

MONGODB ENVIRONMENT

http://www.tutorialspoint.com/mongodb/mongodb_environment.htm

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Install MongoDB On Windows

To install the MongoDB on windows, first download the latest release of MongoDB from <http://www.mongodb.org/downloads> Make sure you get correct version of MongoDB depending upon your windows version. To get your windows version open command prompt and execute following command

```
C:\>wmic os get osarchitecture
OSArchitecture
64-bit
C:\>
```

32-bit versions of MongoDB only support databases smaller than 2GB and suitable only for testing and evaluation purposes.

Now extract your downloaded file to c:\ drive or any other location. Make sure name of the extracted folder is mongodb-win32-i386-[version] or mongodb-win32-x86_64-[version]. Here [version] is the version of MongoDB download.

Now open command prompt and run the following command

```
C:\>move mongodb-win64-* mongodb
1 dir(s) moved.
C:\>
```

In case you have extracted the mongodb at different location, then go to that path by using command **cd FOLDER/DIR** and now run the above given process.

MongoDB requires a data folder to store its files. The default location for the MongoDB data directory is c:\data\db. So you need to create this folder using the Command Prompt. Execute the following command sequence

```
C:\>md data
C:\>md data\db
```

If you have install the MongoDB at different location, then you need to specify any alternate path for **\data\db** by setting the path dbpath in mongod.exe. For the same issue following commands

In command prompt navigate to the bin directory present into the mongodb installation folder. Suppose my installation folder is **D:\set up\mongodb**

```
C:\Users\XYZ>d:
D:\>cd "set up"
D:\set up>cd mongodb
D:\set up\mongodb>cd bin
D:\set up\mongodb\bin>mongod.exe --dbpath "d:\set up\mongodb\data"
```

This will show **waiting for connections** message on the console output indicates that the mongod.exe process is running successfully.

Now to run the mongod you need to open another command prompt and issue the following command

```
D:\set up\mongodb\bin>mongo.exe
MongoDB shell version: 2.4.6
connecting to: test
>db.test.save( { a: 1 } )
>db.test.find()
{ "_id" : ObjectId(5879b0f65a56a454), "a" : 1 }
>
```

This will show that mongod is installed and run successfully. Next time when you run mongod you need to issue only commands

```
D:\set up\mongodb\bin>mongod.exe --dbpath "d:\set up\mongodb\data"
D:\set up\mongodb\bin>mongo.exe
```

Install MongoDB on Ubuntu

Run the following command to import the MongoDB public GPG Key:

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

Create a /etc/apt/sources.list.d/mongodb.list file using the following command.

```
echo 'deb http://downloads-distro.mongodb.org/repo/ubuntu-upstart dist
10gen' | sudo tee /etc/apt/sources.list.d/mongodb.list
```

Now issue the following command to update the repository:

```
sudo apt-get update
```

Now install the MongoDB by using following command:

```
apt-get install mongodb-10gen=2.2.3
```

In the above installation 2.2.3 is currently released mongod version. Make sure to install latest version always. Now mongod is installed successfully.

Start MongoDB

```
sudo service mongod start
```

Stop MongoDB

```
sudo service mongod stop
```

Restart MongoDB

```
sudo service mongod restart
```

To use mongod run the following command

```
mongo
```

This will connect you to running mongod instance.

MongoDB Help

To get list of commands type **db.help()** in mongod client. This will give you list of commands as follows:

```
C:\Windows\system32\cmd.exe - mongo.exe
D:\set up\mongodb\bin>mongo.exe
MongoDB shell version: 2.4.6
connecting to: test
> db.help()
DB methods:
  db.addUser(userDocument)
  db.adminCommand(nameOrDocument) - switches to 'admin' db, and runs command [ just calls db.runCommand(...) ]
  db.auth(username, password)
  db.cloneDatabase(fromhost)
  db.commandHelp(name) returns the help for the command
  db.copyDatabase(fromdb, todb, fromhost)
  db.createCollection(name, { size : ..., capped : ..., max : ... } )
  db.currentOp() displays currently executing operations in the db
  db.dropDatabase()
  db.eval(func, args) run code server-side
  db.fsyncLock() flush data to disk and lock server for backups
  db.fsyncUnlock() unlocks server following a db.fsyncLock()
  db.getCollection(cname) same as db['cname'] or db.cname
  db.getCollectionNames()
  db.getLastError() - just returns the err msg string
  db.getLastErrorObj() - return full status object
  db.getMongo() get the server connection object
  db.getMongo().setSlaveOk() allow queries on a replication slave server
  db.getName()
  db.getPrevError()
  db.getProfilingLevel() - deprecated
  db.getProfilingStatus() - returns if profiling is on and slow threshold
  db.getReplicationInfo()
  db.getSiblingDB(name) get the db at the same server as this one
  db.hostInfo() get details about the server's host
  db.isMaster() check replica primary status
  db.killOp(opid) kills the current operation in the db
  db.listCommands() lists all the db commands
  db.loadServerScripts() loads all the scripts in db.system.js
  db.logout()
  db.printCollectionStats()
  db.printReplicationInfo()
  db.printShardingStatus()
  db.printSlaveReplicationInfo()
  db.removeUser(username)
  db.repairDatabase()
  db.resetError()
  db.runCommand(cmdObj) run a database command.  if cmdObj is a string, turn it into { cmdObj : 1 }
  db.serverStatus()
  db.setProfilingLevel(level,<slowms>) 0=off 1=slow 2=all
  db.setVerboseShell(flag) display extra information in shell output
  db.shutdownServer()
  db.stats()
  db.version() current version of the server
>
```

MongoDB Statistics

To get stats about mongodb server type the command **db.stats()** in mongodb client. This will show the database name, number of collection and documents in the database. Output the command is shown below:

```
C:\Windows\system32\cmd.exe - mongo.exe
> db.stats()
{
  "db" : "test",
  "collections" : 3,
  "objects" : 5,
  "avgObjSize" : 39.2,
  "dataSize" : 196,
  "storageSize" : 12288,
  "numExtents" : 3,
  "indexes" : 1,
  "indexSize" : 8176,
  "fileSize" : 201326592,
  "nsSizeMB" : 16,
  "dataFileVersion" : {
    "major" : 4,
    "minor" : 5
  },
  "ok" : 1
}
```