How to Download & Install MongoDB on Windows

The installers for MongoDB are available in both the 32-bit and 64-bit format. The 32-bit installers are good for development and test environments. But for production environments you should use the 64-bit installers. Otherwise, you can be limited to the amount of data that can be stored within MongoDB.

It is advisable to always use the stable release for production environments.

In this tutorial, you will learn –

- Download & Install MongoDB on Windows
- Hello World MongoDB: JavaScript Driver
- Install Python Driver
- Install Ruby Driver
- Install MongoDB Compass- MongoDB Management Tool
- MongoDB Configuration, Import and Export
- Configuring MongoDB server with configuration file

How to Download & Install MongoDB on Windows

The following steps can be used to download and install MongoDB on Windows 10

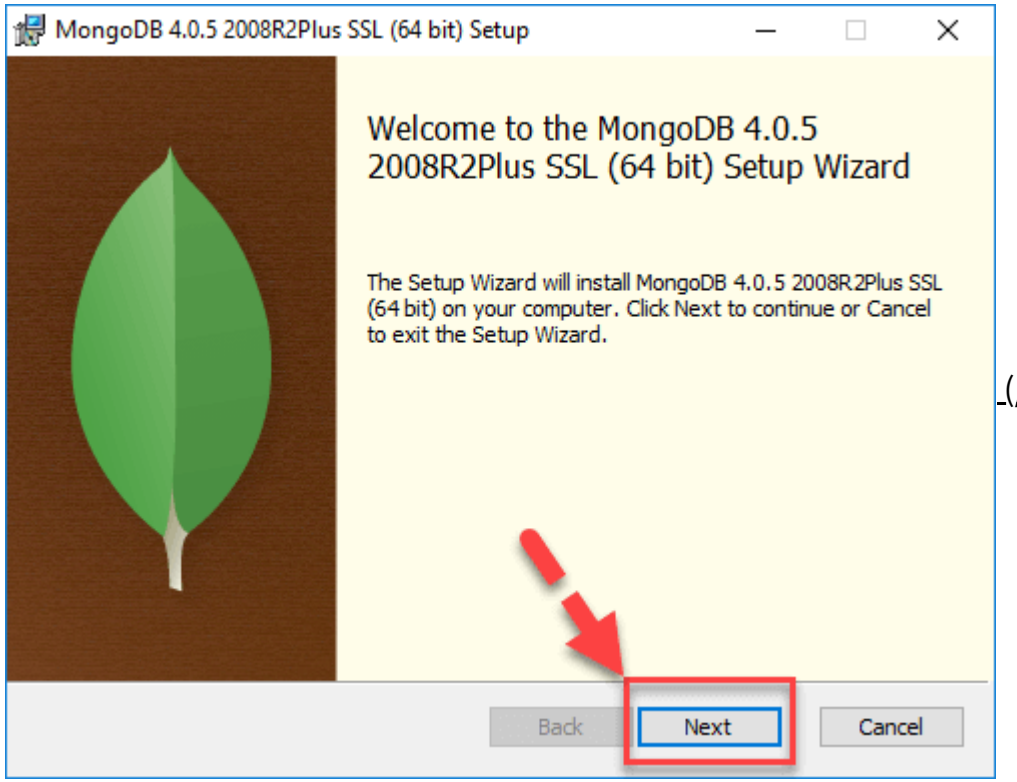
Step 1) Download MongoDB Community Server

Go to link (https://www.mongodb.com/download-center#community) and Download MongoDB Community Server. We will install the 64-bit version for Windows.

(//cdn.guru99.com/images/1/install-mongodb01.png)

Step 2) Click on Setup

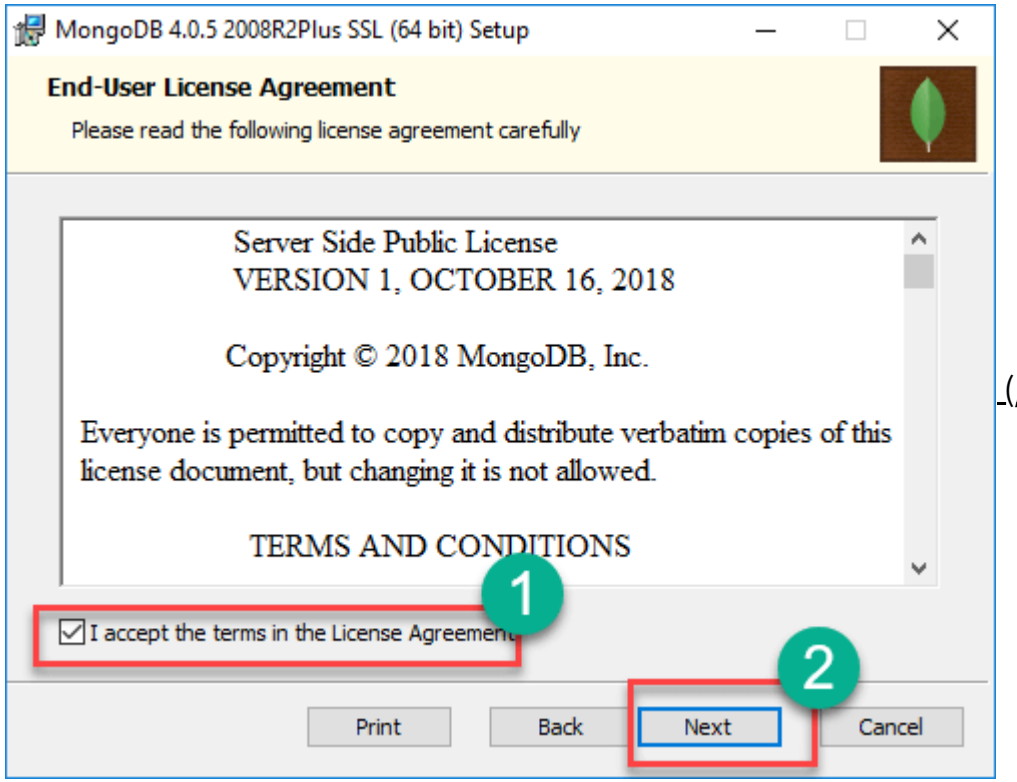
Once download is complete open the msi file. Click Next in the start up screen



(//cdn.guru99.com/images/1/install-mongodb02.png)

Step 3) Accept the End-User License Agreement

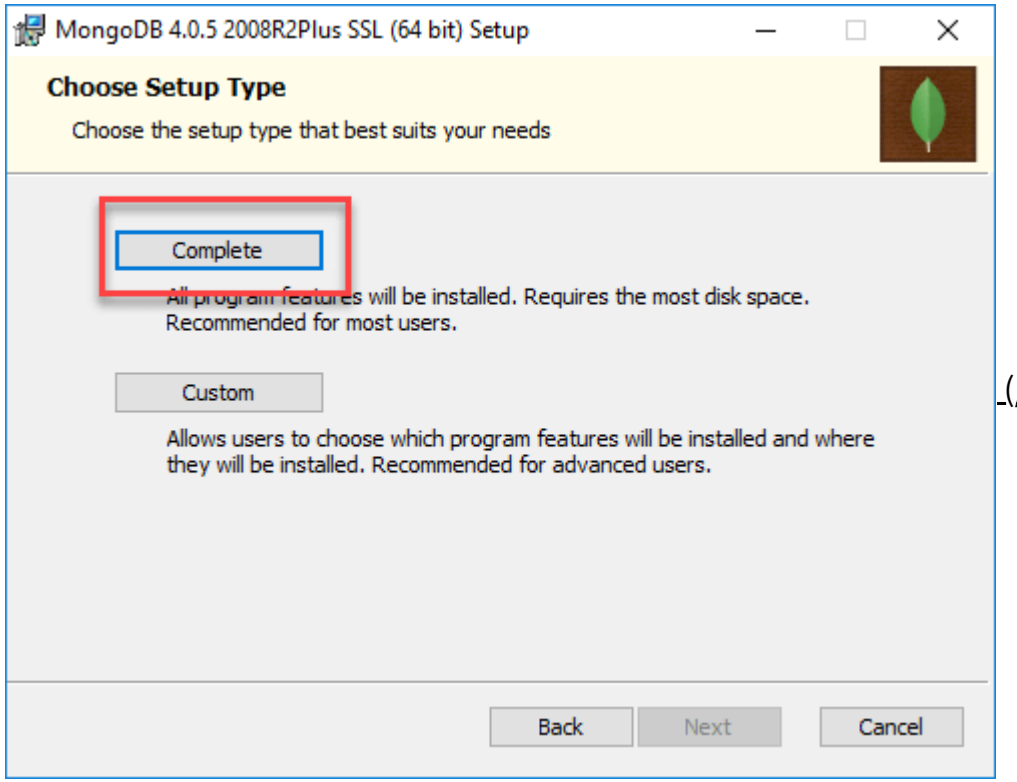
1. Accept the End-User License Agreement
2. Click Next



