

```

1 1. Windows
2 1)Visit Download Center(https://www.mongodb.com/download-center/community)
3 -Installation Manual(https://docs.mongodb.com/manual/tutorial/install-mongodb-on-windows/)
4
5 2)Get MongoDB Community Edition
6 -MongoDB for Windows 64-bit
7 -To find which version of Windows you are running, enter the following commands in the Command Prompt or Powershell:
8 --wmic os get caption
9 --wmic os get osarchitecture
10
11 C:\Users\Instructor>wmic os get caption
12 Caption
13 Microsoft Windows 10 Enterprise Evaluation
14
15 C:\Users\Instructor>wmic os get osarchitecture
16 OSArchitecture
17 64-bit
18
19
20 -Download MongoDB for Windows.
21 --mongodb-win32-x86_64-2012plus-4.2.0-signed.msi
22
23 3)Install MongoDB Community Edition
24 -설치타입은 [Complete]로
25 -[Install MongoDB as a Service] check
26 -[Run service as Network Service user] select
27 -Service Name : MongoDB
28 -Data Directory : 기본값(C:\Program Files\MongoDB\Server\4.2\data\)
29 -Log Directory : 기본값(C:\Program Files\MongoDB\Server\4.2\log\)
30 -[Install MongoDB Compass] check
31 -만일 설치 시간이 너무 오래걸리거나 설치시 화면이 정지되면, 설치를 멈추고 다시 설치할 때 MongoDB Compass는 check 해제하고 설치할 것
32
33 -설치 위치
34 C:\Program Files\MongoDB\Server\4.2\
35
36 -Component Sets
37 --Server : mongod.exe
38 --Router : mongos.exe
39 --Client : mongo.exe
40 --MonitoringTools : mongostat.exe, mongotop.exe
41 --ImportExportTools : mongodump.exe, mongorestore.exe, mongoexport.exe, mongoimport.exe
42 --MiscellaneousTools : bsondump.exe, mongofiles.exe, mongooplog.exe, mongoperf.exe
43
44 4)Configuration
45 -Register Windows System variables
46 --%PATH% = ...;C:\Program Files\MongoDB\Server\4.2\bin;
47 --SET PATH
48 Path=...C:\Program Files\MongoDB\Server\3.4\bin;
49
50 -Start MongoDB
51 --To start MongoDB, run mongod.exe. For example, from the Command Prompt:
52 >mongod.exe
53 ...
54 2019-08-22T14:30:21.895+0900 I STORAGE [initandlisten] exception in initAndListen: NonExistentPath: Data directory
C:\data\db\ not found., terminating
55 ...
56 2019-08-22T14:30:21.896+0900 I CONTROL [initandlisten] now exiting
57 2019-08-22T14:30:21.897+0900 I CONTROL [initandlisten] shutting down with code:100
58 >
59
60 -Set up the MongoDB environment
61 --MongoDB requires a data directory to store all data.
62 --MongoDB's default data directory path is the absolute path \data\db on the drive from which you start MongoDB.
63 --Create this folder by running the following command in a Command Prompt:
64 md \data\db
65 --You can specify an alternate path for data files using the --dbpath option to mongod.exe,
66 for example:
67 "C:\Program Files\MongoDB\Server\4.2\bin\mongod.exe" --dbpath C:/PythonHome/mongodb/data
68
69 In Command Administrator Prompt,
70 C:\PythonHome>md .\data\db
71
72 C:\PythonHome>mongod --dbpath .\data\db
73 ...
74 2019-08-22T14:45:50.599+0900 I CONTROL [initandlisten] MongoDB starting : pid=10936 port=27017
dbpath=.\data\db 64-bit host=DESKTOP-NU7GQVV
75 2019-08-22T14:45:50.599+0900 I CONTROL [initandlisten] targetMinOS: Windows 7/Windows Server 2008 R2
76 2019-08-22T14:45:50.599+0900 I CONTROL [initandlisten] db version v4.2.0
77 ...
78 2019-08-22T14:45:51.038+0900 I INDEX [LogicalSessionCacheRefresh] index build: done building index lsidTTLIndex
on ns config.system.sessions
79
80
81 5)Connect to MongoDB

```

-To connect to MongoDB through the mongo.exe shell, open another Command Prompt.

