log\_bin.000008', MASTER\_LOG\_POS=157;  [mysql@mysqlcirebon 20230714]$ |

# Transfer Backup to Slave

|  |
| --- |
| [mysql@mysqlmojokerto ~]$ rsync -vrah mysql@mysqlcirebon:/backup/mysql/\* /backup/mysql  The authenticity of host 'mysqlcirebon (99.88.0.96)' can't be established.  ECDSA key fingerprint is SHA256:hMHJu8NOxEWUGye2xKr/8v0+TFU0sOXpqr86B0Y+X/c.  Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  Warning: Permanently added 'mysqlcirebon,99.88.0.96' (ECDSA) to the list of known hosts.  mysql@mysqlcirebon's password:  receiving incremental file list  20230714/  20230714/FULL\_DUMP\_20230714.dmp  sent 47 bytes received 1.28M bytes 171.32K bytes/sec  total size is 1.28M speedup is 1.00  [mysql@mysqlmojokerto ~]$ cd /backup/mysql/20230714/; ls -lh  total 1.3M  -rw-r--r--. 1 mysql mysql 1.3M Jul 14 09:25 FULL\_DUMP\_20230714.dmp  [mysql@mysqlmojokerto 20230714]$ |

# Test Connect to Master from Slave

|  |
| --- |
| [mysql@mysqlmojokerto 20230714]$ mysql -urpl -pHEYtayo#789 -h mysqlcirebon -e 'select @@hostname;'  mysql: [Warning] Using a password on the command line interface can be insecure.  +--------------+  | @@hostname |  +--------------+  | mysqlcirebon |  +--------------+  [mysql@mysqlmojokerto 20230714]$ |

# Restore Backup on Slave

|  |
| --- |
| [mysql@mysqlmojokerto 20230714]$ mysql -uroot -p < /backup/mysql/20230714/FULL\_DUMP\_20230714.dmp  Enter password:  [mysql@mysqlmojokerto 20230714]$ |

# Configure Read Only on Slave

|  |
| --- |
| [miiadm@mysqlmojokerto ~]$ sudo vi /etc/my.cnf.d/mysql-server.cnf  [miiadm@mysqlmojokerto ~]$ tail -3 /etc/my.cnf.d/mysql-server.cnf  read\_only=ON  super\_read\_only=ON  [miiadm@mysqlmojokerto ~]$ sudo systemctl stop mysqld  [miiadm@mysqlmojokerto ~]$ sudo systemctl start mysqld  [miiadm@mysqlmojokerto ~]$ |

