

'Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' (111 "Connection refused")'

I am trying to setup mariadb galera cluster on Debian Wheezy 7.5. I have found many different instructions, all a bit different, but none have worked thus far.

I am trying to setup a two node cluster.

On the primary node, I am using the default my.cnf, with these additional settings in conf.d/cluster.cnf:

```
[mysqld]
#mysql settings
bind-address=10.1.1.139
query_cache_size=0
query_cache_type=0
binlog_format=ROW
default_storage_engine=innodb
innodb_autoinc_lock_mode=2
innodb_doublewrite=1

#galery settings
wsrep_provider=/usr/lib/galera/libgalera_smm.so
wsrep_cluster_address="gcomm://10.1.1.139,10.1.1.140"
wsrep_sst_method=rsync
wsrep_cluster_name="sql_cluster"
wsrep_node_incoming_address=10.1.1.139
wsrep_sst_receive_address=10.1.1.139
wsrep_sst_auth=cluster:password
wsrep_node_address='10.1.1.139'
wsrep_node_name='sql1'
wsrep_on=ON
```

Created the cluster user, gave that user all the required permissions, started the server successfully with

```
service mysql start --wsrep-new-cluster
```

The cluster starts up, I can see `cluster_size=1` ;

On the second node, I am using the default my.cnf, with these additional settings in conf.d/cluster.cnf:

```
[mysqld]
#mysql settings
bind-address=10.1.1.140
query_cache_size=0
query_cache_type=0
binlog_format=ROW
default_storage_engine=innodb
innodb_autoinc_lock_mode=2
innodb_doublewrite=1

#galery settings
wsrep_provider=/usr/lib/galera/libgalera_smm.so
wsrep_cluster_address="gcomm://10.1.1.139,10.1.1.140"
wsrep_sst_method=rsync
wsrep_cluster_name="sql_cluster"
wsrep_node_incoming_address=10.1.1.140
wsrep_sst_receive_address=10.1.1.140
wsrep_sst_auth=cluster:password
wsrep_node_address='10.1.1.140'
wsrep_node_name='sql1'
wsrep_on=ON
```

I also replaced debian.cnf on the secondary node with the one from the primary node as per this suggestion:

<http://docs.openstack.org/high-availability-guide/content/ha-aa-db-mysql-galera.html> and granted the appropriate permissions (this was also suggested in other places, don't have the links right now).

Contents of debian.cnf on both nodes:

```
[client]
host = localhost
user = debian-sys-maint
password = <password>
socket = /var/run/mysqld/mysqld.sock

[mysql_upgrade]
host = localhost
user = debian-sys-maint
password = <password>
socket = /var/run/mysqld/mysqld.sock
basedir = /usr
```

