

# Lab10a Mongo Install

## Download and Install MongoDB (version 4.4 as of 3/2021)

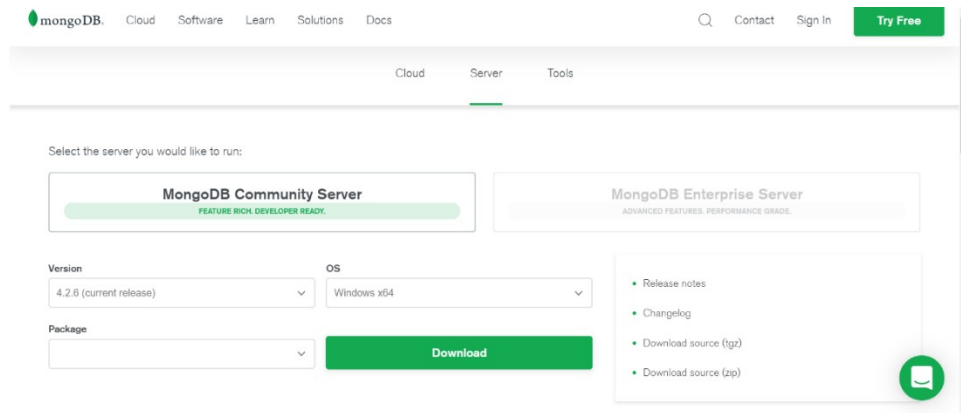
### Download

Go to the following link to download the MongoDB:

<https://www.mongodb.com/download-center/community>

By default, the “MongoDB Community Server” is selected, if not, select ““MongoDB Community Server” option.

Choose you OS. For Windows, choose “Windows X64” and click on “Download” button.

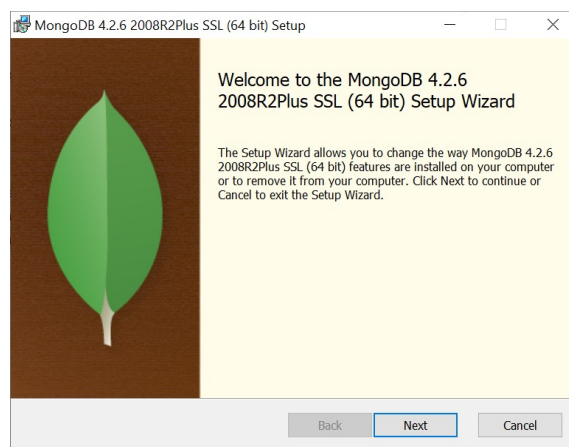


A .msi file will be downloaded.

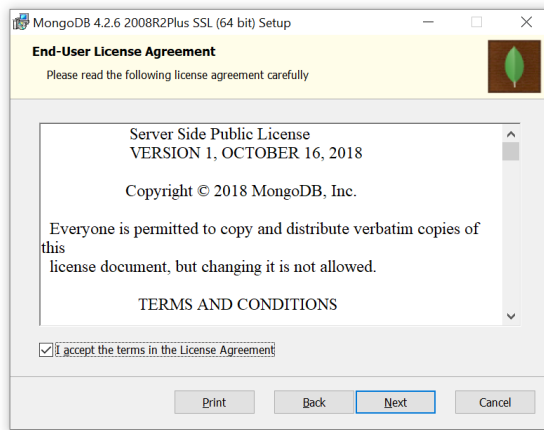
### Install

At the time you install MongoDB, a newer version will be available. This is 4.2 on the screen capture, but 4.4 is current in Marcc 2021.

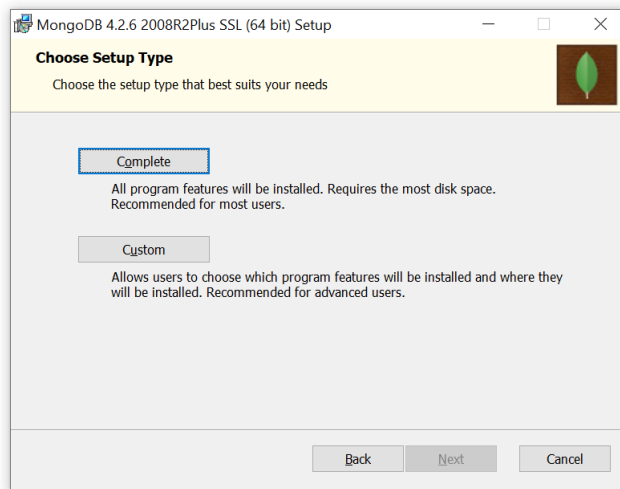
Run the .msi file. You see the installation wizard. Click on the “Next” button.