(//cdn.guru99.com/images/1/install-mongodb03.png)

Step 4) Click on the "complete" button

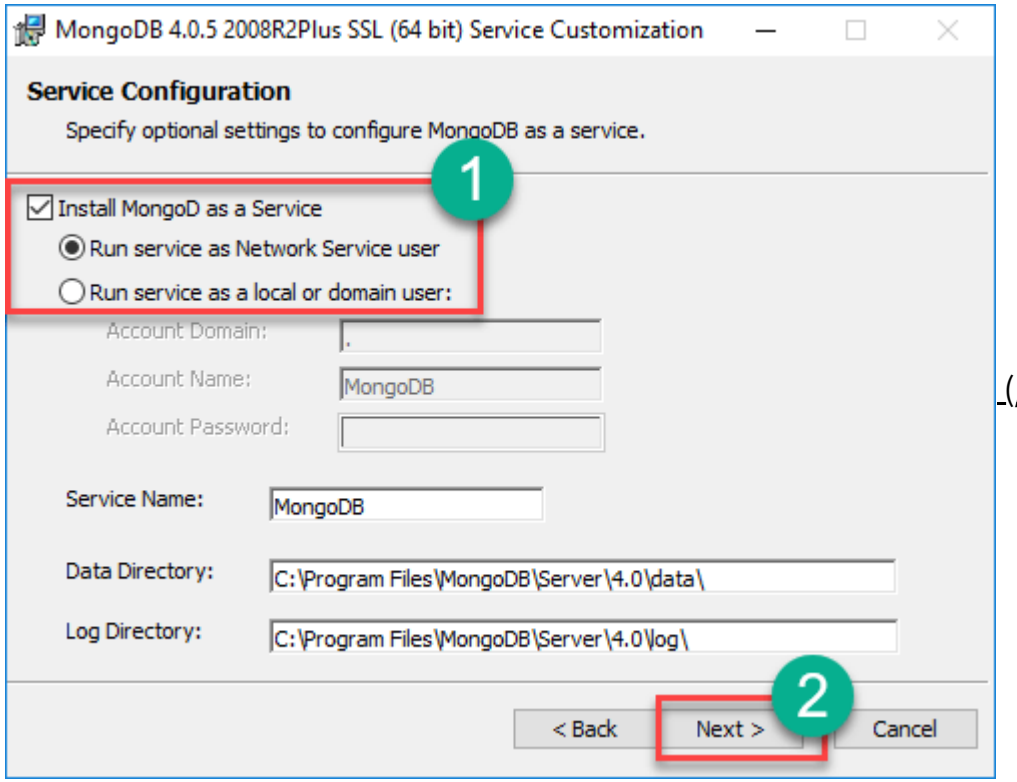
Click on the "complete" button to install all of the components. The custom option can be used to install selective components or if you want to change the location of the installation.



(//cdn.guru99.com/images/1/install-mongodb04.png)

Step 5) Service Configuration

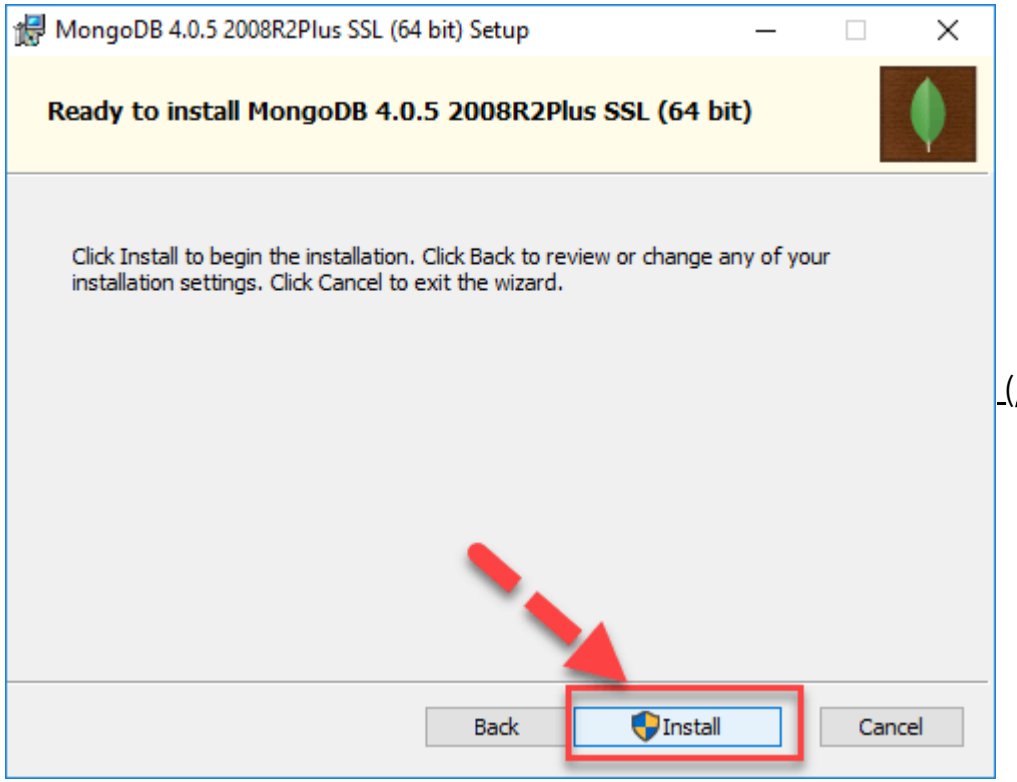
1. Select “Run service as Network Service user”. make a note of the data directory, we’ll need this later.
2. Click Next



(//cdn.guru99.com/images/1/install-mongodb05.png)

Step 6) Start installation process

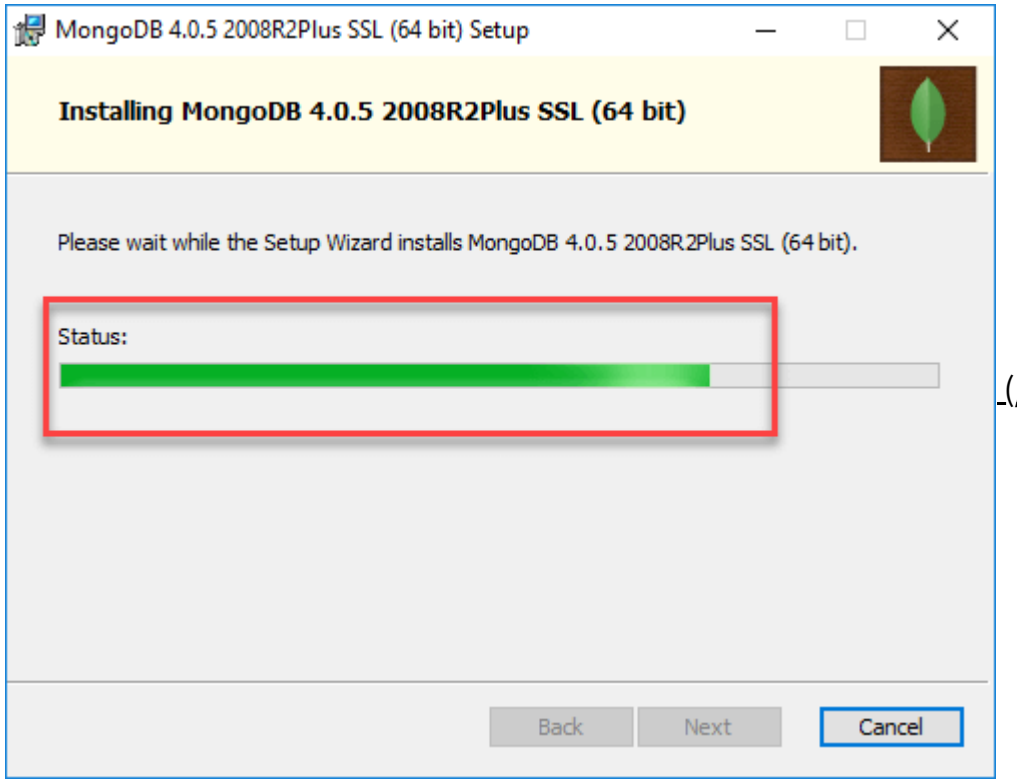
Click on the Install button to start the installation.



