

## ***INSTALLATION OF MONGODB IN WINDOWS***

MongoDB is a document oriented NoSQL database. It's not a relational database, it's non-relational database. It is a schema free database. Schema-less NoSQL data-store will in theory allow you to store any data you like (typically key value pairs, in a document) without prior knowledge of the keys, or data types. Schema free DB is nothing but a NOSQL database. Here you have Collections. There is no prefixed structure. You can alter it very easily and store any kind of data.

Good examples of NoSQL databases are: MONGODB, Neo4j, CASSANDRA, REDIS

MongoDB organizes itself in a group of documents, also known as collection. It is based on simple query language, known as document based query.

## **MongoDB vs. RDBMS**

- Collection vs. table
- Document vs. row
- Field vs. column
- Collection isn't strict about what goes in it (it's schema-less)

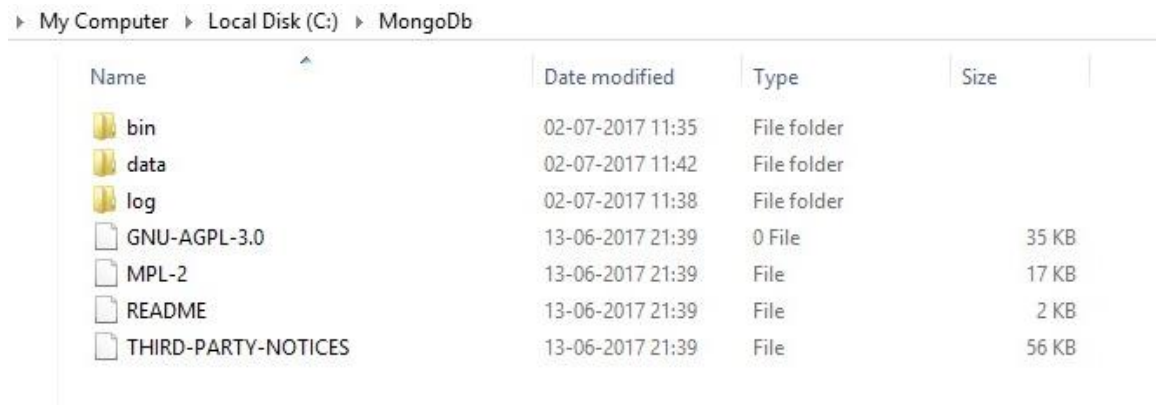
1. Download MongoDB from its official website based upon flavor of your operating system:

[www.mongodb.org](http://www.mongodb.org)

- For windows operating system, download and save .msi file for MongoDB.

2. Install your MongoDB by simply double clicking on .msi file for MongoDB.

- Below image shows path where I have installed MongoDB in my computer.



Name	Date modified	Type	Size
bin	02-07-2017 11:35	File folder	
data	02-07-2017 11:42	File folder	
log	02-07-2017 11:38	File folder	
GNU-AGPL-3.0	13-06-2017 21:39	0 File	35 KB
MPL-2	13-06-2017 21:39	File	17 KB
README	13-06-2017 21:39	File	2 KB
THIRD-PARTY-NOTICES	13-06-2017 21:39	File	56 KB

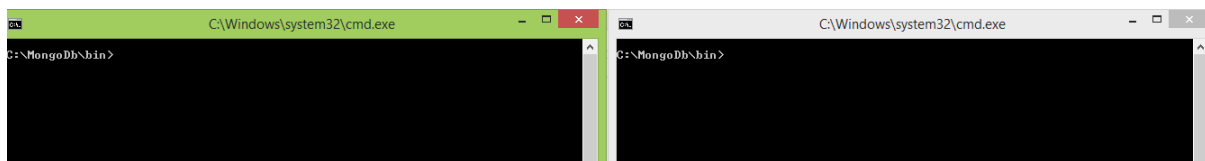
3. Inside bin folder, there are many files. But, we are interested in mongo.exe and mongod.exe

- Mongod is a mongo daemon (server), which will execute in background and accept request from MongoDB. So, it's a background process.
- Mongo.exe is a command line shell, through which we are going to work with our database.

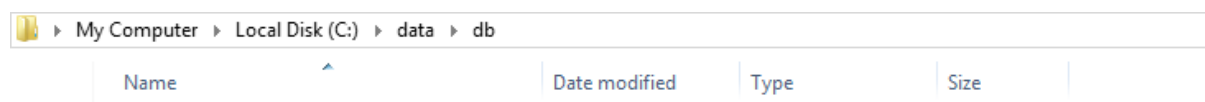
Computer > Local Disk (C:) > MongoDB > bin

