

MariaDBPRODHA (01) IP Swap

1. Checking slave status on mariadbprod01, mariadbprod04 & mariadbprod0501.

```
root@~#
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]>
MariaDB [(none)]> show slave status\G
***** 1. row *****
Slave_IO_State: Waiting for master to send event
Master_Host: 10.90.145.128
Master_User: master_to_slave_rep
Master_Port: 2728
Connect_Retry: 60
Master_Log_File: mariadb_secondary1-isc.000515
Read_Master_Log_Pos: 662364319
Relay_Log_File: relay_primary1_isc-bin.000345
Relay_Log_Pos: 662364067
Relay_Master_Log_File: mariadb_secondary1-isc.000515
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: 662363755
Relay_Log_Space: 662365007
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:
11/12/2024 11:38 AM
```

```
root@mariadbprod04:/home/prod_shubham
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]> show slave status \G;
***** 1. row *****
Slave_IO_State: Waiting for master to send event
Master_Host: 10.90.145.128
Master_User: master_to_slave_rep
Master_Port: 2728
Connect_Retry: 60
Master_Log_File: mariadb_secondary1-isc.000515
Read_Master_Log_Pos: 662711692
Relay_Log_File: relay_secondary04-bin.000025
Relay_Log_Pos: 662712004
Relay_Master_Log_File: mariadb_secondary1-isc.000515
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: 662711692
Relay_Log_Space: 662712379
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:
11/12/2024 11:38 AM
```

```

root@mariadbprod001:/home/prod_shubham
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show slave status\G
***** 1. row *****
Slave_IO_State: Waiting for master to send event
Master_Host: 10.90.145.128
Master_User: master_to_slave_rep
Master_Port: 2728
Connect_Retry: 60
Master_Log_File: mariadb_secondary1-isc.000515
Read_Master_Log_Pos: 662982877
Relay_Log_File: relay_secondary05-bin.000025
Relay_Log_Pos: 662983189
Relay_Master_Log_File: mariadb_secondary1-isc.000515
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: 662982877
Relay_Log_Space: 662983564
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

```

2. We stopped the slave on both mariadbprod01 & mariadbprod04.

```

MariaDB [(none)]> stop slave;
Query OK, 0 rows affected (0.007 sec)

MariaDB [(none)]>
MariaDB [(none)]>