-In Command Prompt,

```
C:\Users\Instructor>mongo
MongoDB shell version v4.2.0
connecting to: mongod://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongod
Implicit session: session { "id" : UUID("cd080c49-a69f-4820-991d-3172723a0990") }
MongoDB server version: 4.2.0
Welcome to the MongoDB shell.
For interactive help, type "help".
For more comprehensive documentation, see
  http://docs.mongodb.org/
...
...
>
```

2. 연결 후 테스트

1)help

> help

```
db.help()          help on db methods
db.mycoll.help()   help on collection methods
sh.help()          sharding helpers
rs.help()          replica set helpers
help admin         administrative help
help connect       connecting to a db help
help keys          key shortcuts
help misc          misc things to know
help mr            mapreduce

show dbs           show database names
show collections   show collections in current database
show users         show users in current database
show profile       show most recent system.profile entries with time >= 1ms
show logs          show the accessible logger names
show log [name]    prints out the last segment of log in memory, 'global' is default
use <db_name>      set current database
db.foo.find()      list objects in collection foo
db.foo.find( { a : 1 } ) list objects in foo where a == 1
it                result of the last line evaluated; use to further iterate
DBQuery.shellBatchSize = x set default number of items to display on shell
exit              quit the mongo shell
>
```

2)사용가능한 DB보기

> show dbs

```
admin  0.000GB
config 0.000GB
local  0.000GB
```

3)db.help()를 사용하여 데이터베이스에 사용할 수 있는 명령어 보기

> db.help()

DB methods:

```
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.createView(name, viewOn, [ { $operator: {...}}, ... ], { viewOptions } )
db.createUser(userDocument)
db.currentOp() displays currently executing operations in the db
db.dropDatabase()
db.eval() - deprecated
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.getCollectionInfos([filter]) - returns a list that contains the names and options of the db's collections
db.getCollectionNames()
db.getLastErrorMessage() - just returns the err msg string
db.getLastErrorMessageObj() - return full status object
db.getLogComponents()
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.getWriteConcern() - returns the write concern used for any operations on this db, inherited from server object if set
db.hostInfo() get details about the server's host
db.isMaster() check replica primary status
```

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166 db.killOp(opid) kills the current operation in the db
167 db.listCommands() lists all the db commands
168 db.loadServerScripts() loads all the scripts in db.system.js
169 db.logout()
170 db.printCollectionStats()
171 db.printReplicationInfo()
172 db.printShardingStatus()
173 db.printSlaveReplicationInfo()
174 db.dropUser(username)
175 db.repairDatabase()
176 db.resetError()
177 db.runCommand(cmdObj) run a database command. if cmdObj is a string, turns it into { cmdObj : 1 }
178 db.serverStatus()
179 db.setLogLevel(level,<component>)
180 db.setProfilingLevel(level,<slowms>) 0=off 1=slow 2=all
181 db.setWriteConcern( <write concern doc> ) - sets the write concern for writes to the db
182 db.unsetWriteConcern( <write concern doc> ) - unsets the write concern for writes to the db
183 db.setVerboseShell(flag) display extra information in shell output
184 db.shutdownServer()
185 db.stats()
186 db.version() current version of the server
187 >

```

4)test 데이터베이스 사용하기

```

189 > use test
190 switched to db test
191
192
193 >show dbs
194 admin 0.000GB
195 config 0.000GB
196 local 0.000GB
197
198 >db.test.save({a:1})
199 writeResult({"nInserted" :1})
200
201 >show dbs
202 admin 0.000GB
203 config 0.000GB
204 local 0.000GB
205 test 0.000GB
206
207 >db.stats()
208 {
209   "db" : "test",
210   "collections" : 1,
211   "views" : 0,
212   "objects" : 1,
213   "avgObjSize" : 33,
214   "dataSize" : 33,
215   "storageSize" : 16384,
216   "numExtents" : 0,
217   "indexes" : 1,
218   "indexSize" : 16384,
219   ...
220   "ok" : 1
221 }
222

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5)mongoDB 종료하기

```

224 > db.shutdownServer()
225 shutdown command only works with the admin database; try 'use admin'
226 > use admin
227 switched to db admin
228 > db.shutdownServer()
229 server should be down...
230 2019-08-22T14:54:54.912+0900 I NETWORK [js] DBClientConnection failed to receive message from 127.0.0.1:27017
- HostUnreachable: Connection reset by peer
231 server should be down...
232 2019-08-22T14:54:54.916+0900 I NETWORK [js] trying reconnect to 127.0.0.1:27017 failed
233 2019-08-22T14:54:54.927+0900 I NETWORK [js] reconnect 127.0.0.1:27017 ok
234 >

```