



# MongoDB 3.0

Installation

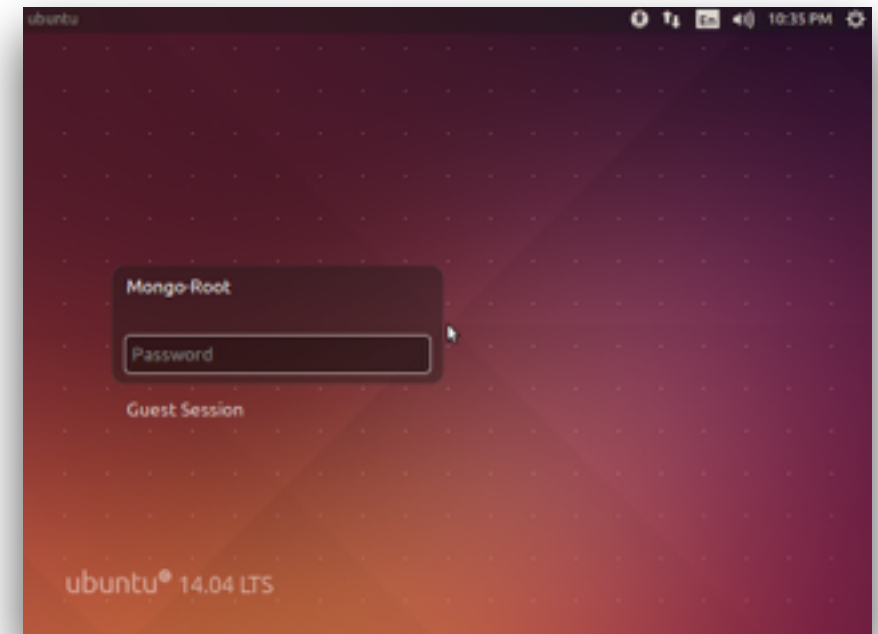
# Topics

- Install MongoDB on Linux Ubuntu 14.04.2 LTS
- Start MongoDB Manually.
- Import Sample Data.

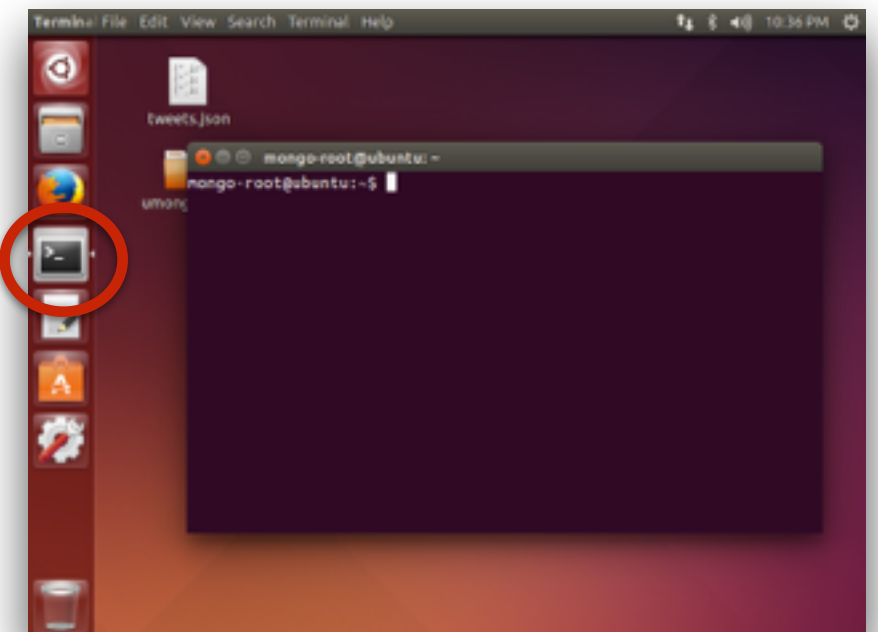
# Lab 1: Install MongoDB

1. Start Ubuntu Guest OS on VMWare Desktop.
2. At the login screen, login with mongo-root account:
  - Username: mongo-root
  - Password: pass@word1
3. Open Terminal.
4. Update Ubuntu

```
sudo apt-get update  
sudo apt-get upgrade -y
```



Terminal  
App



# Lab 1: Install MongoDB

5. Import the public key used by the package management system.

```
sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv  
7F0CEB10
```

