MongoDB config

1. The default file is located at /etc/mongod.conf
2. The default port is TCP 27017
3. Working Port is TCP 27027
4. MongoDB server version: 3.4.5

Limit network exposure

Edit the /etc/mongod.conf or /usr/local/etc/mongod.conf file, enter:

```
$ sudo vi /etc/mongod.conf
```

If your web-app and MongoDB (mongod server) installed on the same machine, set the IP address of MongoDB to 127.0.0.1. This cuts communication directly from the internets:

```
# network interfaces
net:
  port: 27017
  bindIp: 127.0.0.1
```

You need to bind mongod to [IP Address] so that it can be only accessed over VLAN:

```
bindIp: 192.168.1.7 [IP Address]
```

The bind_ip directive Ensure that MongoDB runs in a trusted network environment and limit the interfaces on which MongoDB instances listen for incoming connections.

Change the default port

You can also change the default port if you want. In this example set it to 27027:

```
port: 27027
```

Save and close the file. You need to restart MongoDB, enter:

```
$ sudo service mongod restart
```

MongoDB User Access Control

You need to add a user administrator to a MongoDB instance running without access control and then enables access control. By default anyone can connect to the MongoDB and this is not a good

idea.

Connect to the DB instance

Enter into Mongo shell

```
$ mongo
MongoDB shell version v3.4.5
```

Create the user administrator

> **Warning:**
>
> **Create user with strong password. For demo purpose I am using 'ecosmob123'. Don't use '@' in password**

You need to use admin database. Type the following command at > prompt to create your superuser:

```
$ use admin
switched to db admin
```

Next creates the user 'ecoAdmin' in the admin database with the userAdminAnyDatabase role:

```
$ db.createUser({user:"ecoAdmin",pwd:"ecosmob123",
roles:[{role:"root",db:"admin"}]})
switched to db admin
```

Sample outputs:

```
$ Successfully added user: {
    "user" : "ecoAdmin",
    "roles" : [{
                "role" : "root",
                "db" : "admin"
                }]
    }
```

Disconnect the mongo shell by typing the following command:

```
$ exit
bye
```

Re-start the MongoDB instance

Edit the /etc/mongod.conf or /usr/local/etc/mongod.conf file, enter:

```
$ sudo vi /etc/mongod.conf
```

Turn on security:

```
security:
  authorization: enabled
```

Save and close the file. Re-start the MongoDB instance:

```
$ sudo service mongod restart
```

To authenticate during connection using user vivek and password for the admin database:

```
$ mongo --port 27027 -u ecoAdmin -p mySuperSecretePasswordHere
--authenticationDatabase admin
```

Add additional user to your DB. First create a new database called “ntcarfte”:

```
$ user ntcarfte
switched to db ntcarfte
```

Create a user named ‘ntcareAdmin’ with a password named ‘ntcare123’ for ntcarfte db:

```
db.createUser({
     user: "ntcarAdmin",
     pwd: "ntcar123",
     roles: [
         { role: "readWrite", db: "ntcarfte" }
     ]
})
```

Sample Output :

```
Successfully added user: {
    "user" : "ntcarAdmin",
    "roles" : [{
        "role" : "readWrite",
        "db" : "ntcarfte"
    }]
```

```
}
```

You can now connect to ntcarfte db as follows:

```
$ mongo --port 27027 -u "ntcarAdmin" -p "ntcar123" --authenticationDatabase
"ntcarfte"
```

This make sure only authorized admin user named ‘ecoAdmin’ can execute commands or 'ntcareAdmin' can do read/write operation on ntcarfte db.

Enable auth and open MongoDB access up to all IPs

Edit your MongoDB config file.

```
sudo vim /etc/mongod.conf
```

Look for the net line and comment out the bindIp line under it, which is currently limiting MongoDB connections to localhost:

```
# network interfaces
net:
  port: 27027
#  bindIp: 127.0.0.1  <- comment out this line
```

Logging in using the mongo shell on your laptop

You can close out of ssh and go back to your local console. To enter the remote Mongo database we just set up, you can use the mongo shell:

```
mongo --host 192.168.1.124 --port 27070 -u ntcarAdmin -p secretPassword
--authenticationDatabase ntcarfte
```

Where 192.168.1.124 is your server’s public IP address.

Finish