**MongoDB Replication**

**Server Primary server**  **Secondary Server**

**Hostname** vmware-3 vmware-2

**IP** 192.168.1.12 192.168.1.13

**User/pass pass / pass admin / admin**

MASTER / PRIMARY Server-Vmware-3

**Step -1) Generate Replication Keyfile Authentication at Master DB**

openssl rand -base64 756 > mongo.key

mkdir /opt/mongo  
mv ~/mongo.key /opt/mongo  
scp /opt/mongo/mongo.key [sunny@192.168.1.13:/opt/mongo/](mailto:sunny@192.168.1.13:/opt/mongo/) Copied on Secondary File  
chmod 400 /opt/mongo/mongo.key  
chown mongod:mongod /opt/mongo/mongo.key

**Step-2) Host files Entries –**

127.0.0.1 localhost vmware-3  
192.168.1.12 vmware-3  
192.168.1.13 vmware-2

**Step -3) Edit /etc/mongod.conf**

# network interfaces

net:  
 port: 27017  
 bindIp: vmware-3,192.168.1.12 - Add host name

#security:  
security:  
 authorization: enabled - security enable  
 keyFile: /opt/mongo/mongo.key - add key file for authentication

#replication:  
replication:  
 replSetName: mongo-rep -Replica set name

**Step-4 ) Initiate the replica set**

1. mongo -u pass -p --authenticationDatabase admin -Enter password

Run **[rs.initiate()](https://docs.mongodb.com/manual/reference/method/rs.initiate/" \l "rs.initiate)**on *just one and only one* [mongod](https://docs.mongodb.com/manual/reference/program/mongod/" \l "bin.mongod) instance for the replica set.

1. rs.initiate() - Initiate the replica set
2. rs.add("vmware-2") - Adds a member to a [replica set](https://mongoing.com/docs/reference/glossary.html" \l "term-replica-set)
3. rs.conf() - the current [replica set](https://docs.mongodb.com/manual/reference/glossary/" \l "term-replica-set) configuration

mongo-rep:PRIMARY> rs.conf()

{

"\_id" : "mongo-rep",

"version" : 2,

"protocolVersion" : NumberLong(1),

"members" : [

{

"\_id" : 0,

"host" : "vmware-3:27017",

"arbiterOnly" : false,

"buildIndexes" : true,

"hidden" : false,

"priority" : 1,

"tags" : {

},

"slaveDelay" : NumberLong(0),

"votes" : 1

},

{

"\_id" : 1,

"host" : "vmware-2:27017",

"arbiterOnly" : false,

"buildIndexes" : true,

"hidden" : false,

"priority" : 1,

"tags" : {

},

"slaveDelay" : NumberLong(0),

"votes" : 1

}

],

1. rs.status() - To display the current state of the replica set and current state of each member, run the [rs.status()](https://docs.mongodb.com/manual/reference/method/rs.status/" \l "rs.status) method in a [mongo](https://docs.mongodb.com/manual/reference/program/mongo/" \l "bin.mongo) shell connected to the replica set’s [primary](https://docs.mongodb.com/manual/reference/glossary/" \l "term-primary). For descriptions of the information displayed by [rs.status()](https://docs.mongodb.com/manual/reference/method/rs.status/" \l "rs.status), see [replSetGetStatus](https://docs.mongodb.com/manual/reference/command/replSetGetStatus/).
2. rs.isMaster() - Showing status

mongo-rep:PRIMARY> rs.isMaster()  
{ "hosts" : [  
 "vmware-3:27017",  
 "vmware-2:27017"  
 ],  
 "setName" : "mongo-rep",  
 "setVersion" : 2,

"ismaster" : true,  
 "secondary" : false,  
 "primary" : "vmware-3:27017",  
 "me" : "vmware-3:27017",  
 "ok" : 1

Secondary Server-Vmware-2

**Step -1) Replication Keyfile Authentication from Master DB**

**Keyfile Location -** /opt/mongo/mongo.key  
chmod 400 /opt/mongo/mongo.key  
chown mongod:mongod /opt/mongo/mongo.key

**Step-2) Host files Entries –**

127.0.0.1 localhost vmware-2  
192.168.1.12 vmware-3  
192.168.1.13 vmware-2

**Step -3) Edit /etc/mongod.conf**

# network interfaces

net:  
 port: 27017  
 bindIp: vmware-2,192.168.1.13 - Add host name

#security:  
security:  
 authorization: enabled - security enable  
 keyFile: /opt/mongo/mongo.key - add key file for authentication

#replication:  
replication:  
 replSetName: mongo-rep -Replica set name

**Step-4 ) Master Slave Status**

1. mongo -u pass -p --authenticationDatabase admin -Enter password
2. db.getMongo().setSlaveOk() - this command permits read operations from non-master (i.e. [slave](http://man.hubwiz.com/docset/MongoDB.docset/Contents/Resources/Documents/docs.mongodb.org/manual/reference/glossary/index.html" \l "term-slave) or [secondary](http://man.hubwiz.com/docset/MongoDB.docset/Contents/Resources/Documents/docs.mongodb.org/manual/reference/glossary/index.html" \l "term-secondary)) instances or read operations are acceptable for the current application