(//cdn.guru99.com/images/1/install-mongodb06.png)

Step 7) Click Next once completed

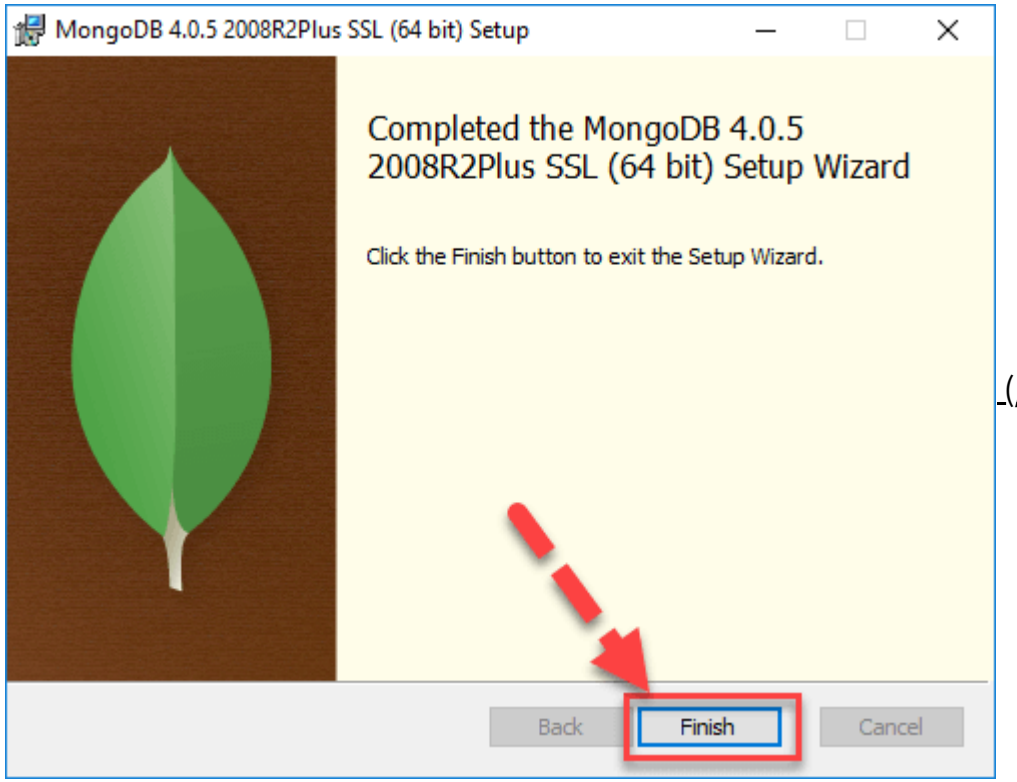
Installation begins. Click Next once completed



(//cdn.guru99.com/images/1/install-mongodb07.png)

Step 8) Click on the Finish button

Final step, Once complete the installation, Click on the Finish button



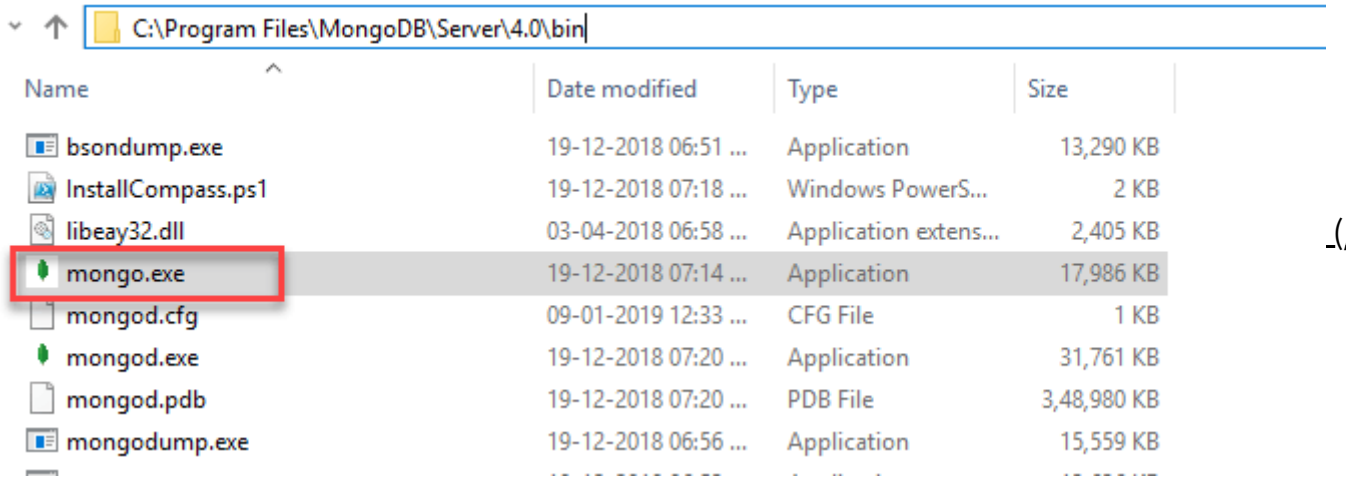
(//cdn.guru99.com/images/1/install-mongodb08.png)

Hello World MongoDB: JavaScript Driver

Drivers in MongoDB are used for connectivity between client applications and the database. For example, if you had Java (https://www.guru99.com/java-tutorial.html)program and required it to connect to MongoDB then you would require to download and integrate the Java driver so that the program can work with the MongoDB database.

The driver for JavaScript (https://www.guru99.com/interactive-javascript-tutorials.html)comes out of the box. The MongoDB shell which is used to work with MongoDB database is actually a javascript shell. To access it

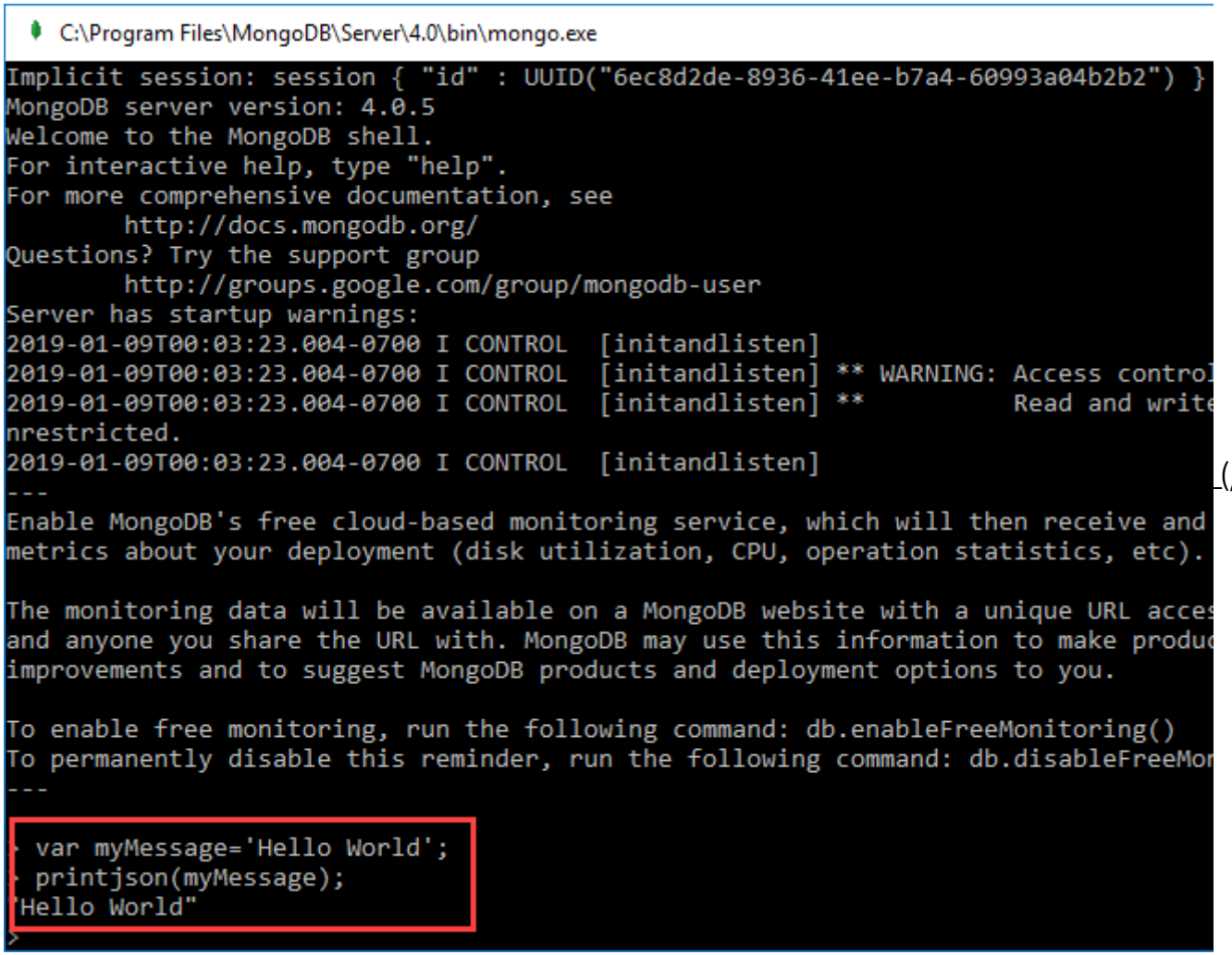
Step 1) Go to " C:\Program Files\MongoDB\Server\4.0\bin" and double click on mongo.exe. Alternatively, you can also click on the MongoDB desktop item