6. Create a list file for MongoDB

```
echo "deb http://repo.mongodb.org/apt/ubuntu "$(lsb_release -sc)"/  
mongodb-org/3.0 multiverse" | sudo tee /etc/apt/sources.list.d/  
mongodb-org-3.0.list
```

7. Reload local package database

```
sudo apt-get update
```

8. Install the MongoDB packages

```
sudo apt-get install -y mongodb-org
```

# Lab 2: Test Connection with Mongo shell

1. Open Terminal
2. Connect MongoDB with mongoshell, enter command...

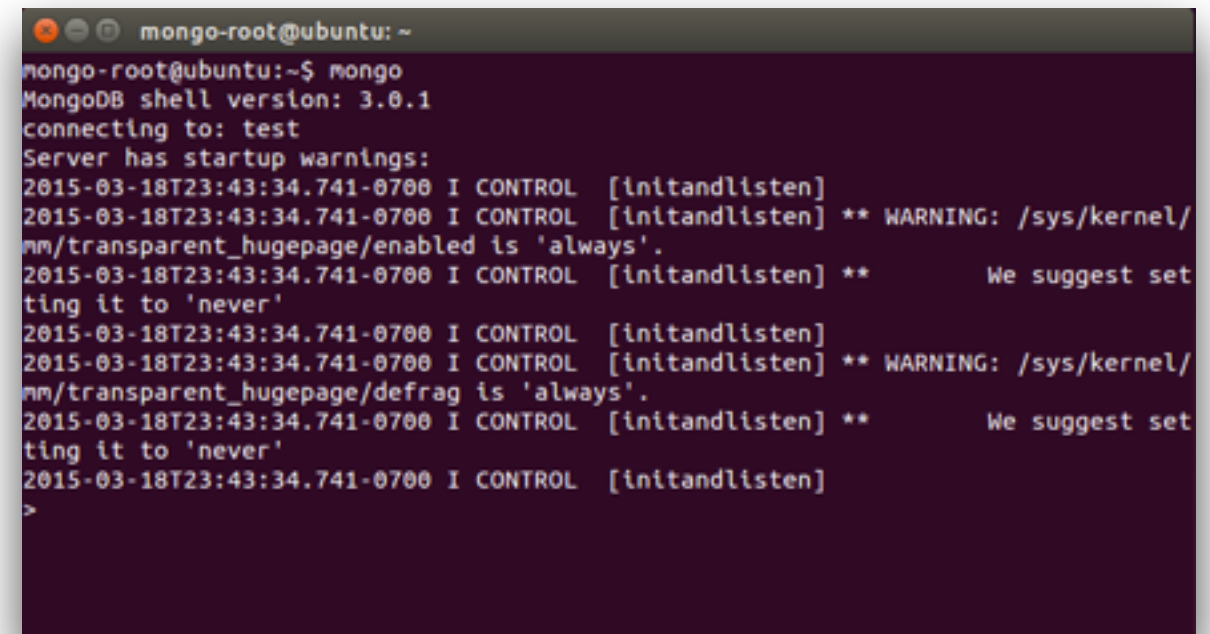
`mongo`

3. In mongo shell, enter command...

`show dbs`

4. Exit from shell by enter command...

`exit`



```
mongo-root@ubuntu: ~  
mongo-root@ubuntu:~$ mongo  
MongoDB shell version: 3.0.1  
connecting to: test  
Server has startup warnings:  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten]  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten] ** WARNING: /sys/kernel/  
mm/transparent_hugepage/enabled is 'always'.  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten] ** We suggest set  
ting it to 'never'  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten]  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten] ** WARNING: /sys/kernel/  
mm/transparent_hugepage/defrag is 'always'.  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten] ** We suggest set  
ting it to 'never'  
2015-03-18T23:43:34.741-0700 I CONTROL [initandlisten]  
>
```

# Lab 3: Start MongoDB Manually

1. Open File Manager, create folder named “data” in the home folder.
2. Open Terminal
3. Start new MongoDB process by enter command...

```
mongod -port 5000 -dbpath /home/mongo-root/data
```

4. Open second Terminal (right-click on the Terminal icon and choose “New Terminal”), connect mongo shell to the second MongoDB process by enter command...

```
mongo -host localhost -port 5000
```