```

3. We stopped MariaDB service on mariadbprod01 and mariadbprod04.

```

[root@ ~]# systemctl stop mariadb.service
[root@ ~]#
[root@ ~]#
[root@ ~]# systemctl status mariadb.service
● mariadb.service - MariaDB 10.6.9 database server
   Loaded: loaded (/usr/lib/systemd/system/mariadb.service; enabled; vendor preset: disabled)
   Drop-In: /etc/systemd/system/mariadb.service.d
            └─migrated-from-my.cnf-settings.conf
   Active: inactive (dead) since Tue 2024-11-12 11:47:17 IST; 7s ago
     Docs: man:mariadb(8)
           https://mariadb.com/kb/en/library/systemd/
   Process: 436481 ExecStart=/usr/sbin/mariadbd $MYSQLD_OPTS $WSREP_NEW_CLUSTER $WSREP_START_POSITION (code=exited, status=0/SUCCESS)
  Main PID: 436481 (code=exited, status=0/SUCCESS)
    Status: "MariaDB server is down"

Nov 12 11:47:16 mariadbprod01 systemd[1]: Stopping MariaDB 10.6.9 database server...
Nov 12 11:47:17 mariadbprod01 systemd[1]: mariadb.service: Succeeded.
Nov 12 11:47:17 mariadbprod01 systemd[1]: Stopped MariaDB 10.6.9 database server.
Warning: Journal has been rotated since unit was started. Log output is incomplete or unavailable.
[root@ ~]#
[root@ ~]#

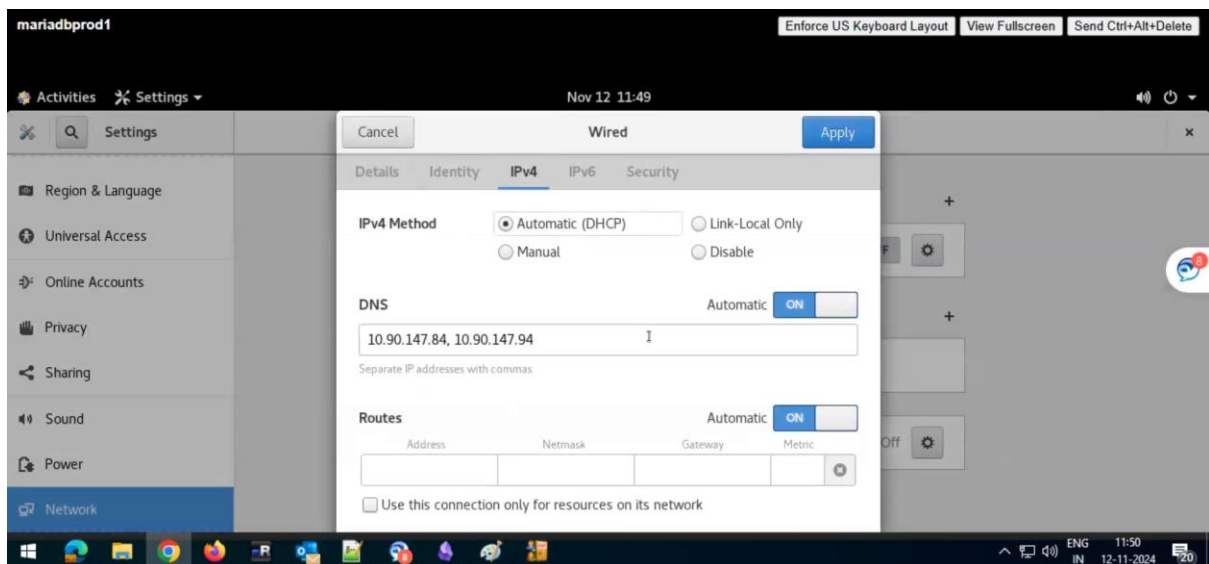
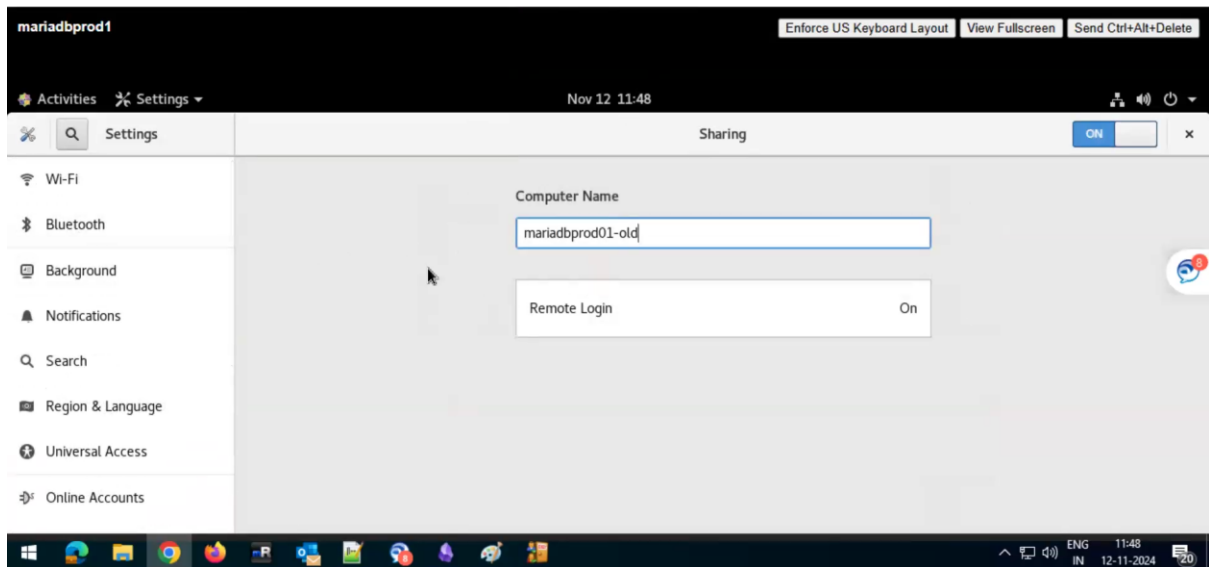
```

```

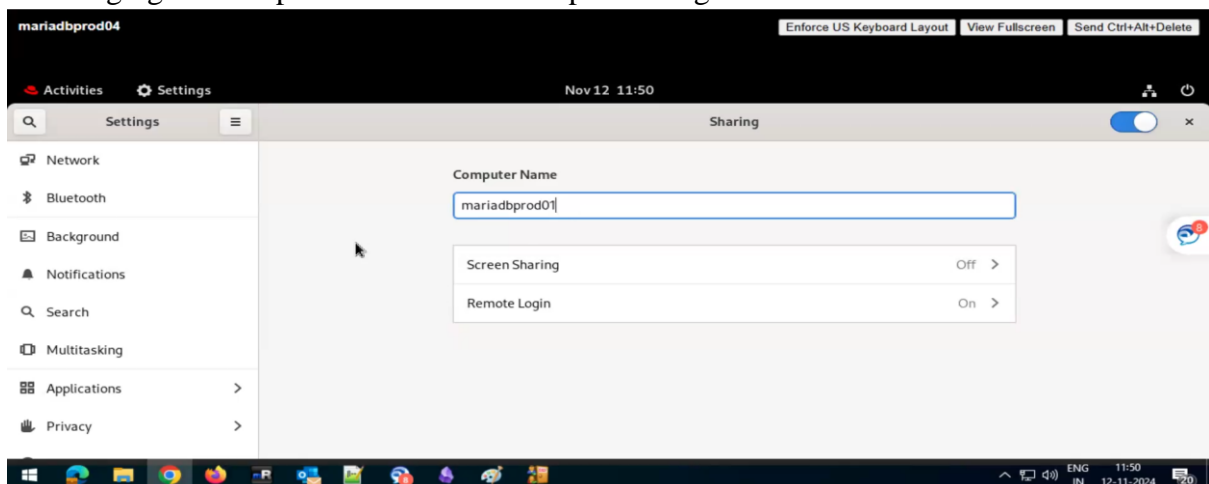
[root@mariadbprod04 prod_shubham]# systemctl stop mariadb.service
[root@mariadbprod04 prod_shubham]#
[root@mariadbprod04 prod_shubham]#
[root@mariadbprod04 prod_shubham]# systemctl status mariadb.service

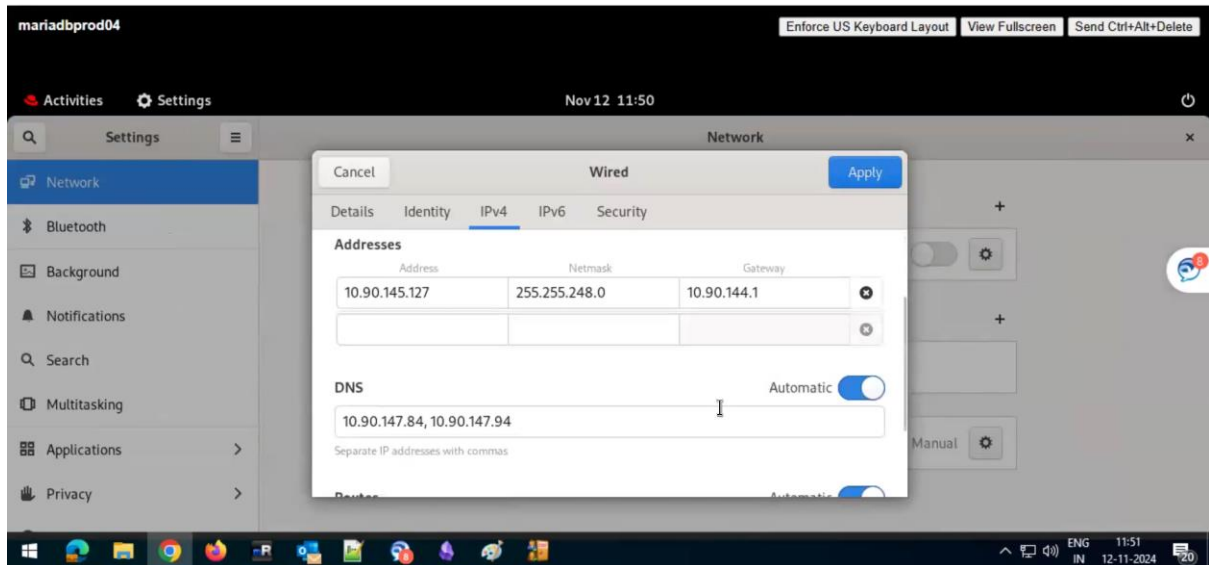
```