# Start Slave

|  |
| --- |
| [mysql@mysqlmojokerto ~]$ head /backup/mysql/20230714/FULL\_DUMP\_20230714.dmp -n80 | grep -i master\_log\_pos  -- CHANGE MASTER TO MASTER\_LOG\_FILE='log\_bin.000008', MASTER\_LOG\_POS=157;  [mysql@mysqlmojokerto ~]$ mysql -uroot -p  Enter password:  Welcome to the MySQL monitor. Commands end with ; or \g.  Your MySQL connection id is 8  Server version: 8.0.32 Source distribution  Copyright (c) 2000, 2023, Oracle and/or its affiliates.  Oracle is a registered trademark of Oracle Corporation and/or its  affiliates. Other names may be trademarks of their respective  owners.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  mysql> select @@hostname  -> ;  +----------------+  | @@hostname |  +----------------+  | mysqlmojokerto |  +----------------+  1 row in set (0.00 sec)  mysql> CHANGE MASTER TO MASTER\_HOST='mysqlcirebon',  -> MASTER\_USER='rpl',  -> MASTER\_PASSWORD='HEYtayo#789',  -> MASTER\_LOG\_FILE= 'log\_bin.000007',  -> MASTER\_LOG\_POS=157;  Query OK, 0 rows affected, 8 warnings (0.02 sec)  mysql> show warnings; SHOW SLAVE STATUS\G;  +---------+------+--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+  | Level | Code | Message |  +---------+------+--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+  | Warning | 1287 | 'CHANGE MASTER' is deprecated and will be removed in a future release. Please use CHANGE REPLICATION SOURCE instead |  | Warning | 1287 | 'MASTER\_HOST' is deprecated and will be removed in a future release. Please use SOURCE\_HOST instead |  | Warning | 1287 | 'MASTER\_USER' is deprecated and will be removed in a future release. Please use SOURCE\_USER instead |  | Warning | 1287 | 'MASTER\_PASSWORD' is deprecated and will be removed in a future release. Please use SOURCE\_PASSWORD instead |  | Warning | 1287 | 'MASTER\_LOG\_FILE' is deprecated and will be removed in a future release. Please use SOURCE\_LOG\_FILE instead |  | Warning | 1287 | 'MASTER\_LOG\_POS' is deprecated and will be removed in a future release. Please use SOURCE\_LOG\_POS instead |  | Note | 1759 | Sending passwords in plain text without SSL/TLS is extremely insecure. |  | Note | 1760 | Storing MySQL user name or password information in the master info repository is not secure and is therefore not recommended. Please consider using the USER and PASSWORD connection options for START SLAVE; see the 'START SLAVE Syntax' in the MySQL Manual for more information. |  +---------+------+--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+  8 rows in set (0.00 sec)  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Slave\_IO\_State:  Master\_Host: mysqlcirebon  Master\_User: rpl  Master\_Port: 3306  Connect\_Retry: 60  Master\_Log\_File: log\_bin.000007  Read\_Master\_Log\_Pos: 157  Relay\_Log\_File: mysqlmojokerto-relay-bin.000001  Relay\_Log\_Pos: 4  Relay\_Master\_Log\_File: log\_bin.000007  Slave\_IO\_Running: No  Slave\_SQL\_Running: No  Replicate\_Do\_DB:  Replicate\_Ignore\_DB:  Replicate\_Do\_Table:  Replicate\_Ignore\_Table:  Replicate\_Wild\_Do\_Table:  Replicate\_Wild\_Ignore\_Table:  Last\_Errno: 0  Last\_Error:  Skip\_Counter: 0  Exec\_Master\_Log\_Pos: 157  Relay\_Log\_Space: 157  Until\_Condition: None  Until\_Log\_File:  Until\_Log\_Pos: 0  Master\_SSL\_Allowed: