# **How to Install and Configure MongoDB on CentOS 7**

MongoDB is a NoSQL database that provides high performance, high availability, and automatic scaling. NoSQL database means that, unlike MySQL or PostgreSQL, it does not support SQL (Structured Query Language) to retrieve or manipulate the stored data. MongoDB does not store data in tables, instead, it stores data in a "document" structure similar to JSON (in MongoDB called BSON).

Step one Launch Centos instance

Security Group: mangoDB port and ssh -22, 27017 is open.

Login : centos

Chenge root user : sudo su-

#yum update -y

## **Step 1 - Add the MongoDB Repository in CentOS**

# Cd /etc/yum.repos.d/

# vi mongodb-org-3.2.repo

[mongodb-org-3.2]  
name=MongoDB Repository  
baseurl=https://repo.mongodb.org/yum/redhat/$releasever/mongodb-org/3.2/x86\_64/  
gpgcheck=1  
enabled=1  
gpgkey=https://www.mongodb.org/static/pgp/server-3.2.asc

:wq!

Save the file and exit the editor.

## **Step 2 - Installing MongoDB**

We've added MongoDB repository, now check the repository list on the server to make sure that the MongoDB repository is available in the list.

# yum repolist

You sould see results below. The MongoDB repository is on the list.

**Next, install MongoDB with the yum command.**

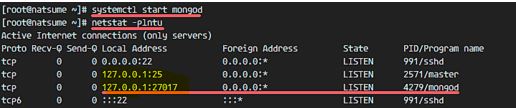
**#** yum insatll mongodb-org -y

# systemctl start mongodb {start the MongoD service }

# systemctl enable mongodb {enable the service }

heck that MongoDB is running by checking that the port '27017' is open.

# netstate -plant



# systemctl status mongodb { service Active or not to Check}

## **Step 3 - Fix a MongoDB Error**

MongoDB is installed. Now we can access the mongodb shell by using the command below:

Login to the mongo1 server and start the mongo shell.

# mongo

Switch to the database 'admin'

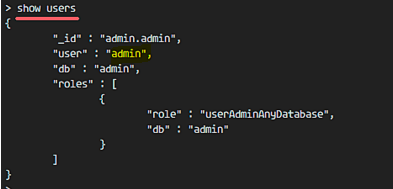
use admin

Type in the MongoDB query below to create the new administrator user:

db.createUser(  
  {  
    user: "admin",  
    pwd: "admin123",  
    roles: [ { role: "userAdminAnyDatabase", db: "admin" } ]  
  }  
)

Next, ensure that the user has been created with the MongoDB query below.

show users



The MongoDB administrator user has been created.

## **Step 5 - Enable User Authentication in MongoDB**

Go to the '/etc/init.d/' directory and edit the "mongod" file:

# cd /etc/init.d

# vi mongod

On line 15 you will find the "OPTION" variable, there we will add the "mongod" option.

OPTIONS=" --auth -f $CONFIGFILE"

Save the file.

Reload the systemd service and restart MongoDB.

systemctl daemon-reload  
systemctl restart mongod

Login to mongo

User admin

Show users

Now we need to use the command 'db.auth()' for the authentication..

db.auth('admin', 'admin123')

Server create ami

Launch ami 2 instances.

Login server

Next, We will disable SELinux by editing the configuration file with vim.

vim /etc/sysconfig/selinux

Change value '****enforcing****' to '****disabled****'.

SELINUX=disabled

Paste hosts configuration below:

Vi /ect/hosts ( follow the same step 3 instances ) take private ips

127.128.2.3 mongo-1

123.253.6.2 mongo-2

128.25.25.2 mongo-3

:wq!

Check 3 instances mongodb active or not

#systemctl status mongod

Chenge the hostname

# hostnamectl set-hostname mongo-1 ( first instace primary)

# hostnamectl set-hostname mongo-2 ( second instance secondary)

# hostnamectl set-hostname mongo-3 (thard instance ) after

To check the host name

#hostname

reboot the servers.