4. Changing mariadbprod01 VM hostname and ipv4 setting to dynamic.



5. Changing mariadbprod04 hostname and ipv4 setting.





6. Crosschecking IP change, RedHat version in changed new mariadbprod01, then rebooting the machine.

```

10.90.145.127_mariadbprod1
Docs: man:mariadb(8)
https://mariadb.com/kb/en/library/systemd/

Nov 04 22:49:05 mariadbprod04 systemd[1]: Starting MariaDB 10.6.19 database server...
Nov 04 22:49:05 mariadbprod04 mariadb[4540]: 2024-11-04 22:49:05 0 [Warning] Could not increase number of max_open_files to
Nov 04 22:49:05 mariadbprod04 systemd[1]: Started MariaDB 10.6.19 database server.
Nov 12 11:43:07 mariadbprod04 systemd[1]: Stopping MariaDB 10.6.19 database server...
Nov 12 11:43:08 mariadbprod04 systemd[1]: mariadb.service: Deactivated successfully.
Nov 12 11:43:08 mariadbprod04 systemd[1]: Stopped MariaDB 10.6.19 database server.
Nov 12 11:43:08 mariadbprod04 systemd[1]: mariadb.service: Consumed 19h 49min 4.775s CPU time.

[root@mariadbprod01 ~]#
[root@mariadbprod01 ~]#
[root@mariadbprod01 ~]#
[root@mariadbprod01 ~]# ifconfig
ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.90.145.127 netmask 255.255.248.0 broadcast 10.90.151.255
    ether 00:50:56:a9:b5:dc txqueuelen 1000 (Ethernet)
    RX packets 306299893 bytes 34958456841 (32.5 GiB)
    RX errors 0 dropped 78267 overruns 0 frame 0
    TX packets 1537721 bytes 122668508 (116.9 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 169911 bytes 8840759 (8.4 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 169911 bytes 8840759 (8.4 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@mariadbprod01 ~]# cat /etc/redhat-release
Red Hat Enterprise Linux release 9.4 (Plow)
[root@mariadbprod01 ~]# restart
bash: restart: command not found...
Failed to search for file: /mnt/disc/BaseOS/ was not found
[root@mariadbprod01 ~]# reboot
[root@mariadbprod01 ~]#

```

7. Enabling the service and restarting again on new mariadbprod01.

```
[root@mariadbprod01 prod_shubham]# systemctl enable mariadb.service
Created symlink /etc/systemd/system/multi-user.target.wants/mariadb.service → /usr/lib/systemd/system/mariadb.service.
[root@mariadbprod01 prod_shubham]#
[root@mariadbprod01 prod_shubham]#
[root@mariadbprod01 prod_shubham]#
[root@mariadbprod01 prod_shubham]# reboot
[root@mariadbprod01 prod_shubham]#
```

8. While attempting to start slave on new mariadbprod01 after restart, we got following error:

```
MariaDB [(none)]> start slave;
ERROR 1201 (HY000): Could not initialize master info structure for ''; more error messages can be found in the MariaDB error log
MariaDB [(none)]>
MariaDB [(none)]>
```