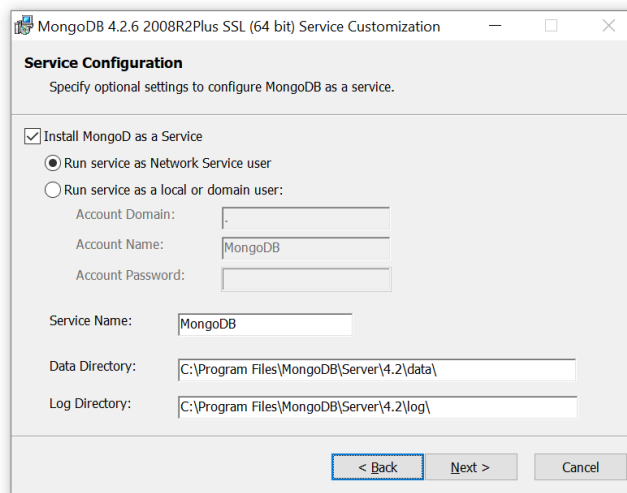
Read and accept the terms in the License Agreement and click on the “Next” button.



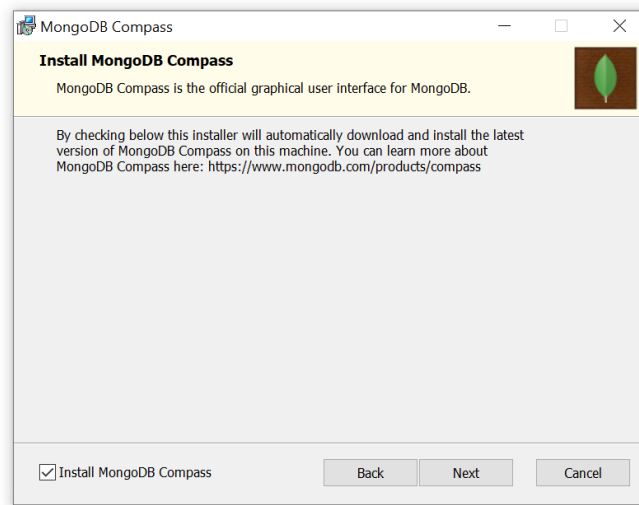
The setup type is “Complete” by default. Choose “Complete”.



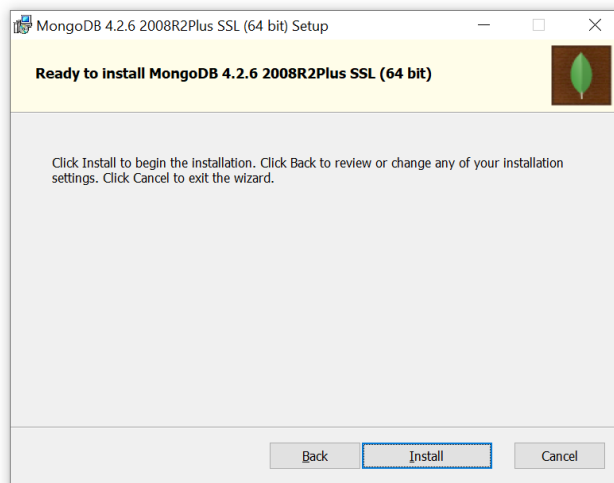
In the Service Configuration page, leave everything as default and do not change anything. Click on the “Next” button.

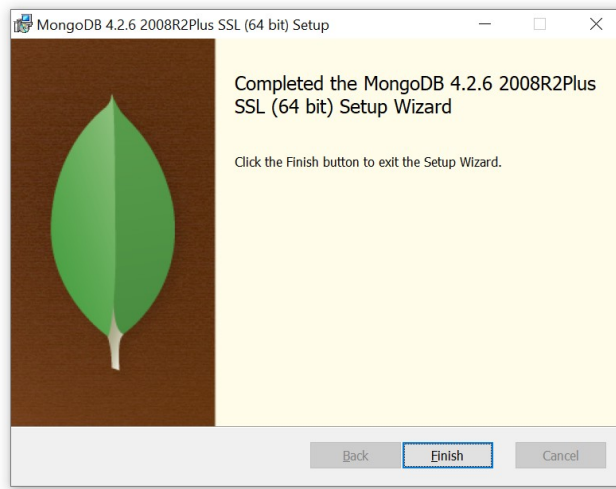


In the next page leave the “Install Mongo Compass” checked and click on the “Next” button.



Click on “Install”. When the install process is completed, click on the “Finish” button.