When I try to start the second node with:

```
service mysql start
```

It fails, and I get this in /var/log/syslog:

```
May 7 19:45:30 ns514282 mysqld_safe: Starting mysqld daemon with databases from
/var/lib/mysql
May 7 19:45:30 ns514282 mysqld_safe: WSREP: Running position recovery with --
log_error=/var/lib/mysql/wsrep_recovery.s6Uwyc' --pid-file=/var/lib/mysql/ns514282.ip-
167-114-159.net-recover.pid'
May 7 19:45:33 ns514282 mysqld_safe: WSREP: Recovered position 00000000-0000-0000-0000-
000000000000:-1
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: wsrep_start_position var
```

```
submitted: '00000000-0000-0000-0000-000000000000:-1'
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Read nil XID from storage engines, skipping position init
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: wsrep_load(): loading provider library '/usr/lib/galera/libgalera_smm.so'
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: wsrep_load(): Galera 3.9(rXXXX) by Codership Oy <info@codership.com> loaded successfully.
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: CRC-32C: using hardware acceleration.
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Found saved state: 00000000-0000-0000-0000-000000000000:-1
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Passing config to GCS: base_host = 10.1.1.142; base_port = 4567; cert.log_conflicts = no; debug = no; evs.auto_evict = 0; evs.delay_margin = PT1S; evs.delayed_keep_period = PT30S; evs.inactive_check_period = PT0.5S; evs.inactive_timeout = PT15S; evs.join_retrans_period = PT1S; evs.max_install_timeouts = 3; evs.send_window = 4; evs.stats_report_period = PT1M; evs.suspect_timeout = PT5S; evs.user_send_window = 2; evs.view_forget_timeout = PT24H; gcache.dir = /var/lib/mysql/; gcache.keep_pages_size = 0; gcache.mem_size = 0; gcache.name = /var/lib/mysql//galera.cache; gcache.page_size = 128M; gcache.size = 128M; gcs.fc_debug = 0; gcs.fc_factor = 1.0; gcs.fc_limit = 16; gcs.fc_master_slave = no; gcs.max_packet_size = 64500; gcs.max_throttle = 0.25; gcs.recv_q_hard_limit = 9223372036854775807; gcs.recv_q_soft_limit = 0.25; gcs.sync_donor = no; gmcast.segment = 0; gmcast.version = 0; pc.announce_timeout = PT3S; pc.checksum = false; pc.ignore_quorum = false; pc.ignore_sb = false; pc.npv
May 7 19:45:33 ns514282 mysqld: o = false; pc.recovery
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Service thread queue flushed.
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Assign initial position for certification: -1, protocol version: -1
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: wsrep_sst_grab()
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Start replication
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Setting initial position to 00000000-0000-0000-0000-000000000000:-1
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: protonet asio version 0
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: Using CRC-32C for message checksums.
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: backend: asio
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: restore pc from disk successfully
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: GMMCast version 0
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: (66b559a2, 'tcp://0.0.0.0:4567') listening at tcp://0.0.0.0:4567
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: (66b559a2, 'tcp://0.0.0.0:4567') multicast: , ttl: 1
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: EVS version 0
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: gcomm: connecting to group 'bfm_cluster', peer '10.1.1.141:10.1.1.142:'
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Warning] WSREP: (66b559a2, 'tcp://0.0.0.0:4567') address 'tcp://10.1.1.142:4567' points to own listening address, blacklisting
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: (66b559a2, 'tcp://0.0.0.0:4567') address 'tcp://10.1.1.142:4567' pointing to uuid 66b559a2 is blacklisted, skipping
May 7 19:45:33 ns514282 mysqld: 150507 19:45:33 [Note] WSREP: (66b559a2, 'tcp://0.0.0.0:4567') turning message relay requesting on, nonlive peers:
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: declaring dc2b490d at tcp://10.1.1.141:4567 stable
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: re-bootstrapping prim from partitioned components
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: view(view_id(PRIM,66b559a2,12) memb {
May 7 19:45:34 ns514282 mysqld: #01166b559a2,0
May 7 19:45:34 ns514282 mysqld: #011dc2b490d,0
May 7 19:45:34 ns514282 mysqld: } joined {
May 7 19:45:34 ns514282 mysqld: } left {
May 7 19:45:34 ns514282 mysqld: } partitioned {
May 7 19:45:34 ns514282 mysqld: })
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: save pc into disk
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: clear restored view
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: gcomm: connected
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Changing maximum packet size to 64500, resulting msg size: 32636
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Shifting CLOSED -> OPEN (TO: 0)
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Opened channel 'bfm_cluster'
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Waiting for SST to complete.
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: New COMPONENT: primary = yes, bootstrap = no, my_idx = 0, memb_num = 2