(//cdn.guru99.com/images/1/install-mongodb09.png)

Step 2) Enter following program into shell

```
var myMessage='Hello World';
printjson(myMessage);
```



(//cdn.guru99.com/images/1/install-mongodb10.png)

Code Explanation:

1. We are just declaring a simple Javascript variable to store a string called 'Hello World.'
2. We are using the printjson method to print the variable to the screen.

Install Python Driver

Step 1) Ensure Python is installed on the system

Step 2) Install the mongo related drivers by issuing the below command

```
pip install pymongo
```

Install Ruby Driver

Step 1) Ensure Ruby is installed on the system

Step 2) Ensure gems is updated by issuing the command

```
gem update -system
```

Step 3) Install the mongo related drivers by issuing the below command

```
gem install mong
```

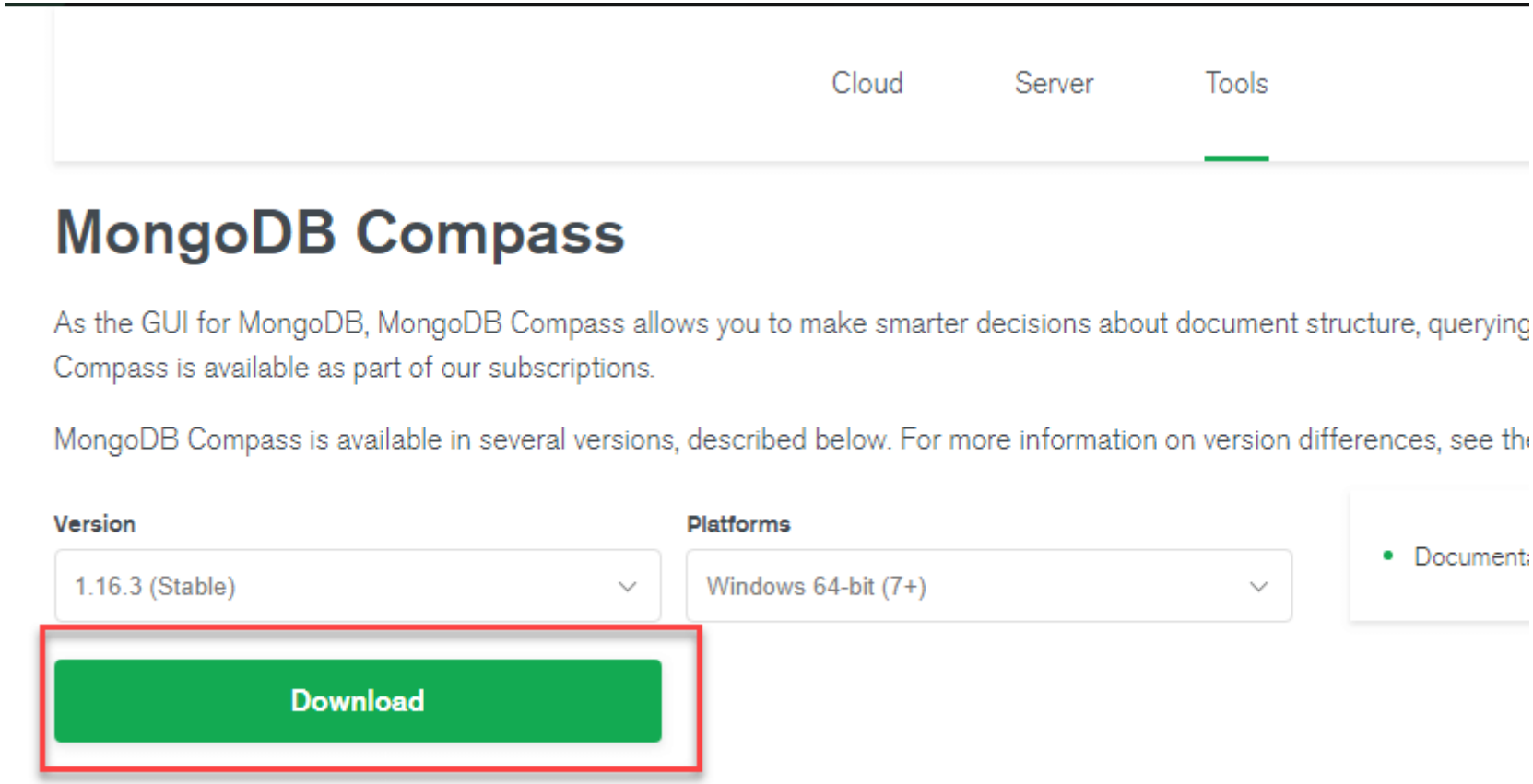
Install MongoDB Compass- MongoDB Management Tool

There are tools in the market which are available for managing MongoDB. One such non-commercial tool is MongoDB Compass.

Some of the features of Compass are given below:

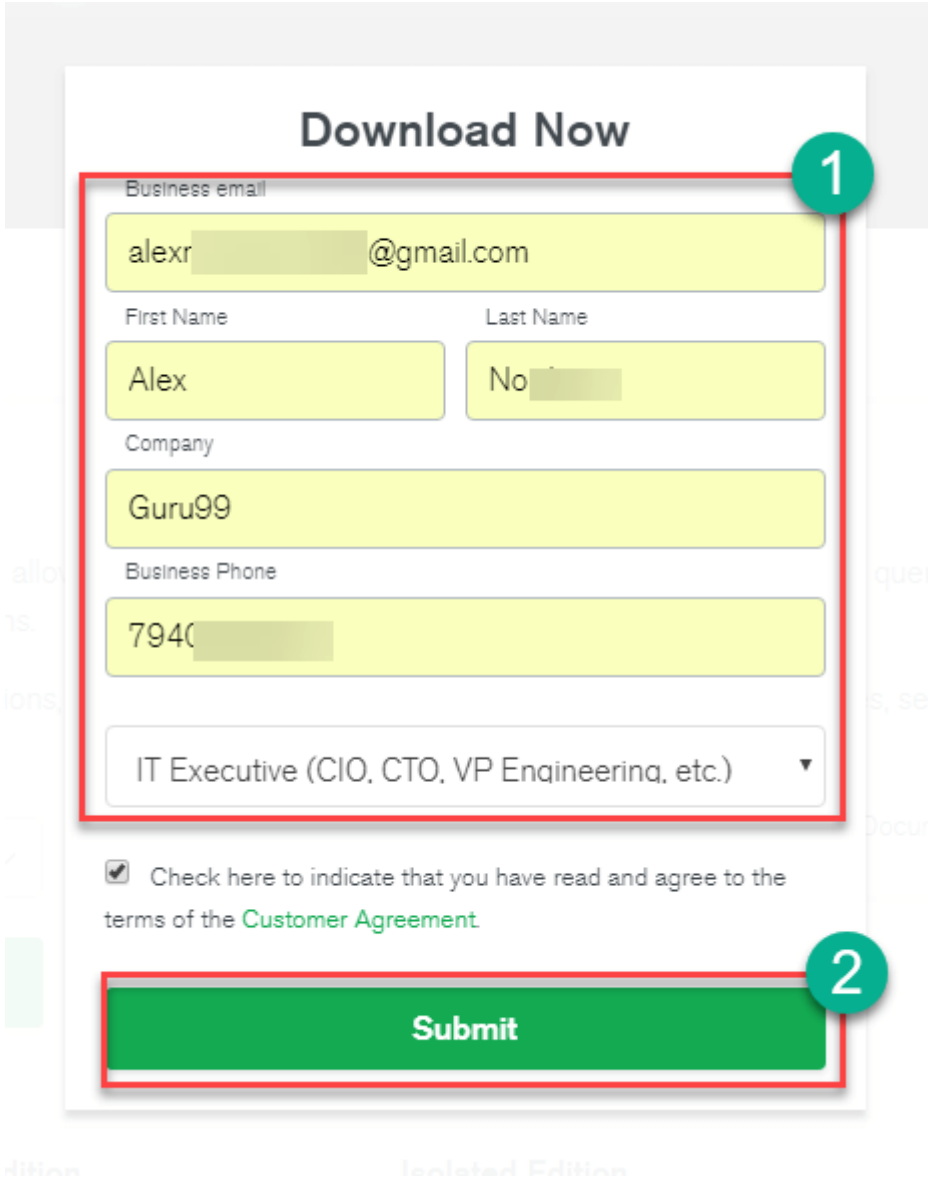
1. Full power of the Mongoshell
2. Multiple shells
3. Multiple results

