[Installation and Configuration Replica - MongoDB enterprise edition](https://wiki.intuit.com/display/OICP/Installation+and+Configuration+Replica+-+MongoDB+enterprise+edition)

**Steps for Mongo DB enterprise version installation**

**1.     Login to ASW console.**

**2.     Select/Connect EC2 instance**

**E.g.** ssh -i "nwkeys.pem" [ec2-user@ec2-<ip>.us-east-2.compute.amazonaws.com](mailto:ec2-user@ec2-%3cip%3e.us-east-2.compute.amazonaws.com)

**In AWS EC2’s instance through ssh:**

**3.     sudo yum update**

**4.     Keep \*.pem file at /etc/ssl/ in instance.**

**For Test pupose:**

        cd /etc/ssl/

        sudo openssl req -newkey rsa:2048 -new -x509 -days 365 -nodes -out mongodb-cert.crt -keyout mongodb-cert.key

        sudo su root

        cat mongodb-cert.key mongodb-cert.crt > mongodb.pem

**5.     [TBD] CAFile**

**6.     Configure repository.**

**Create an /etc/yum.repos.d/mongodb-enterprise.repo file so that you can install MongoDB enterprise directly, using yum.**

sudo nano /etc/yum.repos.d/mongodb-enterprise.repo

For the latest stable release of MongoDB Enterprise

Use the following repository file:

|  |
| --- |
| [mongodb-enterprise]  name=MongoDB Enterprise Repository  baseurl=https://repo.mongodb.com/yum/amazon/2013.03/mongodb-enterprise/3.4/$basearch/  gpgcheck=1  enabled=1  gpgkey=https://www.mongodb.org/static/pgp/server-3.4.asc  **# To add ssl enabled.**  sslMode = requireSSL  sslPEMKeyFile = /etc/ssl/mongodb.pem  sslCAFile = /etc/ssl/ca.pem |

**7.     sudo yum install -y mongodb-enterprise**

**8.     sudo nano /etc/mongod.conf**

**Storage path :**

storage:

  dbPath: /var/lib/mongo

**Log location:**

               systemLog:

                      destination: file

 logAppend: true

                       path: /var/log/mongodb/mongod.log

**9.     Start MongoDB**

             You can start the [mongod](https://docs.mongodb.com/manual/reference/program/mongod/#bin.mongod) process by issuing the following command:

sudo service mongod start

**10.  start mongo db with ssl enabled**

sudo mongod --sslPEMKeyFile "/etc/ssl/mongodb.pem" --sslMode "requireSSL"

sudo service mongod start --sslPEMKeyFile "/etc/ssl/mongodb.pem" --sslMode "requireSSL"

**11.  Verify that MongoDB has started successfully**

You can verify that the [mongod](https://docs.mongodb.com/manual/reference/program/mongod/#bin.mongod) process has started successfully by checking the contents of the log file at /var/log/mongodb/mongod.log for a line reading

[initandlisten] waiting for connections on port <port>

where <port> is the port configured in /etc/mongod.conf, 27017 by default.

You can optionally ensure that MongoDB will start following a system reboot by issuing the following command:

sudo chkconfig mongod on

**12.  Stop MongoDB.**

         As needed, you can stop the [mongod](https://docs.mongodb.com/manual/reference/program/mongod/#bin.mongod) process by issuing the following command:

sudo service mongod stop

**13.  Restart MongoDB.**

You can restart the [mongod](https://docs.mongodb.com/manual/reference/program/mongod/#bin.mongod) process by issuing the following command:

sudo service mongod restart

You can follow the state of the process for errors or important messages by watching the output in the /var/log/mongodb/mongod.log file.

**Uninstall MongoDB**

To completely remove MongoDB from a system, you must remove the MongoDB applications themselves, the configuration files, and any directories containing data and logs. The following section guides you through the necessary steps.

Warning

This process will *completely* remove MongoDB, its configuration, and *all* databases. This process is not reversible, so ensure that all of your configuration and data is backed up before proceeding.

**1.    Remove Packages.**

Remove any MongoDB packages that you had previously installed.

sudo yum erase $(rpm -qa | grep mongodb-enterprise)

**2.    Remove Data Directories.**

Remove MongoDB databases and log files.

sudo rm -r /var/log/mongodb

sudo rm -r /var/lib/mongo

**Client:**

**With SSL:**

***Client should have \*.pem file***

mongo -u cm1 -p secretPassword --ssl --host 13.58.90.84 --sslPEMKeyFile mongodb.pem --sslAllowInvalidCertificates

**Without SSL:**

mongo -u cm1 -p secretPassword 13.58.90.84/

**Source:**

[**https://docs.mongodb.com/manual/tutorial/configure-ssl/**](https://docs.mongodb.com/manual/tutorial/configure-ssl/)

[**https://ianlondon.github.io/blog/mongodb-auth/**](https://ianlondon.github.io/blog/mongodb-auth/)

**Mongo Replica set**

1. Install MongoDB enterprise edition in different instances/ Availability zones.
2. Enable Elastic IP addresses for each of the instances.
3. Add/update **same** security group for all MongoDB instances and allow port 27017
4. Add replica set in mongodb.conf

        # replication:

           oplogSizeMB: <int>

           replicaSetName: <string>

          secondaryIndexPrefetch: <string>

          enableMajorityReadConcern: <boolean>

     5. Login to MongoDB instance.

     6. Enter into Db

        Sudo mongo

      7. Add other hosts  and below are the commands to use.

config = {\_id : "rs0" , members: [{\_id: 0, host:"10-0-0-68:27017"},{\_id:1, host:"10-0-0-247:27017"},{\_id: 2, host:"10-0-0-148:27017"}]}

Rs.initiate() – Initialize replica set.

Rs.initiate(config)   -- initialize replica set with Host details in config object

Rs.add(<host2>);  -- Add secondary host.

Rs.add(<host3>); -- Add another secondary host.

            Rs.status() – to check replica set status.

        8. In secondary hosts:

           Execute below command once to see replicated data.

              rs.slaveOk()

 Sources:

<https://eladnava.com/deploy-a-highly-available-mongodb-replica-set-on-aws/>

<http://www.tothenew.com/blog/how-to-setup-replica-sets-in-mongo-db-aws-ec2/>