5. Quit from mongo shell by enter command...

```
exit
```

6. Go back to the first Terminal, quit MongoDB process by press **Control+C** from keyboard.

# Lab 4: Import data into MongoDB

1. Open Terminal
2. Start MongoDB Service

```
sudo start mongod
```

3. Goto Desktop folder by enter command...

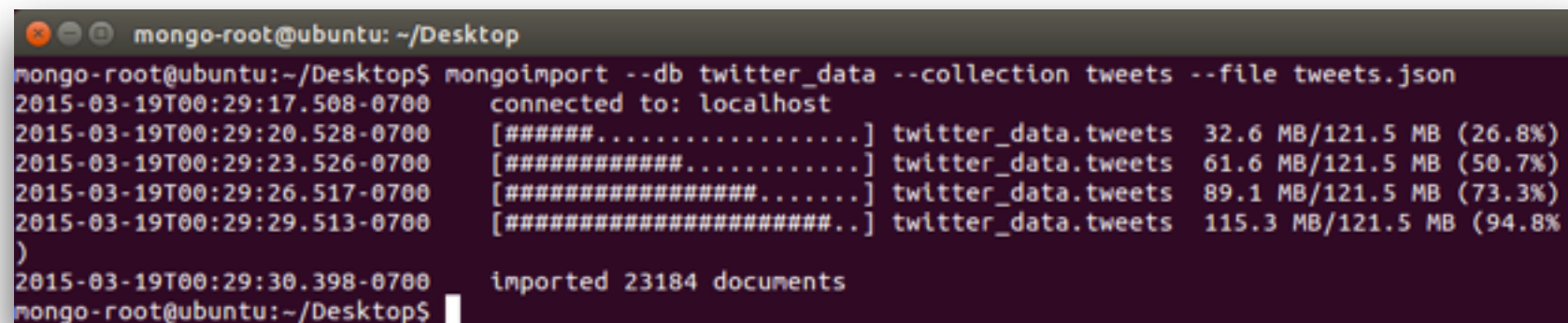
```
cd /home/mongo-root/Desktop
```

or

```
cd Desktop
```

4. Import sample data from tweets.json into MongoDB, enter command...

```
mongoimport --db twitter_data --collection tweets --file tweets.json
```



```
mongo-root@ubuntu: ~/Desktop
mongo-root@ubuntu:~/Desktop$ mongoimport --db twitter_data --collection tweets --file tweets.json
2015-03-19T00:29:17.508-0700    connected to: localhost
2015-03-19T00:29:20.528-0700    [#####.....] twitter_data.tweets  32.6 MB/121.5 MB (26.8%)
2015-03-19T00:29:23.526-0700    [#####.....] twitter_data.tweets  61.6 MB/121.5 MB (50.7%)
2015-03-19T00:29:26.517-0700    [#####.....] twitter_data.tweets  89.1 MB/121.5 MB (73.3%)
2015-03-19T00:29:29.513-0700    [#####.....] twitter_data.tweets  115.3 MB/121.5 MB (94.8%)
)
2015-03-19T00:29:30.398-0700    imported 23184 documents
mongo-root@ubuntu:~/Desktop$
```

# Lab 5: Validate imported data

1. Open mongo shell by enter command...

`mongo`

2. Inside mongo shell, display databases inside current MongoDB process by enter command...

`show dbs`

*You should see 2 databases, "local" and "twitter\_data"*

3. Connect to database named "twitter\_data" by enter command...

`use twitter_data`

4. Show collections inside database by enter command...

`show collections`

*You should see 2 collections, "system.indexes" and "tweets"*

5. Display document count inside collection named "tweets" by enter command...

`db.tweets.count()`



# References

- Ubuntu
  - Official Website:  
<http://www.ubuntu.com>
  - Desktop Download page:  
<http://www.ubuntu.com/download/desktop>
  - Server Download page:  
<http://www.ubuntu.com/download/server>
- Download MongoDB Installer Packages :-
  - [http://www.mongodb.org/downloads?\\_ga=1.83537808.784597387.1426580584](http://www.mongodb.org/downloads?_ga=1.83537808.784597387.1426580584)
- MongoDB Installation Documents
  - Ubuntu Linux:  
<http://docs.mongodb.org/manual/tutorial/getting-started/>
  - Windows:  
<http://docs.mongodb.org/manual/tutorial/install-mongodb-on-windows/>