Step 1) Go to link (https://www.mongodb.com/try/download/compass) and click download



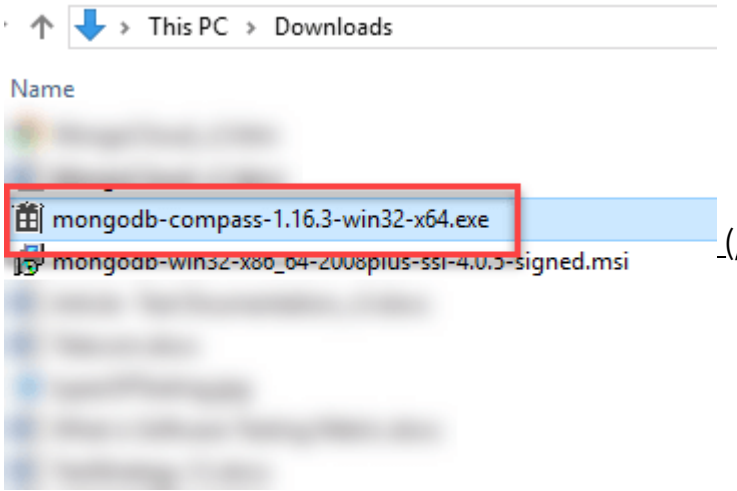
(//cdn.guru99.com/images/1/install-mongodb11.png)

Step 2) Enter details in the popup and click submit



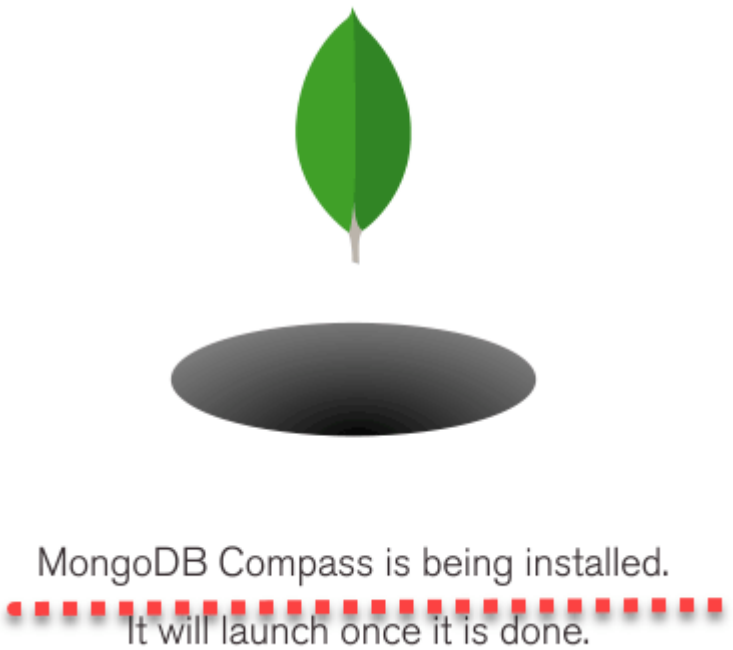
(//cdn.guru99.com/images/1/install-mongodb12.png)

Step 3) Double click on the downloaded file



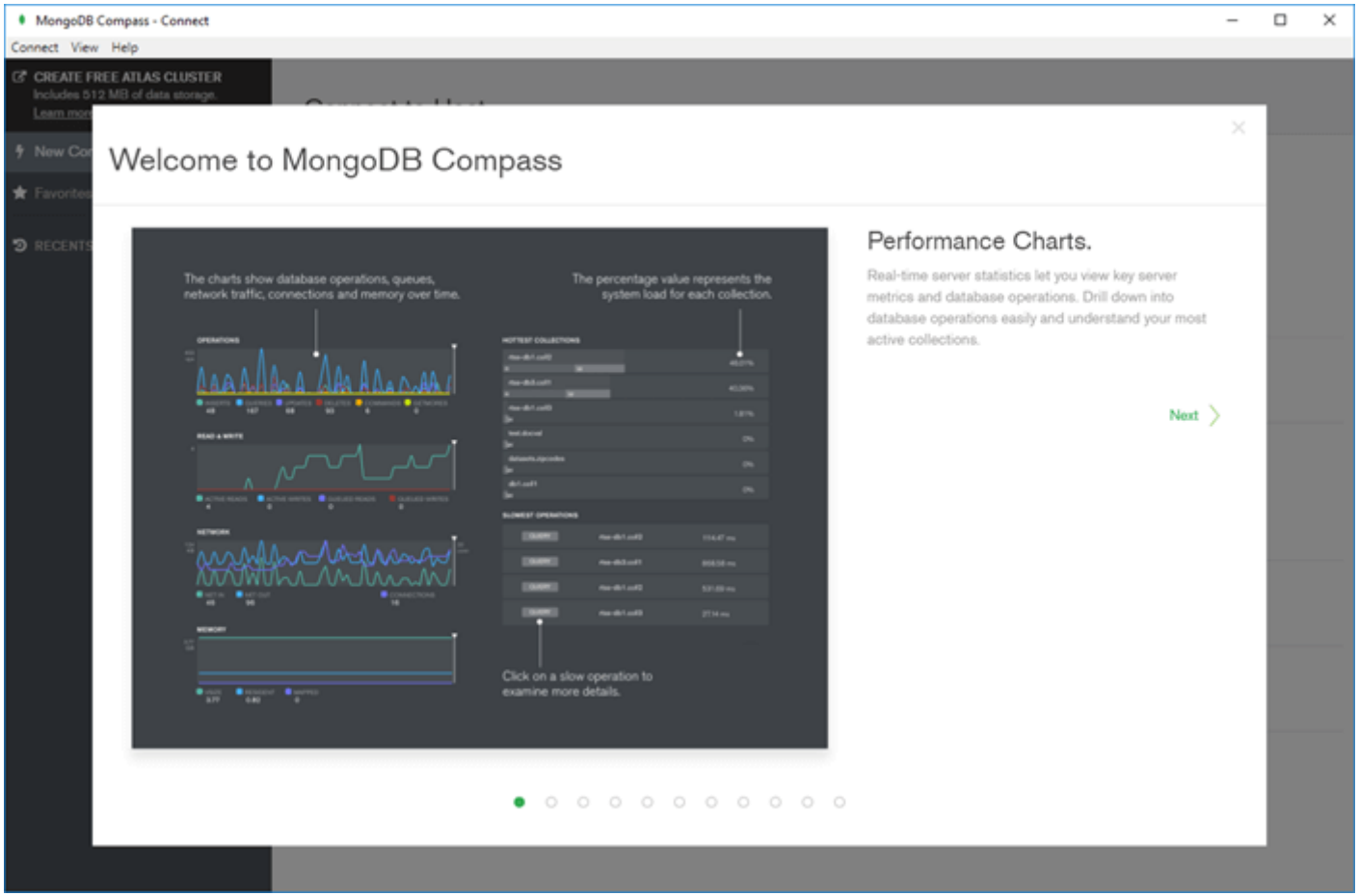
(//cdn.guru99.com/images/1/install-mongodb13.png)