Name	Date modified	Type	Size
journal	02-07-2017 11:35	File folder	
bsondump.exe	13-06-2017 21:40	Application	7,178 KB
libeay32.dll	19-12-2016 18:30	Application extens...	1,954 KB
mongo.exe	13-06-2017 21:52	Application	11,025 KB
mongod.exe	13-06-2017 21:56	Application	26,484 KB
mongod.lock	02-07-2017 11:35	LOCK File	0 KB
mongod.pdb	13-06-2017 21:56	Program Debug D...	2,49,372 KB
mongodump.exe	13-06-2017 21:42	Application	9,239 KB
mongoexport.exe	13-06-2017 21:41	Application	7,434 KB
mongofiles.exe	13-06-2017 21:41	Application	7,349 KB
mongoimport.exe	13-06-2017 21:41	Application	7,527 KB
mongooplog.exe	13-06-2017 21:43	Application	7,178 KB
mongoperf.exe	13-06-2017 21:57	Application	22,849 KB
mongorestore.exe	13-06-2017 21:42	Application	10,551 KB
mongos.exe	13-06-2017 21:56	Application	13,636 KB
mongos.pdb	13-06-2017 21:56	Program Debug D...	1,23,580 KB
mongostat.exe	13-06-2017 21:40	Application	7,500 KB
mongotop.exe	13-06-2017 21:43	Application	7,309 KB
ssleay32.dll	19-12-2016 18:30	Application extens...	318 KB

4. Open two terminal and traverse through path of bin folder inside MongoDB.



5. Execute mongod.exe command in one cmd. Initially it will show some error. That indicates, in order to work with MongoDB, you need two folders inside C:\.



6. Now, execute mongod.exe command in one cmd.

```
mongod.exe
C:\MongoDb\bin>mongod.exe
2017-07-25T18:07:19.891+0530 I CONTROL [initandlisten] MongoDB starting : pid=1
58628 port=27017 dbpath=C:\data\db\ 64-bit host=Manan
2017-07-25T18:07:19.893+0530 I CONTROL [initandlisten] targetMinOS: Windows 7/W
indows Server 2008 R2
2017-07-25T18:07:19.893+0530 I CONTROL [initandlisten] db version v3.4.5
2017-07-25T18:07:19.893+0530 I CONTROL [initandlisten] git version: 520b8f3092c
48d934f0cd78ab5f40fe594f96863
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] OpenSSL version: OpenSSL
1.0.1u-fips 22 Sep 2016
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] allocator: tcmalloc
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] modules: none
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] build environment:
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] distmod: 2008plus-ss
l
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] distarch: x86_64
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] target_arch: x86_64
2017-07-25T18:07:19.894+0530 I CONTROL [initandlisten] options: {}
2017-07-25T18:07:19.943+0530 I - [initandlisten] Detected data files in C
:\data\db\ created by the 'wiredTiger' storage engine, so setting the active sto
rage engine to 'wiredTiger'.
2017-07-25T18:07:19.946+0530 I STORAGE [initandlisten] wiredtiger_open config:
create,cache_size=3535M,session_max=20000,eviction=(threads_min=4,threads_max=4)
,config_base=false,statistics=(fast),log=(enabled=true,archive=true,path=journal
,compressor=snappy),file_manager=(close_idle_time=100000),checkpoint=(wait=60,lo
g_size=2GB),statistics_log=(wait=0),
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten]
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten] ** WARNING: Access contr
ol is not enabled for the database.
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten] ** Read and wri
te access to data and configuration is unrestricted.
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten]
2017-07-25T18:07:23.637+0530 I FTDC [initandlisten] Initializing full-time d
iagnostic data capture with directory 'C:\data\db\diagnostic.data'
2017-07-25T18:07:23.639+0530 I NETWORK [thread1] waiting for connections on por
t 27017
```

You can see mongod is ready to establish connection.

7. In 2<sup>nd</sup> terminal execute, mongo.exe

```
mongo.exe
C:\MongoDb\bin>mongo.exe
MongoDB shell version v3.4.5
connecting to: mongod://127.0.0.1:27017
MongoDB server version: 3.4.5
Server has startup warnings:
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten]
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten] ** WARNING: Access contr
ol is not enabled for the database.
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten] ** Read and wri
te access to data and configuration is unrestricted.
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten]
>
```

Check window of mongod.exe, it will show connection accepted as shown below:

```
2017-07-25T18:22:37.054+0530 I NETWORK [thread1] connection accepted from 127.0.0.1:34139 #1 (1 connection now open)
2017-07-25T18:22:37.055+0530 I NETWORK [conn1] received client metadata from 127.0.0.1:34139 conn1: { application: { name: "MongoDB Shell" }, driver: { name: "MongoDB Internal Client", version: "3.4.5" }, os: { type: "Windows", name: "Microsoft Windows 8", architecture: "x86_64", version: "6.2 (build 9200)" } }
```

8. To check installation is successful, perform simple db command. It will show sample database: test



```
C:\MongoDb\bin>mongo.exe
MongoDB shell version v3.4.5
connecting to: mongodb://127.0.0.1:27017
MongoDB server version: 3.4.5
Server has startup warnings:
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten]
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten] ** WARNING: Access control
ol is not enabled for the database.
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten] **           Read and wri
te access to data and configuration is unrestricted.
2017-07-25T18:07:21.205+0530 I CONTROL [initandlisten]
> use test
>
```