No  Master\_SSL\_CA\_File:  Master\_SSL\_CA\_Path:  Master\_SSL\_Cert:  Master\_SSL\_Cipher:  Master\_SSL\_Key:  Seconds\_Behind\_Master: NULL  Master\_SSL\_Verify\_Server\_Cert: No  Last\_IO\_Errno: 0  Last\_IO\_Error:  Last\_SQL\_Errno: 0  Last\_SQL\_Error:  Replicate\_Ignore\_Server\_Ids:  Master\_Server\_Id: 0  Master\_UUID:  Master\_Info\_File: mysql.slave\_master\_info  SQL\_Delay: 0  SQL\_Remaining\_Delay: NULL  Slave\_SQL\_Running\_State:  Master\_Retry\_Count: 86400  Master\_Bind:  Last\_IO\_Error\_Timestamp:  Last\_SQL\_Error\_Timestamp:  Master\_SSL\_Crl:  Master\_SSL\_Crlpath:  Retrieved\_Gtid\_Set:  Executed\_Gtid\_Set:  Auto\_Position: 0  Replicate\_Rewrite\_DB:  Channel\_Name:  Master\_TLS\_Version:  Master\_public\_key\_path:  Get\_master\_public\_key: 0  Network\_Namespace:  1 row in set, 1 warning (0.00 sec)  ERROR:  No query specified  mysql> start slave;  Query OK, 0 rows affected, 1 warning (0.01 sec)  mysql> show warnings; SHOW SLAVE STATUS\G;  +---------+------+-------------------------------------------------------------------------------------------------------+  | Level | Code | Message |  +---------+------+-------------------------------------------------------------------------------------------------------+  | Warning | 1287 | 'START SLAVE' is deprecated and will be removed in a future release. Please use START REPLICA instead |  +---------+------+-------------------------------------------------------------------------------------------------------+  1 row in set (0.00 sec)  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Slave\_IO\_State: Waiting for source to send event  Master\_Host: mysqlcirebon  Master\_User: rpl  Master\_Port: 3306  Connect\_Retry: 60  Master\_Log\_File: log\_bin.000008  Read\_Master\_Log\_Pos: 157  Relay\_Log\_File: mysqlmojokerto-relay-bin.000004  Relay\_Log\_Pos: 369  Relay\_Master\_Log\_File: log\_bin.000008  Slave\_IO\_Running: Yes  Slave\_SQL\_Running: Yes  Replicate\_Do\_DB:  Replicate\_Ignore\_DB:  Replicate\_Do\_Table:  Replicate\_Ignore\_Table:  Replicate\_Wild\_Do\_Table:  Replicate\_Wild\_Ignore\_Table:  Last\_Errno: 0  Last\_Error:  Skip\_Counter: 0  Exec\_Master\_Log\_Pos: 157  Relay\_Log\_Space: 633  Until\_Condition: None  Until\_Log\_File:  Until\_Log\_Pos: 0  Master\_SSL\_Allowed: No  Master\_SSL\_CA\_File:  Master\_SSL\_CA\_Path:  Master\_SSL\_Cert:  Master\_SSL\_Cipher:  Master\_SSL\_Key:  Seconds\_Behind\_Master: 0  Master\_SSL\_Verify\_Server\_Cert: No  Last\_IO\_Errno: 0  Last\_IO\_Error:  Last\_SQL\_Errno: 0  Last\_SQL\_Error:  Replicate\_Ignore\_Server\_Ids:  Master\_Server\_Id: 98  Master\_UUID: d319dd63-221d-11ee-bfc9-02001700117e  Master\_Info\_File: mysql.slave\_master\_info  SQL\_Delay: 0  SQL\_Remaining\_Delay: NULL  Slave\_SQL\_Running\_State: Replica has read all relay log; waiting for more updates  Master\_Retry\_Count: 86400  Master\_Bind:  Last\_IO\_Error\_Timestamp:  Last\_SQL\_Error\_Timestamp:  Master\_SSL\_Crl:  Master\_SSL\_Crlpath:  Retrieved\_Gtid\_Set:  Executed\_Gtid\_Set:  Auto\_Position: 0  Replicate\_Rewrite\_DB:  Channel\_Name:  Master\_TLS\_Version:  Master\_public\_key\_path:  Get\_master\_public\_key: 0  Network\_Namespace:  1 row in set, 1 warning (0.00 sec)  ERROR:  No query specified  mysql> |