Step 4) Installation will auto-start



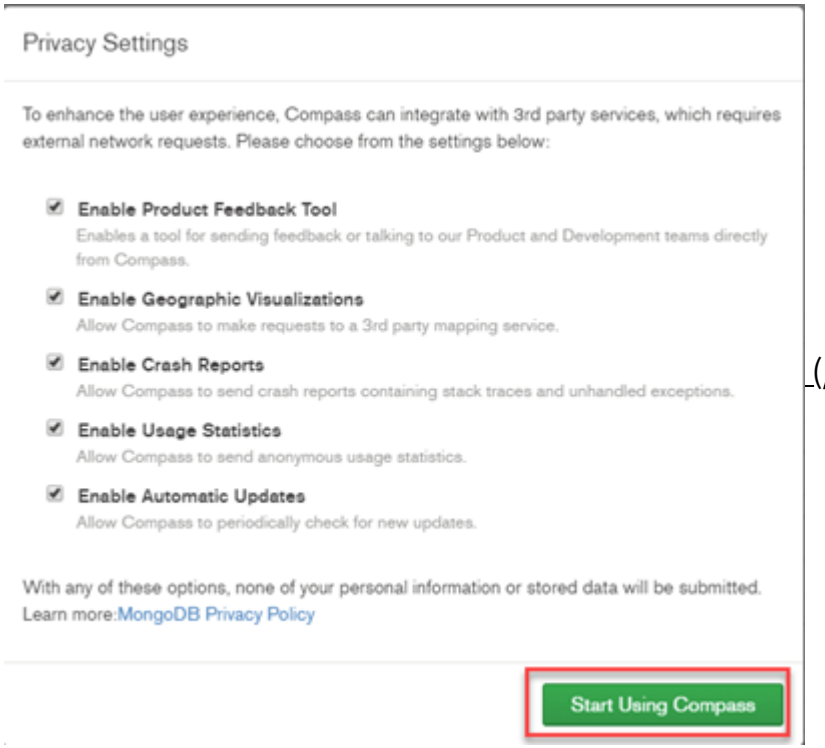
(//cdn.guru99.com/images/1/install-mongodb14.png)

Step 5) Compass will launch with a Welcome screen



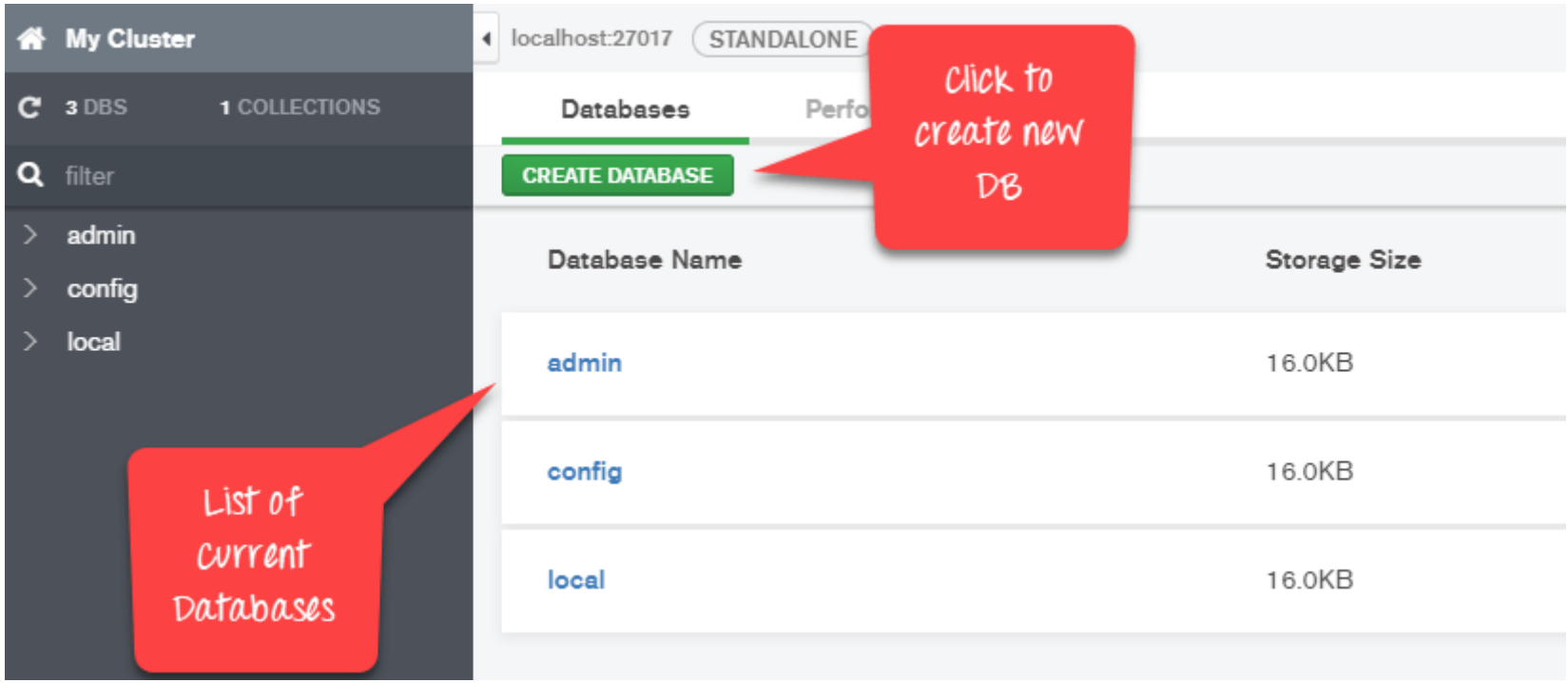
(//cdn.guru99.com/images/1/install-mongodb15.png)

Step 6) Keep the privacy settings as default and Click "Start Using Compass"



(//cdn.guru99.com/images/1/install-mongodb16.png)

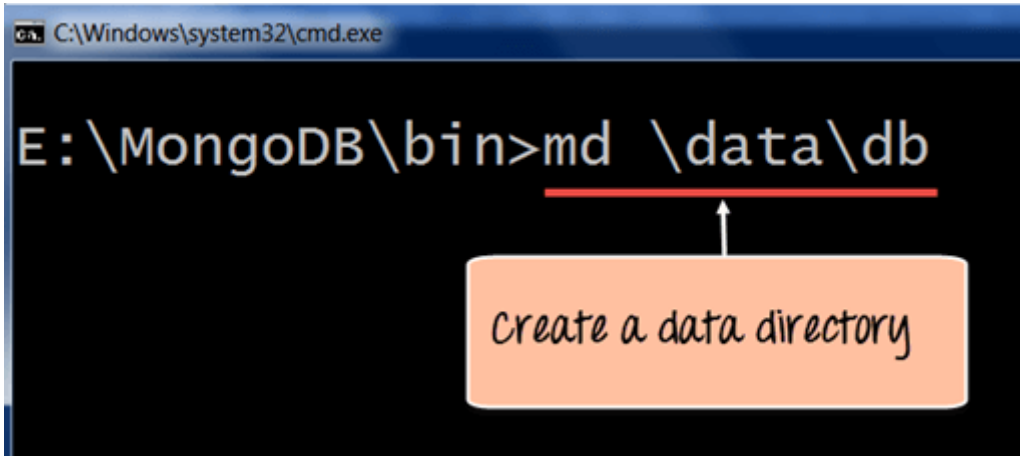
Step 7) You will see homescreen with list of current databases.



(//cdn.guru99.com/images/1/install-mongodb17.png)

MongoDB Configuration, Import, and Export

Before starting the MongoDB server, the first key aspect is to configure the data directory where all the MongoDB data will be stored. This can be done in the following way



(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio15.png)

The above command 'md \data\db' makes a directory called \data\db in your current location.

MongoDB will automatically create the databases in this location, because this is the default location for MongoDB to store its information. We are just ensuring the directory is present, so that MongoDB can find it when it starts.

The import of data into MongoDB is done using the "mongoimport" command. The following example shows how this can be done.

