ReplicaSet - Deployment

1. Become the Sudo user

```
[tom@localhost ~]$ sudo su
[sudo] password for tom:
```

2. Create separate database directories for each Mongod process

```
[tom@localhost ~]$ sudo su
[sudo] password for tom:
[root@localhost tom]# cd /var/lib/mongo
[root@localhost mongo]# mkdir replicaset0
[root@localhost mongo]# mkdir replicaset1
[root@localhost mongo]# mkdir replicaset2
```

3. Start the first Mongod process on port 27017

```
[root@localhost mongo]# mongod --port 27017 -dbpath
/var/lib/mongo/replicaset0 --logpath /var/lib/mongo/replicaset0/log --replSet
myreplicaset --fork --smallfiles --nojournal
```

```
about to fork child process, waiting until server is ready for connections.
forked process: 2984
child process started successfully, parent exiting
```

4. Start the second Mongod process on port 27018

```
[root@localhost mongo]# mongod --port 27018 -dbpath
/var/lib/mongo/replicaset1 --logpath /var/lib/mongo/replicaset1/log --replSet
myreplicaset --fork --smallfiles --nojournal
```

```
about to fork child process, waiting until server is ready for connections.
forked process: 3036
child process started successfully, parent exiting
```

5. Start the third Mongod process on port 27019

```
[root@localhost mongo]# mongod --port 27019 -dbpath
/var/lib/mongo/replicaset2 --logpath /var/lib/mongo/replicaset2/log --replSet
myreplicaset --fork --smallfiles --nojournal
```

```
about to fork child process, waiting until server is ready for connections.
forked process: 3082
child process started successfully, parent exiting
```

6. Log into the Console of the first Mongod Process on port 27017

```
[tom@localhost ~]$ mongo --port 27017
```

```
MongoDB shell version: 2.6.3
connecting to: 127.0.0.1:27017/test
>
```

7. Initiate the Replica Set

```
> rs.initiate()
```

```
{
      "info2" : "no configuration explicitly specified -- making one",
      "me" : "localhost.localdomain:27017",
      "info" : "Config now saved locally.  Should come online in about a
minute.",
      "ok" : 1
}
```

8. Press enter after a second or so and you must see this

```
myreplicaset:PRIMARY>
```

9. Add members to the Replica set

```
Syntax: myreplicaset:PRIMARY> rs.add("<hostname>:<port>")

myreplicaset:PRIMARY> rs.add("localhost.localdomain:27018")

{ "ok" : 1 }
```

10.   Do the same for the Mongod process on port 27019

```
myreplicaset:PRIMARY> rs.add("localhost.localdomain:27019")

{ "ok" : 1 }
```

11.　　　Check status of the Replica set

```
myreplicaset:PRIMARY> rs.status();
```

```
{
      "set" : "myreplicaset",
      "date" : ISODate("2014-07-08T12:57:39Z"),
      "myState" : 1,
      "members" : [
              {
                      "_id" : 0,
                      "name" : "localhost.localdomain:27017",
                      "health" : 1,
                      "state" : 1,
                      "stateStr" : "PRIMARY",
                      "uptime" : 434,
                      "optime" : Timestamp(1404824222, 1),
                      "optimeDate" : ISODate("2014-07-08T12:57:02Z"),
                      "electionTime" : Timestamp(1404824025, 1),
                      "electionDate" : ISODate("2014-07-08T12:53:45Z"),
                      "self" : true
              },
              {
                      "_id" : 1,
                      "name" : "localhost.localdomain:27018",
                      "health" : 1,
                      "state" : 2,
                      "stateStr" : "SECONDARY",
                      "uptime" : 44,
                      "optime" : Timestamp(1404824222, 1),
                      "optimeDate" : ISODate("2014-07-08T12:57:02Z"),
                      "lastHeartbeat" : ISODate("2014-07-08T12:57:39Z"),
                      "lastHeartbeatRecv" : ISODate("2014-07-08T12:57:38Z"),
                      "pingMs" : 0,
                      "syncingTo" : "localhost.localdomain:27017"
              },
              {
                      "_id" : 2,
                      "name" : "localhost.localdomain:27019",
                      "health" : 1,
                      "state" : 2,
                      "stateStr" : "SECONDARY",
                      "uptime" : 37,
                      "optime" : Timestamp(1404824222, 1),
                      "optimeDate" : ISODate("2014-07-08T12:57:02Z"),
                      "lastHeartbeat" : ISODate("2014-07-08T12:57:38Z"),
                      "lastHeartbeatRecv" : ISODate("2014-07-08T12:57:38Z"),
                      "pingMs" : 0,
                      "syncingTo" : "localhost.localdomain:27017"
              }
      ],
      "ok" : 1
}
```

12.   Check the configuration of the Replica set

```
myreplicaset:PRIMARY> rs.conf();
```

```
{
      "_id" : "myreplicaset",
      "version" : 3,
      "members" : [
            {
                  "_id" : 0,
                  "host" : "localhost.localdomain:27017"
            },
            {
                  "_id" : 1,
                  "host" : "localhost.localdomain:27018"
            },
            {
                  "_id" : 2,
                  "host" : "localhost.localdomain:27019"
            }
      ]
}
```

13.   Exit from the Primary and log into the Secondaries and view the status and configuration