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: STATE_EXCHANGE: sent state UUID: 279db665-f513-11e4-9149-aa318d13ebc4
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: STATE_EXCHANGE: sent state msg: 279db665-f513-11e4-9149-aa318d13ebc4
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: STATE_EXCHANGE: got state msg: 279db665-f513-11e4-9149-aa318d13ebc4 from 0 (sql1)
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: STATE_EXCHANGE: got state msg: 279db665-f513-11e4-9149-aa318d13ebc4 from 1 (sql3)
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Warning] WSREP: Quorum: No node with complete state:
May 7 19:45:34 ns514282 mysqld:
May 7 19:45:34 ns514282 mysqld:
May 7 19:45:34 ns514282 mysqld: #011Version : 3
May 7 19:45:34 ns514282 mysqld: #011Flags : 0x1
May 7 19:45:34 ns514282 mysqld: #011Protocols : 0 / 7 / 3
May 7 19:45:34 ns514282 mysqld: #011State : NON-PRIMARY
May 7 19:45:34 ns514282 mysqld: #011Prim state : NON-PRIMARY
May 7 19:45:34 ns514282 mysqld: #011Prim UUID : 00000000-0000-0000-0000-000000000000
May 7 19:45:34 ns514282 mysqld: #011Prim seqno : -1
May 7 19:45:34 ns514282 mysqld: #011First seqno : -1
May 7 19:45:34 ns514282 mysqld: #011Last seqno : -1
May 7 19:45:34 ns514282 mysqld: #011Prim JOINED : 0
May 7 19:45:34 ns514282 mysqld: #011State UUID : 279db665-f513-11e4-9149-aa318d13ebc4
May 7 19:45:34 ns514282 mysqld: #011Group UUID : 00000000-0000-0000-0000-000000000000
```

```
May 7 19:45:34 ns514282 mysqld: #011Name : 'sql1'
May 7 19:45:34 ns514282 mysqld: #011Incoming addr: '10.1.1.142:3306'
May 7 19:45:34 ns514282 mysqld:
May 7 19:45:34 ns514282 mysqld: #011Version : 3
May 7 19:45:34 ns514282 mysqld: #011Flags : 0x2
May 7 19:45:34 ns514282 mysqld: #011Protocols : 0 / 7 / 3
May 7 19:45:34 ns514282 mysqld: #011State : NON-PRIMARY
May 7 19:45:34 ns514282 mysqld: #011Prim state : SYNCED
May 7 19:45:34 ns514282 mysqld: #011Prim UUID : b65a0277-f50f-11e4-a916-dbeff5b65a2e
May 7 19:45:34 ns514282 mysqld: #011Prim seqno : 8
May 7 19:45:34 ns514282 mysqld: #011First seqno : -1
May 7 19:45:34 ns514282 mysqld: #011Last seqno : 0
May 7 19:45:34 ns514282 mysqld: #011Prim JOINED : 1
May 7 19:45:34 ns514282 mysqld: #011State UUID : 279db665-f513-11e4-9149-aa318d13ebc4
May 7 19:45:34 ns514282 mysqld: #011Group UUID : dc2be55b-f506-11e4-8748-4bd7f3fc795c
May 7 19:45:34 ns514282 mysqld: #011Name : 'sql1'
May 7 19:45:34 ns514282 mysqld: #011Incoming addr: '10.1.1.141:3306'
May 7 19:45:34 ns514282 mysqld:
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Full re-merge of primary
b65a0277-f50f-11e4-a916-dbeff5b65a2e found: 1 of 1.
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Quorum results:
May 7 19:45:34 ns514282 mysqld: #011version = 3,
May 7 19:45:34 ns514282 mysqld: #011component = PRIMARY,
May 7 19:45:34 ns514282 mysqld: #011conf_id = 8,
May 7 19:45:34 ns514282 mysqld: #011members = 1/2 (joined/total),
May 7 19:45:34 ns514282 mysqld: #011act_id = 0,
May 7 19:45:34 ns514282 mysqld: #011last_appl. = -1,
May 7 19:45:34 ns514282 mysqld: #011protocols = 0/7/3 (gcs/repl/appl),
May 7 19:45:34 ns514282 mysqld: #011group UUID = dc2be55b-f506-11e4-8748-4bd7f3fc795c
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Flow-control interval: [23,
23]
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Shifting OPEN -> PRIMARY
(TO: 0)
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: State transfer required:
May 7 19:45:34 ns514282 mysqld: #011Group state: dc2be55b-f506-11e4-8748-4bd7f3fc795c:0
May 7 19:45:34 ns514282 mysqld: #011Local state: 00000000-0000-0000-0000-000000000000:-1
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: New cluster view: global
state: dc2be55b-f506-11e4-8748-4bd7f3fc795c:0, view# 9: Primary, number of nodes: 2, my
index: 0, protocol version 3
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Warning] WSREP: Gap in state sequence.
Need state transfer.
May 7 19:45:34 ns514282 mysqld: 150507 19:45:34 [Note] WSREP: Running: 'wsrep_sst_rsync -
-role 'joiner' --address '10.1.1.142' --auth 'cluster:password' --datadir
'/var/lib/mysql/' --defaults-file '/etc/mysql/my.cnf' --parent '12278' --binlog
'/var/log/mysql/mariadb-bin' '
May 7 19:45:34 ns514282 mysqld: rsyncd[12428]: rsyncd version 3.0.9 starting, listening on port
4444
May 7 19:45:37 ns514282 mysqld: 150507 19:45:37 [Note] WSREP: (66b559a2,
'tcp://0.0.0.0:4567') turning message relay requesting off
May 7 19:45:47 ns514282 /usr/sbin/irqbalance: Load average increasing, re-enabling all
cpus for irq balancing
May 7 19:45:57 ns514282 /usr/sbin/irqbalance: Load average increasing, re-enabling all
cpus for irq balancing
May 7 19:46:02 ns514282 /usr/sbin/cron[16491]: (root) CMD (/usr/local/rtm/bin/rtm 50 >
/dev/null 2> /dev/null)
May 7 19:46:03 ns514282 /etc/init.d/mysql[16711]: 0 processes alive and
'/usr/bin/mysqladmin --defaults-file=/etc/mysql/debian.cnf ping' resulted in
May 7 19:46:03 ns514282 /etc/init.d/mysql[16711]: #007/usr/bin/mysqladmin: connect to
server at 'localhost' failed
May 7 19:46:03 ns514282 /etc/init.d/mysql[16711]: error: 'Can't connect to local MySQL
server through socket '/var/run/mysqld/mysqld.sock' (111 "Connection refused")'
May 7 19:46:03 ns514282 /etc/init.d/mysql[16711]: Check that mysqld is running and that
the socket: '/var/run/mysqld/mysqld.sock' exists!
```