# Create DB on Master

|  |
| --- |
| mysql> create database rogilani;  Query OK, 1 row affected (0.00 sec)  mysql> show databases;  +--------------------+  | Database |  +--------------------+  | information\_schema |  | mysql |  | performance\_schema |  | rogilani |  | sys |  +--------------------+  5 rows in set (0.00 sec)  mysql> exit  Bye  [mysql@mysqlcirebon ~]$ |

# Check DB Just Created on Slave

|  |
| --- |
| mysql> create database rogi;  ERROR 1290 (HY000): The MySQL server is running with the --super-read-only option so it cannot execute this statement  mysql> show databases;  +--------------------+  | Database |  +--------------------+  | information\_schema |  | mysql |  | performance\_schema |  | sys |  +--------------------+  4 rows in set (0.00 sec)  mysql> show databases;  +--------------------+  | Database |  +--------------------+  | information\_schema |  | mysql |  | performance\_schema |  | rogilani |  | sys |  +--------------------+  5 rows in set (0.00 sec)  mysql> exit  Bye  [mysql@mysqlmojokerto ~]$ |

# Switchover (20230724)

Original topology: mysqlcirebon is master, mysqlmojokerto is slave.

To be topology: mysqlmojokerto is master, mysqlcirebon is slave.

## Ensure Replication is Running

|  |
| --- |
| mysql> select @@hostname;  +----------------+  | @@hostname |  +----------------+  | mysqlmojokerto |  +----------------+  1 row in set (0.00 sec)  mysql> show slave status\G;  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Slave\_IO\_State: Waiting for source to send event  Master\_Host: mysqlcirebon  Master\_User: rpl  Master\_Port: 3306  Connect\_Retry: 60  Master\_Log\_File: log\_bin.000009  Read\_Master\_Log\_Pos: 157  Relay\_Log\_File: mysqlmojokerto-relay-bin.000008  Relay\_Log\_Pos: 369  Relay\_Master\_Log\_File: log\_bin.000009  Slave\_IO\_Running: Yes  Slave\_SQL\_Running: Yes  Replicate\_Do\_DB:  Replicate\_Ignore\_DB:  Replicate\_Do\_Table:  Replicate\_Ignore\_Table:  Replicate\_Wild\_Do\_Table:  Replicate\_Wild\_Ignore\_Table:  Last\_Errno: 0  Last\_Error:  Skip\_Counter: 0  Exec\_Master\_Log\_Pos: 157  Relay\_Log\_Space: 755  Until\_Condition: None  Until\_Log\_File:  Until\_Log\_Pos: 0  Master\_SSL\_Allowed: No  Master\_SSL\_CA\_File:  Master\_SSL\_CA\_Path:  Master\_SSL\_Cert:  Master\_SSL\_Cipher:  Master\_SSL\_Key:  Seconds\_Behind\_Master: 0  Master\_SSL\_Verify\_Server\_Cert: No  Last\_IO\_Errno: 0  Last\_IO\_Error:  Last\_SQL\_Errno: 0  Last\_SQL\_Error:  Replicate\_Ignore\_Server\_Ids:  Master\_Server\_Id: 98  Master\_UUID: d319dd63-221d-11ee-bfc9-02001700117e  Master\_Info\_File: mysql.slave\_master\_info  SQL\_Delay: 0  SQL\_Remaining\_Delay: NULL  Slave\_SQL\_Running\_State: Replica has read all relay log; waiting for more updates  Master\_Retry\_Count: 86400  Master\_Bind:  Last\_IO\_Error\_Timestamp:  Last\_SQL\_Error\_Timestamp:  Master\_SSL\_Crl:  Master\_SSL\_Crlpath:  Retrieved\_Gtid\_Set:  Executed\_Gtid\_Set:  Auto\_Position: 0  Replicate\_Rewrite\_DB:  Channel\_Name:  Master\_TLS\_Version:  Master\_public\_key\_path:  Get\_master\_public\_key: 0  Network\_Namespace:  1 row in set, 1 warning (0.00 sec)  ERROR:  No query specified  mysql> |

## Stop All Connections to DB

Note the values for the parameters File and Position.

|  |
| --- |
| mysql> flush tables with read lock;  Query OK, 0 rows affected (0.00 sec)  mysql> SHOW MASTER STATUS\G;  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  File: log\_bin.000009  Position: 157  Binlog\_Do\_DB:  Binlog\_Ignore\_DB:  Executed\_Gtid\_Set:  1 row in set (0.00 sec)  ERROR:  No query specified  mysql> exit  Bye  [mysql@mysqlcirebon ~]$ |

## Check Slave Status

|  |
| --- |
| mysql> SHOW REPLICA STATUS\G;  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Replica\_IO\_State: Waiting for source to send event  Source\_Host: mysqlcirebon  Source\_User: rpl  Source\_Port: 3306  Connect\_Retry: 60  Source\_Log\_File: log\_bin.000009  Read\_Source\_Log\_Pos: 157  Relay\_Log\_File: mysqlmojokerto-relay-bin.000008  Relay\_Log\_Pos: 369  Relay\_Source\_Log\_File: log\_bin.000009  Replica\_IO\_Running: Yes  Replica\_SQL\_Running: Yes  Replicate\_Do\_DB:  Replicate\_Ignore\_DB:  Replicate\_Do\_Table:  Replicate\_Ignore\_Table:  Replicate\_Wild\_Do\_Table:  Replicate\_Wild\_Ignore\_Table:  Last\_Errno: 0  Last\_Error:  Skip\_Counter: 0  Exec\_Source\_Log\_Pos: 157  Relay\_Log\_Space: 755  Until\_Condition: None  Until\_Log\_File:  Until\_Log\_Pos: 0  Source\_SSL\_Allowed: No  Source\_SSL\_CA\_File:  Source\_SSL\_CA\_Path:  Source\_SSL\_Cert:  Source\_SSL\_Cipher:  Source\_SSL\_Key:  Seconds\_Behind\_Source: 0  Source\_SSL\_Verify\_Server\_Cert: No  Last\_IO\_Errno: 0  Last\_IO\_Error:  Last\_SQL\_Errno: 0  Last\_SQL\_Error:  Replicate\_Ignore\_Server\_Ids:  Source\_Server\_Id: 98  Source\_UUID: d319dd63-221d-11ee-bfc9-02001700117e  Source\_Info\_File: mysql.slave\_master\_info  SQL\_Delay: 0  SQL\_Remaining\_Delay: NULL  Replica\_SQL\_Running\_State: Replica has read all relay log; waiting for more updates  Source\_Retry\_Count: 86400  Source\_Bind:  Last\_IO\_Error\_Timestamp:  Last\_SQL\_Error\_Timestamp:  Source\_SSL\_Crl:  Source\_SSL\_Crlpath:  Retrieved\_Gtid\_Set:  Executed\_Gtid\_Set:  Auto\_Position: 0  Replicate\_Rewrite\_DB:  Channel\_Name:  Source\_TLS\_Version:  Source\_public\_key\_path:  Get\_Source\_public\_key: 0  Network\_Namespace:  1 row in set (0.00 sec)  ERROR:  No query specified  mysql> select @@hostname, @@global.read\_only, @@global.super\_read\_only;  +----------------+--------------------+--------------------------+  | @@hostname | @@global.read\_only | @@global.super\_read\_only |  +----------------+--------------------+--------------------------+  | mysqlmojokerto | 1 | 1 |  +----------------+--------------------+--------------------------+  1 row in set (0.00 sec)  mysql> |