9. To resolve this error, we reset slave and run change master command on new mariadbprod01.

```
MariaDB [(none)]> stop slave;
Query OK, 0 rows affected, 1 warning (0.000 sec)

MariaDB [(none)]>
MariaDB [(none)]> reset slave;
Query OK, 0 rows affected (0.024 sec)

MariaDB [(none)]>
MariaDB [(none)]> CHANGE MASTER TO MASTER_HOST='10.90.145.128', master_port=2728, MASTER_USER='master_to_slave_rep', MASTER_PASSWORD='Our%RePLICA!8r7y', MASTER_LOG_FILE='mariadb_secondary1-isc.000515', MASTER_LOG_POS=663201900;
Query OK, 0 rows affected (0.058 sec)

MariaDB [(none)]>
MariaDB [(none)]>
MariaDB [(none)]> start slave;
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]>
```

```
MariaDB [(none)]> show slave status \G
***** 1. ROW *****
Slave_IO_State: Waiting for master to send event
Master_Host: 10.90.145.128
Master_User: master_to_slave_rep
Master_Port: 2728
Connect_Retry: 60
Master_Log_File: mariadb_secondary1-isc.000515
Read_Master_Log_Pos: 699543471
Relay_Log_File: mariadb_primary1_isc-bin.000002
Relay_Log_Pos: 1544795
Relay_Master_Log_File: mariadb_secondary1-isc.000515
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: 664746127
Relay_Log_Space: 36342457
```

```
root@mariaadbprod01:/data/logs/logs
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: 664746127
Relay_Log_Space: 36342457
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: 1960
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: 2
Master_SSL_Crl:
Master_SSL_Crlpath:
Using_Gtid: No
Gtid_IO_Pos:
Replicate_Do_Domain_Ids:
Replicate_Ignore_Domain_Ids:
Parallel_Mode: optimistic
SQL_Delay: 0
SQL_Remaining_Delay: NULL
Slave_SQL_Running_State: Commit
Slave_DDL_Groups: 0
Slave_Non_Transactional_Groups: 2
Slave_Transactional_Groups: 359
1 row in set (0.000 sec)

MariaDB [(none)]>
```

10. After change master, we checked the process list where 'binlog_dump process' was present.

```
root@mariaadbprod2~
show processlist
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| ID    | User                | Host                | DB        | Command | Time | State | Info                                     |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 25375555 | sustain_portal_appln | 10.90.150.188:63243 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 250 | 0.000 |                                         |
| 25375644 | sustain_portal_appln | 10.90.150.188:63252 | sustainportalnew | Sleep   | 287 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 102 | 0.000 | Master has sent all binlog to slave; waiting for more updates |
| 25376015 | eproposal_appln     | 10.90.145.96:49404 | eproposal   | Execute | 0 | 0.000 | Sending data |
| select emp_name from mymasters.workflow_empmaster a where a.emp_no='31990740' | Sleep   | 44 | 0.000 |                                         |
| 25376068 | sustain_portal_appln | 10.90.150.188:63263 | sustainportalnew | Sleep   | 48 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 47 | 0.000 |                                         |
| 25376120 | sustain_portal_appln | 10.90.150.188:63264 | sustainportalnew | Sleep   | 45 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376125 | sustain_portal_appln | 10.90.150.188:63265 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376128 | sustain_portal_appln | 10.90.150.188:63266 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376130 | sustain_portal_appln | 10.90.150.188:63267 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376131 | sustain_portal_appln | 10.90.150.188:63268 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376132 | sustain_portal_appln | 10.90.150.188:63269 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376133 | sustain_portal_appln | 10.90.150.188:63270 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376134 | sustain_portal_appln | 10.90.150.188:63271 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 44 | 0.000 |                                         |
| 25376135 | sustain_portal_appln | 10.90.150.188:63272 | sustainportalnew | Sleep   | 44 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 2 | 0.000 |                                         |
| 25376150 | pmm                 | 127.0.0.1:44252    | NULL      | Sleep   | 2 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 2 | 0.000 |                                         |
| 25376169 | pmm                 | 127.0.0.1:44260    | NULL      | Sleep   | 2 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 2 | 0.000 |                                         |
| 25376189 | pmm                 | 127.0.0.1:44276    | NULL      | Sleep   | 2 | 0.000 |                                         |
| NULL    | NULL                | NULL                | NULL      | Sleep   | 2 | 0.000 |                                         |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
61 rows in set (0.001 sec)

MariaDB [(none)]>
```