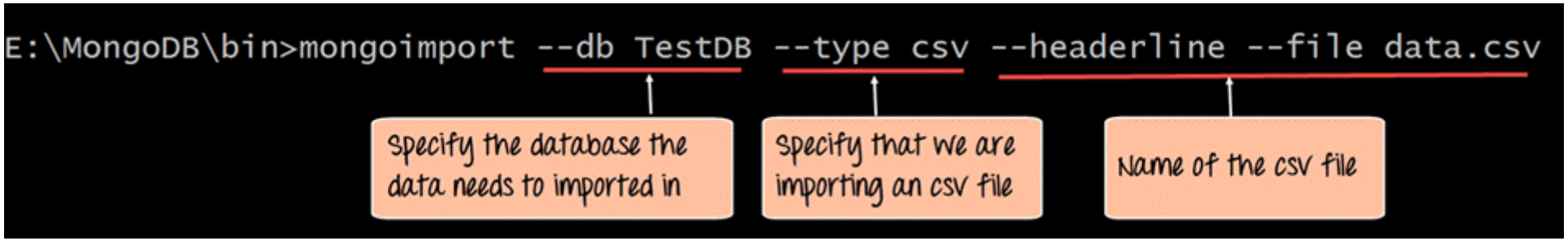
Step 1) Create a CSV file called data.csv and put the following data in it

Employeeid,EmployeeName

1. Guru99
2. Mohan
3. Smith

So in the above example, we are assuming we want to import 3 documents into a collection called data. The first row is called the header line which will become the Field names of the collection.

Step 2) Issue the mongo import command

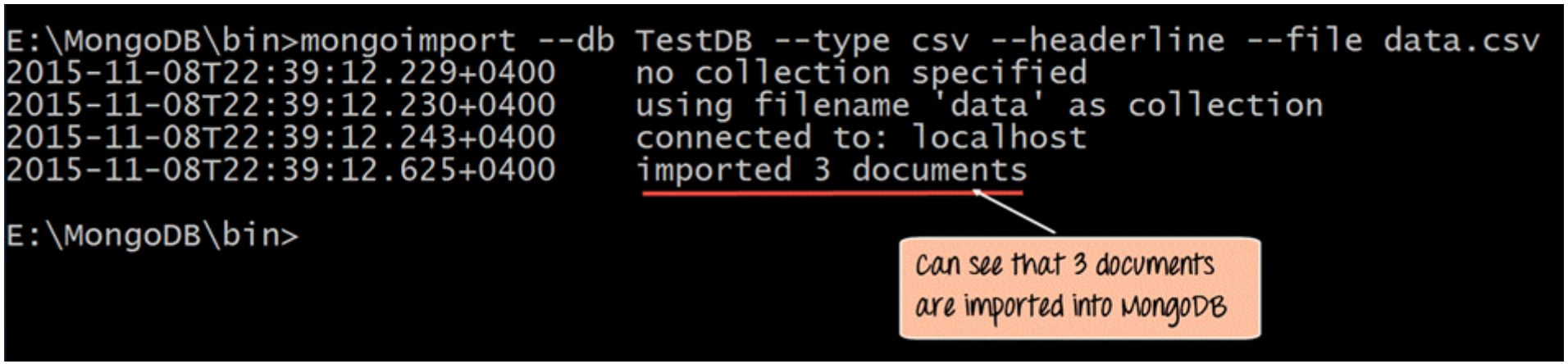


(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio16.png)

Code Explanation:

1. We are specifying the db option to say which database the data should be imported to
2. The type option is to specify that we are importing a csv file
3. Remember that the first row is called the header line which will become the Field names of the collection, that is why we specify the –headerline option. And then we specify our data.csv file.

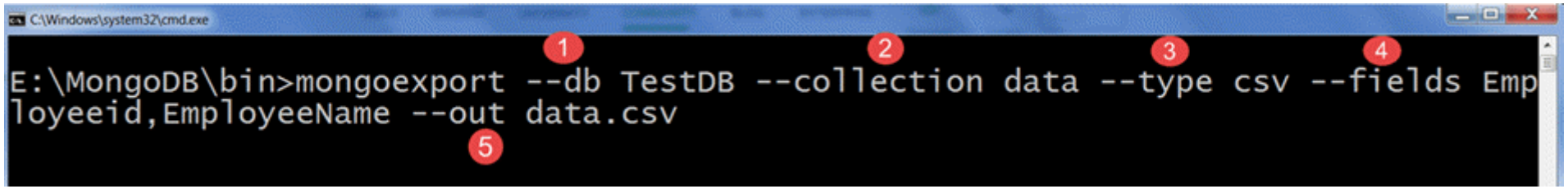
Output



(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio17.png)

The output clearly shows that 3 documents were imported into MongoDB.

Exporting MongoDB is done by using the mongoexport command

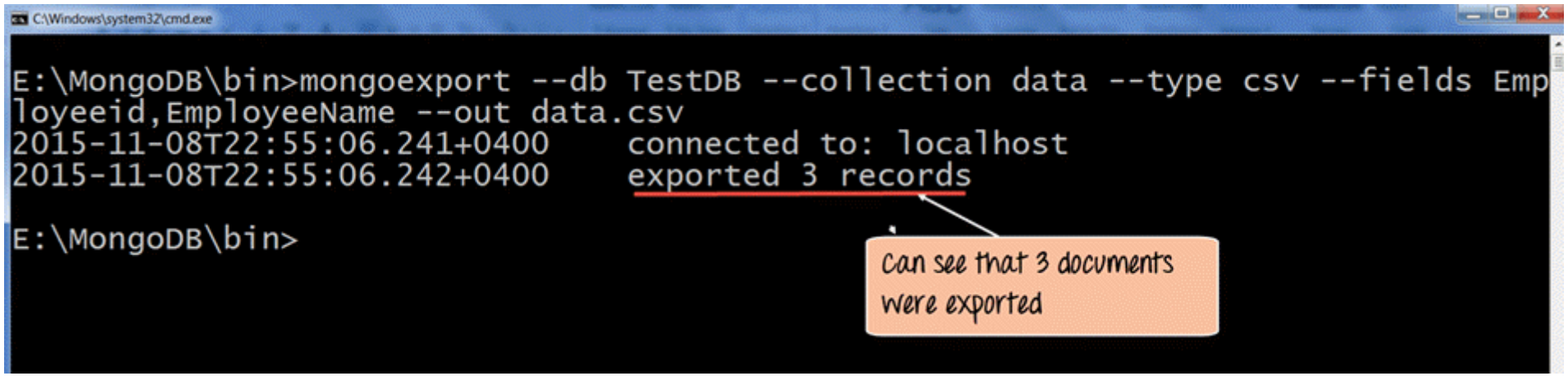


(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio18.png)

Code Explanation:

1. We are specifying the db option to say which database the data should be exported from.
2. We are specifying the collection option to say which collection to use
3. The third option is to specify that we want to export to a csv file
4. The fourth is to specify which fields of the collection should be exported.
5. The –out option specifies the name of the csv file to export the data to.

Output



(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio19.png)

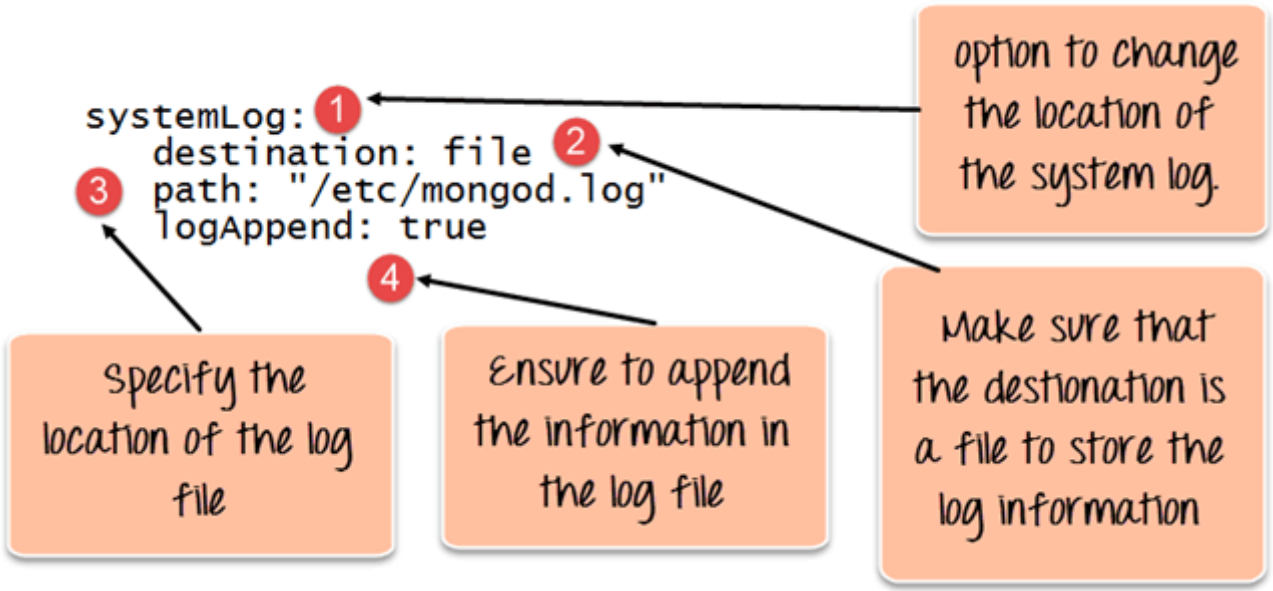
The output clearly shows that 3 records were exported from MongoDB.