## Stop Slave and Do the Switchover

|  |
| --- |
| mysql> STOP REPLICA;  Query OK, 0 rows affected (0.00 sec)  mysql> reset REPLICA all;  Query OK, 0 rows affected (0.01 sec)  mysql> RESET MASTER;  Query OK, 0 rows affected (0.00 sec)  mysql> SHOW REPLICA STATUS\G;  Empty set (0.00 sec)  ERROR:  No query specified  mysql> SHOW MASTER STATUS\G;  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  File: log\_bin.000001  Position: 157  Binlog\_Do\_DB:  Binlog\_Ignore\_DB:  Executed\_Gtid\_Set:  1 row in set (0.00 sec)  ERROR:  No query specified  mysql> |

## Change Configuration in my.cnf & Restart MySQL

|  |
| --- |
| [mysql@mysqlmojokerto ~]$ exit  logout  [miiadm@mysqlmojokerto ~]$ sudo vi /etc/my.cnf.d/mysql-server.cnf  [miiadm@mysqlmojokerto ~]$ tail -3 /etc/my.cnf.d/mysql-server.cnf  read\_only=0  super\_read\_only=0  [miiadm@mysqlmojokerto ~]$ sudo systemctl stop mysqld  [miiadm@mysqlmojokerto ~]$ sudo systemctl start mysqld  [miiadm@mysqlmojokerto ~]$ sudo systemctl status mysqld  ● mysqld.service - MySQL 8.0 database server  Loaded: loaded (/usr/lib/systemd/system/mysqld.service; disabled; vendor preset: disabled)  Active: active (running) since Mon 2023-07-24 09:11:15 GMT; 6s ago  Process: 7773 ExecStartPost=/usr/libexec/mysql-check-upgrade (code=exited, status=0/SUCCESS)  Process: 7690 ExecStartPre=/usr/libexec/mysql-prepare-db-dir mysqld.service (code=exited, status=0/SUCCESS)  Process: 7665 ExecStartPre=/usr/libexec/mysql-check-socket (code=exited, status=0/SUCCESS)  Main PID: 7727 (mysqld)  Status: "Server is operational"  Tasks: 39 (limit: 99872)  Memory: 372.9M  CGroup: /system.slice/mysqld.service  └─7727 /usr/libexec/mysqld --basedir=/usr  Jul 24 09:11:14 mysqlmojokerto systemd[1]: Starting MySQL 8.0 database server...  Jul 24 09:11:15 mysqlmojokerto systemd[1]: Started MySQL 8.0 database server.  [miiadm@mysqlmojokerto ~]$  [mysql@mysqlcirebon ~]$ exit  logout  [miiadm@mysqlcirebon ~]$ sudo vi /etc/my.cnf.d/mysql-server.cnf  [miiadm@mysqlcirebon ~]$ tail -3 /etc/my.cnf.d/mysql-server.cnf  read\_only=1  super\_read\_only=1  [miiadm@mysqlcirebon ~]$ sudo systemctl stop mysqld  [miiadm@mysqlcirebon ~]$ sudo systemctl start mysqld  [miiadm@mysqlcirebon ~]$ sudo systemctl status mysqld  ● mysqld.service - MySQL 8.0 database server  Loaded: loaded (/usr/lib/systemd/system/mysqld.service; disabled; vendor preset: disabled)  Active: active (running) since Mon 2023-07-24 09:11:15 GMT; 6s ago  Process: 7403 ExecStartPost=/usr/libexec/mysql-check-upgrade (code=exited, status=0/SUCCESS)  Process: 7320 ExecStartPre=/usr/libexec/mysql-prepare-db-dir mysqld.service (code=exited, status=0/SUCCESS)  Process: 7295 ExecStartPre=/usr/libexec/mysql-check-socket (code=exited, status=0/SUCCESS)  Main PID: 7357 (mysqld)  Status: "Server is operational"  Tasks: 39 (limit: 99872)  Memory: 370.7M  CGroup: /system.slice/mysqld.service  └─7357 /usr/libexec/mysqld --basedir=/usr  Jul 24 09:11:14 mysqlcirebon systemd[1]: Starting MySQL 8.0 database server...  Jul 24 09:11:15 mysqlcirebon systemd[1]: Started MySQL 8.0 database server.  [miiadm@mysqlcirebon ~]$ |

