

# Role DATA - Master / Master + 2 Slaves - Redundant (Debian/Win2019)

## Master Servers

The following steps configure the master servers, and are performed on both master servers.

First of all, a configuration file is created on each server.

**CAUTION** - if you make modifications to the configuration:



- The **server\_id** must be unique per server.
- The Parameter **auto\_increment\_offset** must be different for each master.

## Configure Master 1

```
cat <<EOFF > /etc/mysql/mysql.conf.d/jtel-master.cnf
# Custom MySQL settings for a specific SQL master server
#
# WARNING: This file is specific to the master server

[mysqld]
#
# Replication Options
#

# Specific options for MASTER role
#
server_id                = 1
binlog_format            = ROW
expire_logs_days        = 1
max_binlog_size          = 100M
log_bin                  = binlog
auto_increment_increment = 2
auto_increment_offset    = 1
log_slave_updates
relay_log                = mysqld-relay-bin
relay_log_index           = mysqld-relay-bin.index
relay_log_info_file      = relay-log.info
EOFF
```

## Configure Master 2

```
cat <<EOFF > /etc/mysql/mysql.conf.d/jtel-master.cnf
# Custom MySQL settings for a specific SQL master server
#
# WARNING: This file is specific to the master server

[mysqld]
#
# Replication Options
#

# Specific options for MASTER role
#
server_id                = 2
binlog_format            = ROW
expire_logs_days         = 1
max_binlog_size          = 100M
log_bin                  = binlog
auto_increment_increment = 2
auto_increment_offset    = 2
log_slave_updates
relay_log                = mysqld-relay-bin
relay_log_index           = mysqld-relay-bin.index
relay_log_info_file       = relay-log.info
EOFF
```

## Replication User

Next, a replication user is created, which is used to connect to the master servers.

**CAUTION PASSWORD**

```
mysql -u root -p<password> -v -e"CREATE USER 'repl'@'%' IDENTIFIED BY '<password>'"
mysql -u root -p<password> -v -e"GRANT REPLICATION SLAVE ON *.* TO 'repl'@'%' "
mysql -u root -p<password> -v -e"FLUSH PRIVILEGES"
```

## Slave Servers

The following steps configure the slave servers, and are performed on both slave servers.

First of all, a configuration file is created on each server.

**CAUTION - if you make modifications to the configuration:**



- The **server\_id** must be unique per server.

## Configure Slave 1

```
cat <<EOFF > /etc/mysql/mysql.conf.d/jtel-slave.cnf
# Custom MySQL settings for a specific SQL slave server
#
# WARNING: This file is specific to the slave server

[mysqld]
# Specific options for SLAVE role
#
server_id                = 101
relay_log                = mysqld-relay-bin
relay_log_index           = mysqld-relay-bin.index
relay_log_info_file       = relay-log.info
skip-log-bin
EOFF
```

## Configure Slave 2

```
cat <<EOFF > /etc/mysql/mysql.conf.d/jtel-slave.cnf
# Custom MySQL settings for a specific SQL slave server
#
# WARNING: This file is specific to the slave server

[mysqld]
# Specific options for SLAVE role
#
server_id                = 102
relay_log                = mysqld-relay-bin
relay_log_index           = mysqld-relay-bin.index
relay_log_info_file       = relay-log.info
skip-log-bin
EOFF
```

## Restart MySQL Servers

Next, all 4 mysql servers are restarted, to reload the configuration.

```
systemctl restart mysql
```