Configuring MongoDB server with configuration file

One can configure the mongod server instance to startup with a configuration file. The configuration file contains settings that are equivalent to the mongod command-line options.

For example, supposed you wanted MongoDB to store all its logging information to a custom location then follow the below steps

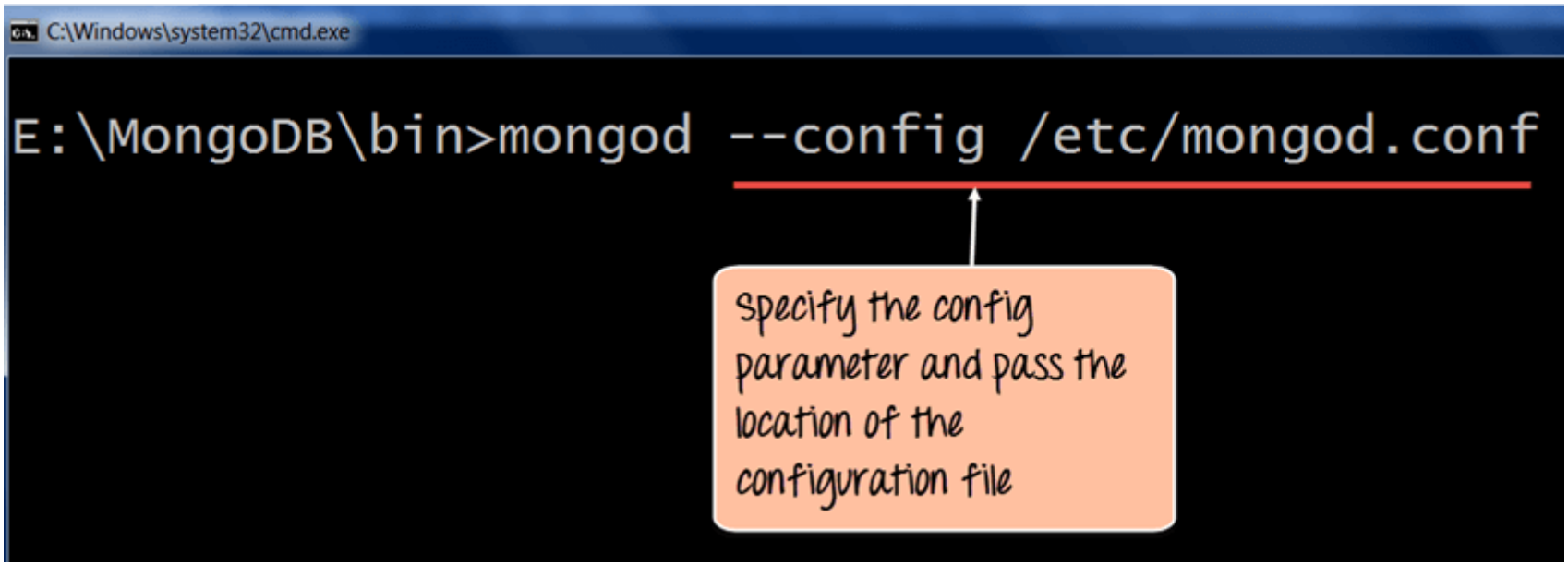
Step 1) Create a file called, "mongod.conf" and store the below information in the file



(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio20.png)

1. The first line of the file specifies that we want to add configuration for the system log file, that is where the information about what the server is doing in a custom log file.
2. The second option is to mention that the location will be a file.
3. This mentions the location of the log file
4. The logAppend: "true" means to ensure that the log information keeps on getting added to the log file. If you put the value as "false", then the file would be deleted and created fresh whenever the server starts again.

Step 2) Start the mongod server process and specify the above created configuration file as a parameter. The screenshot of how this can be done is shown below



(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio21.png)

Once the above command is executed, the server process will start using this configuration file, and if you go to the /etc. directory on your system, you will see the mongod.log file created.

The below snapshot shows an example of what a log file would look like.

```
2015-11-18T17:09:39.892+0400 I CONTROL  Hotfix KB2731284 or later update is installed, no need to zero-out data files
2015-11-18T17:09:39.983+0400 I CONTROL  [initandlisten] MongoDB starting : pid=4328 port=27017 dbpath=E:\data\db\ 32-bit
host=Babuli-PC
2015-11-18T17:09:39.983+0400 I CONTROL  [initandlisten] ** NOTE: This is a 32-bit MongoDB binary running on a 64-bit operating
2015-11-18T17:09:39.983+0400 I CONTROL  [initandlisten] **       system. Switch to a 64-bit build of MongoDB to
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten] **       support larger databases.
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten]
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten]
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten] ** NOTE: This is a 32 bit MongoDB binary.
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten] **       32 bit builds are limited to less than 2GB of data (or less with --journal).
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten] **       Note that journaling defaults to off for 32 bit and is currently off.
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten] **       See http://dochub.mongodb.org/core/32bit
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten]
2015-11-18T17:09:39.984+0400 I CONTROL  [initandlisten] targetMinOS: Windows XP SP3
2015-11-18T17:09:39.985+0400 I CONTROL  [initandlisten] db version v3.0.7
2015-11-18T17:09:39.985+0400 I CONTROL  [initandlisten] git version: 6ce7cbe8c6b899552dadd907604559806aa2e9bd
2015-11-18T17:09:39.985+0400 I CONTROL  [initandlisten] build info: windows sys.getwindowsversion(major=6, minor=1, build=7601,
platform=2, service_pack='Service Pack 1') BOOST_LIB_VERSION=1_49
2015-11-18T17:09:39.985+0400 I CONTROL  [initandlisten] allocator: tcmalloc
2015-11-18T17:09:39.985+0400 I CONTROL  [initandlisten] options: { config: "E:\mongo.conf", systemLog: { destination: "file", logAppend:
true, path: "mongod.log" } }
2015-11-18T17:09:41.605+0400 I NETWORK  [initandlisten] waiting for connections on port 27017
2015-11-18T17:10:09.219+0400 I NETWORK  [initandlisten] connection accepted from 127.0.0.1:51310 #1 (1 connection now open)
```

(//cdn.guru99.com/images/MongoDB/112015_1144_Installatio22.png)

Prev

Report a Bug

Next

MongoDB Tutorials

1) What is MongoDB? (/what-is-mongodb.html)

2) NoSQL Tutorial (/nosql-tutorial.html)

3) Installation and Configuration (/installation-configuration-mongodb.html)

4) Install MongoDB in Cloud (/mongodb-atlas-cloud.html)

5) Create & Insert Database (/create-read-update-operations-mongodb.html)

(https://www.facebook.com/guru99com/)
(https://twitter.com/guru99com)
(https://www.linkedin.com/company/guru99/)
(https://www.youtube.com/channel/UC19i1XD6k88KqHlET8atqFQ)
(https://forms.aweber.com/form/46/724807646.htm)

About

About Us (/about-us.html)
Advertise with Us (/advertise-us.html)
Write For Us (/become-an-instructor.html)
Contact Us (/contact-us.html)

Career Suggestion

SAP Career Suggestion Tool (/best-sap-module.html)
Software Testing as a Career (/software-testing-career-complete-guide.html)

Interesting

eBook (/ebook-pdf.html)
Blog (/blog/)
Quiz (/tests.html)
SAP eBook (/sap-ebook-pdf.html)

Execute online

Execute Java Online (/try-java-editor.html)
Execute Javascript (/execute-javascript-online.html)
Execute HTML (/execute-html-online.html)
Execute Python (/execute-python-online.html)