#reboot

## **Installed MongoDB on All Nodes**

Login Three servers

# systemctl start mongodb {start the MongoD service }

## **Configure MongoDB Replica Set**

In this step, we will prepare all server nodes to implement the replica sets in MongoDB.

Edit the MongoDB configuration file mongod.conf file with vim.

vim /etc/mongod.conf

In the 'net' section line 27, comment the 'bindIP'.

net:  
  port: 27017  
  # bindIP: 127.0.0.1

Theree Servers Coment the “bindIP”

Next, uncomment replication line 36, and set the replication name to '****myreplica01****'.

*replication:  
  replSetName: "myreplica"*

Theree Servers *replSetName: "myreplica01"*

Save th file and exit vim.

Restart MongoDB on all nodes.

*systemctl restart mongod*

## **MongoDB Replica Set initiate**

In this step, we will create the replica set. We will use the '****mongo-1****' server as '****PRIMARY****' node, and '****mongo-2****' and '****mongo-3****' as '****SECONDARY****' nodes.

mongo

Initiate the replica set from the mongo1 server with the query below.

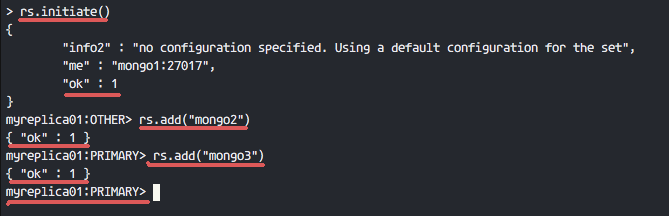
rs.initiate()

Make sure 'ok' value is 1.

Now add the 'mongo-2' and 'mongo3' nodes to the replica sets.

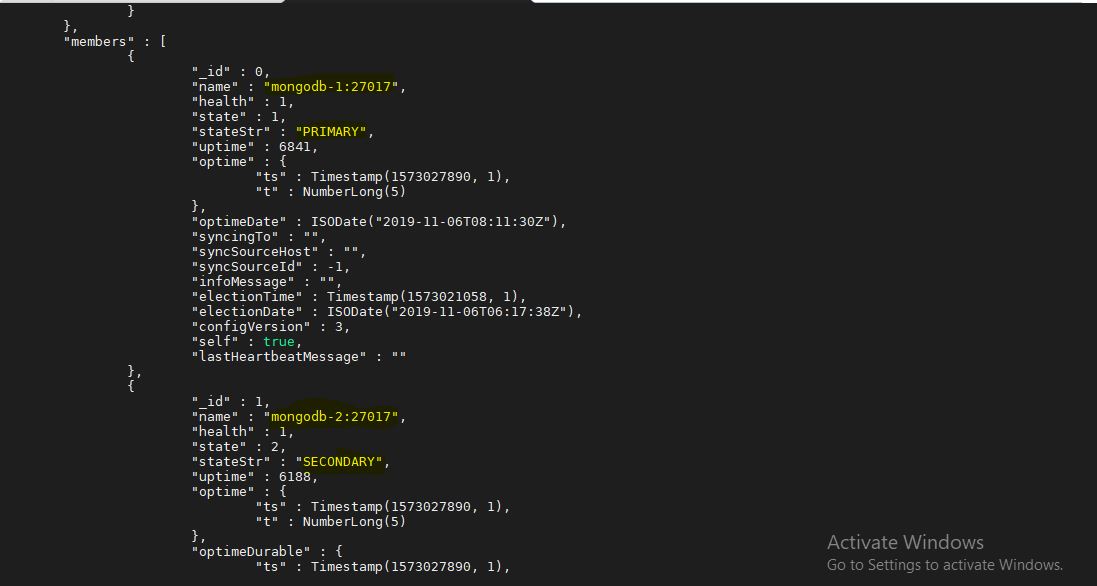
rs.add("mongo-2")  
rs.add("mongo-3")

You will see the results below and make sure there is no error.



Next, check the replica sets status with the rs query below.

rs.status()



Another query to check the status is:

rs.isMaster()