## Configure Replication on New Slave

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| --- |
| [miiadm@mysqlcirebon ~]$ sudo su - mysql  Last login: Mon Jul 24 09:06:21 GMT 2023 on pts/0  [mysql@mysqlcirebon ~]$ mysql -u root -p  Enter password:  Welcome to the MySQL monitor. Commands end with ; or \g.  Your MySQL connection id is 8  Server version: 8.0.32 Source distribution  Copyright (c) 2000, 2023, Oracle and/or its affiliates.  Oracle is a registered trademark of Oracle Corporation and/or its  affiliates. Other names may be trademarks of their respective  owners.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  mysql> CHANGE MASTER TO MASTER\_HOST='mysqlmojokerto', MASTER\_USER='rpl', MASTER\_PASSWORD='HEYtayo#789';  Query OK, 0 rows affected, 6 warnings (0.02 sec)  mysql> START REPLICA;  Query OK, 0 rows affected (0.01 sec)  mysql> show warnings; SHOW REPLICA STATUS\G;  Empty set (0.00 sec)  \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 1. row \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  Replica\_IO\_State: Waiting for source to send event  Source\_Host: mysqlmojokerto  Source\_User: rpl  Source\_Port: 3306  Connect\_Retry: 60  Source\_Log\_File: log\_bin.000002  Read\_Source\_Log\_Pos: 157  Relay\_Log\_File: mysqlcirebon-relay-bin.000003  Relay\_Log\_Pos: 369  Relay\_Source\_Log\_File: log\_bin.000002  Replica\_IO\_Running: Yes  Replica\_SQL\_Running: Yes  Replicate\_Do\_DB:  Replicate\_Ignore\_DB:  Replicate\_Do\_Table:  Replicate\_Ignore\_Table:  Replicate\_Wild\_Do\_Table:  Replicate\_Wild\_Ignore\_Table:  Last\_Errno: 0  Last\_Error:  Skip\_Counter: 0  Exec\_Source\_Log\_Pos: 157  Relay\_Log\_Space: 798  Until\_Condition: None  Until\_Log\_File:  Until\_Log\_Pos: 0  Source\_SSL\_Allowed: No  Source\_SSL\_CA\_File:  Source\_SSL\_CA\_Path:  Source\_SSL\_Cert:  Source\_SSL\_Cipher:  Source\_SSL\_Key:  Seconds\_Behind\_Source: 0  Source\_SSL\_Verify\_Server\_Cert: No  Last\_IO\_Errno: 0  Last\_IO\_Error:  Last\_SQL\_Errno: 0  Last\_SQL\_Error:  Replicate\_Ignore\_Server\_Ids:  Source\_Server\_Id: 99  Source\_UUID: d317c72c-221d-11ee-b734-0200170195fb  Source\_Info\_File: mysql.slave\_master\_info  SQL\_Delay: 0  SQL\_Remaining\_Delay: NULL  Replica\_SQL\_Running\_State: Replica has read all relay log; waiting for more updates  Source\_Retry\_Count: 86400  Source\_Bind:  Last\_IO\_Error\_Timestamp:  Last\_SQL\_Error\_Timestamp:  Source\_SSL\_Crl:  Source\_SSL\_Crlpath:  Retrieved\_Gtid\_Set:  Executed\_Gtid\_Set:  Auto\_Position: 0  Replicate\_Rewrite\_DB:  Channel\_Name:  Source\_TLS\_Version:  Source\_public\_key\_path:  Get\_Source\_public\_key: 0  Network\_Namespace:  1 row in set (0.00 sec)  ERROR:  No query specified  mysql> select @@hostname,@@global.read\_only,@@global.super\_read\_only;  +--------------+--------------------+--------------------------+  | @@hostname | @@global.read\_only | @@global.super\_read\_only |  +--------------+--------------------+--------------------------+  | mysqlcirebon | 1 | 1 |  +--------------+--------------------+--------------------------+  1 row in set (0.00 sec)  mysql> exit  Bye  [mysql@mysqlcirebon ~]$ |