11. We checked replication status by deleting one entry from 'abhi' database on mariadbprod02,

And checking the reflected value in new mariadbprod01& mariadbprod0501.

```
MariaDB [abhi]> select * from testing;
+-----+
| id    |
+-----+
| 10000 |
| 1002  |
+-----+
2 rows in set (0.002 sec)

MariaDB [abhi]>
MariaDB [abhi]>
MariaDB [abhi]> delete from testing where id='10000';
Query OK, 1 row affected (0.005 sec)

MariaDB [abhi]>
MariaDB [abhi]> select * from testing;
+-----+
| id    |
+-----+
| 1002  |
+-----+
1 row in set (0.001 sec)

MariaDB [abhi]>
MariaDB [abhi]>
```

```
MariaDB [(none)]> select * from abhi.testing;
ERROR 2006 (HY000): Server has gone away
No connection. Trying to reconnect...
Connection id: 21475
Current database: *** NONE ***

+-----+
| id    |
+-----+
| 1002  |
+-----+
1 row in set (0.002 sec)

MariaDB [(none)]>
```

12. We tried logging in on mariadbprod0501 server, with old credentials.

```
root@mariadbprod0501:/home/prod_shubham
Your MariaDB connection id is 21508
Server version: 10.6.19-MariaDB-log MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]> \q
Bye
[root@mariadbprod0501 prod_shubham]# mysql -u root -pMariaProd1##786
[root@mariadbprod0501 prod_shubham]# mysql -u root -pMariaProd1##786
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: YES)
[root@mariadbprod0501 prod_shubham]#
[root@mariadbprod0501 prod_shubham]# mysql -u root -pMariaProd5##786
Welcome to the MariaDB monitor. Commands end with ; or \q.
Your MariaDB connection id is 21510
Server version: 10.6.19-MariaDB-log MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]> select user, host, password from mysql.user where user='root';
+-----+
| User | Host | Password |
+-----+
| root | localhost | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | mariadbprod1 | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | 127.0.0.1 | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | ::1 | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | 10.50.145.127 | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | dbclients01.hpcl.co.in | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | 10.90.145.183 | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
| root | 10.90.145.96 | *886E1F3DB52007CF6B0A959BAF40A7507C494785B |
+-----+
8 rows in set (0.002 sec)

MariaDB [(none)]>
MariaDB [(none)]>
```

13. We enabled and restarted MariaDB service after which we were able to login with old password.

```
[root@mariadbprod0501 prod_shubham]# systemctl status mariadb.service
* mariadb.service - MariaDB 10.6.19 database server
   Loaded: loaded (/usr/lib/systemd/system/mariadb.service; enabled; preset: disabled)
   Drop-In: /etc/systemd/system/mariadb.service.d
            └─migrated-from-my.cnf-settings.conf
   Active: active (running) since Wed 2024-11-06 00:53:18 EST; 6 days ago
     Docs: man:mariadb(8)
           https://mariadb.com/kb/en/library/systemd/
   Main PID: 94526 (mariadbd)
    Status: "Taking your SQL requests now..."
     Tasks: 18 (limit: 251443)
    Memory: 8.7G
       CPU: 7h 51min 11.383s
   CGroup: /system.slice/mariadb.service
           └─94526 /usr/sbin/mariadbd

Nov 06 00:53:17 mariadbprod0501 systemd[1]: Starting MariaDB 10.6.19 database server...
Nov 06 00:53:17 mariadbprod0501 mariadbd[94526]: 2024-11-06 0:53:17 0 [Warning] Could not increase number of max_open_files to more than 32768 (request: 66043)
Nov 06 00:53:18 mariadbprod0501 systemd[1]: Started MariaDB 10.6.19 database server.
[root@mariadbprod0501 prod_shubham]#
[root@mariadbprod0501 prod_shubham]#
[root@mariadbprod0501 prod_shubham]#
[root@mariadbprod0501 prod_shubham]# systemctl restart mariadb.service
[root@mariadbprod0501 prod_shubham]#
```

```
[root@mariadbprod0501 prod_shubham]# mysql -u root -pMariaProd511786
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: YES)
[root@mariadbprod0501 prod_shubham]#
[root@mariadbprod0501 prod_shubham]#
[root@mariadbprod0501 prod_shubham]# mysql -u root -pMariaProd11786
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.6.19-MariaDB-log MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
MariaDB [(none)]>
```

Note: After MariaDB service restart login password for root changed because while fresh installation we set root password through 'mariadb-secure-installation'.

After setting replication using complete backup that password for root user was changed to same as production.

And when we took restart of MariaDB service, it got reflected to old one i.e. same as production.

Completed...