This question has countless threads all over the internet. Some with no answers. Some of the ones that do have answers

ERROR 2002 (HY000): Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' (111) - my disk space is not full

Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' - no answer. But as per comments, the mysql.sock does exist and has mysql.mysql ownership.

[ERROR 2002 \(HY000\): Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' \(2\)](#) - server is installed, again socket is present in the right location

I have also read that this might be a permissions issue on /var/run/mysqld, but I have checked this and gave it mysql.mysql ownership.

If nothing else, this is an attempt to revive this issue. Any direction is really appreciated.

Thank you,

Update: my.cnf for both nodes. It is the default my.cnf. The only change is commenting out the `bind-address=127.0.0.1` line.

```
[client]
port      = 3306
socket    = /var/run/mysqld/mysqld.sock

[mysqld_safe]
socket    = /var/run/mysqld/mysqld.sock
nice      = 0

[mysqld]
user      = mysql
pid-file  = /var/run/mysqld/mysqld.pid
socket    = /var/run/mysqld/mysqld.sock
port      = 3306
basedir   = /usr
datadir   = /var/lib/mysql
tmpdir    = /tmp
lc_messages_dir = /usr/share/mysql
lc_messages = en_US
skip-external-locking
```

```
# bind-address            = 127.0.0.1

max_connections           = 100
connect_timeout           = 5
wait_timeout              = 600
max_allowed_packet        = 16M
thread_cache_size         = 128
sort_buffer_size          = 4M
bulk_insert_buffer_size   = 16M
tmp_table_size            = 32M
max_heap_table_size       = 32M

myisam_recover             = BACKUP
key_buffer_size           = 128M
table_open_cache          = 400
myisam_sort_buffer_size   = 512M
concurrent_insert         = 2
read_buffer_size          = 2M
read_rnd_buffer_size      = 1M

query_cache_limit         = 128K
query_cache_size          = 64M

log_warnings              = 2

slow_query_log_file       = /var/log/mysql/mariadb-slow.log
long_query_time           = 10
log_slow_verbosity        = query_plan

log_bin                   = /var/log/mysql/mariadb-bin
log_bin_index             = /var/log/mysql/mariadb-bin.index
expire_logs_days          = 10
max_binlog_size           = 100M

default_storage_engine    = InnoDB

innodb_buffer_pool_size  = 256M
innodb_log_buffer_size   = 8M
innodb_file_per_table     = 1
innodb_open_files        = 400
innodb_io_capacity        = 400
innodb_flush_method       = O_DIRECT

[mysqldump]
quick
quote-names
max_allowed_packet       = 16M

[mysql]

[isamchk]
key_buffer               = 16M


!includedir /etc/mysql/conf.d/
```

Update Also, I tested, and if I attempt to start the node regularly on its own, (without the cluster, with no extra settings, just defaults) it works.

[mariadb](#) [galera](#) [mariasql](#)

Can you also paste the contents of `/etc/mysql/my.cnf` ? The log doesn't show that mysqld started listening on the unix socket but mysqladmin is attempting to ping thru this socket. – [alvits](#) May 8 '15 at 1:52

@alvits Thank you for the reply. I have updated the question. Is there maybe an option I can do for more verbose logging? – [Levon Tamrazov](#) May 8 '15 at 12:54

The default my.cnf isn't telling mysqld to listen on either localhost nor mysqld.sock. What you can do is - in `debian.cnf`, within the `[client]` section, change `host=localhost` to `host=10.1.1.139` and `host=10.1.1.140` for each nodes correspondingly. Finally, remove the line `socket = /var/run/mysqld/mysqld.sock`. Let me know how it went. – [alvits](#) May 8 '15 at 16:06 

Sorry for the late reply, our team has moved on with Percona (which installed without any issues). I don't want to abandon this though, so I will set up this environment and test your suggestions later today or tomorrow. – [Levon Tamrazov](#) May 13 '15 at 17:54