## Run MongoDB

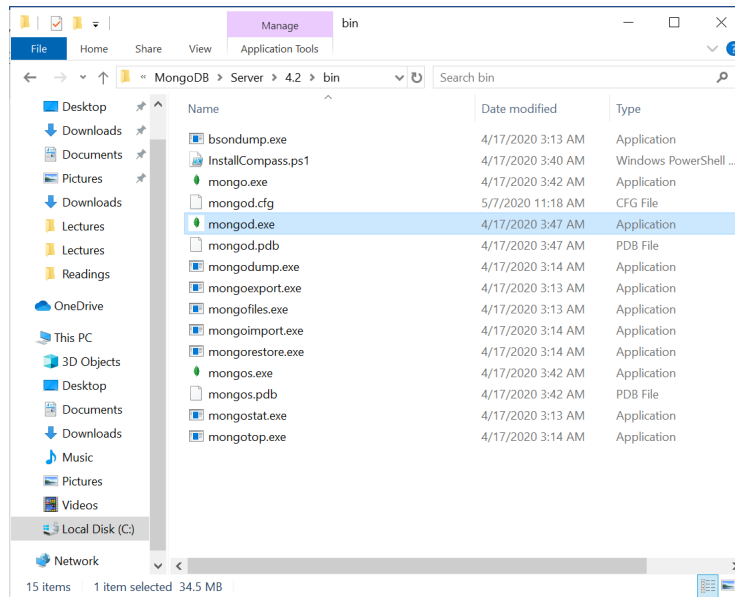
On your computer, go to the directory where MongoDB is installed and go to the “bin” directory.

C:\Program Files\MongoDB\Server\4.4\bin

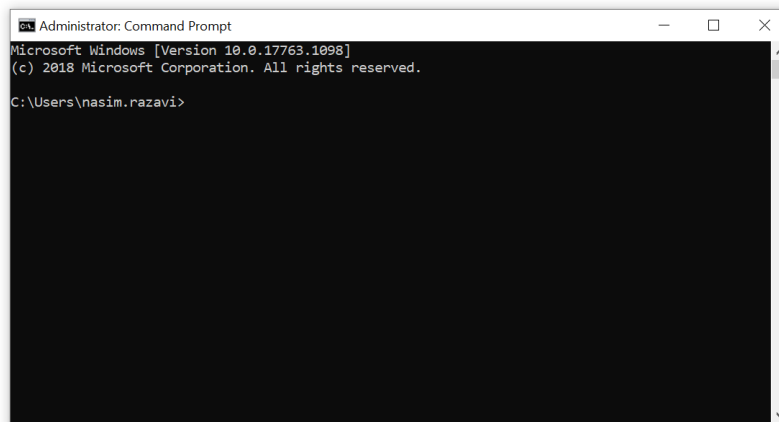
You can find MongoDB executable files here:

mongo.exe

mongod.exe



To run MongoDB, open the Windows command prompt and go to the “bin” directory of MongoDB.



Before you run MongoDB, first create the following directory if it does not exist.

C:\data\db\

Now, execute “mongod” in your command prompt. MongoDB should be running with no errors.

```
Administrator: Command Prompt - mongod
Microsoft Windows [Version 10.0.17763.1098]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\nasim.razavi>cd C:\Program Files\MongoDB\Server\4.2\bin

C:\Program Files\MongoDB\Server\4.2\bin>mongod
2020-05-07T11:36:16.308-0400 I CONTROL [main] Automatically disabling TLS 1.0, to force-enable
  TLS 1.0 specify --sslDisabledProtocols 'none'
2020-05-07T11:36:17.193-0400 W ASIO [main] No TransportLayer configured during NetworkInter
face startup
2020-05-07T11:36:17.194-0400 I CONTROL [initandlisten] MongoDB starting : pid=21352 port=27017
  dbpath=C:\data\db\ 64-bit host=NHA3072-L-26D8
2020-05-07T11:36:17.194-0400 I CONTROL [initandlisten] targetMinOS: Windows 7/Windows Server 2
008 R2
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] db version v4.2.6
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] git version: 20364840b8f1af16917e4c23c1
b5f5efd8b352f8
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] allocator: tcmalloc
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] modules: none
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] build environment:
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] distmod: 2012plus
2020-05-07T11:36:17.195-0400 I CONTROL [initandlisten] distarch: x86_64
```

Open a new command prompt. Go to the “bin” directory of MongoDB.

C:\Program Files\MongoDB\Server\4.4\bin

Execute “mongo” in your command prompt which opens the Mongo Client shell.

```
Administrator: Command Prompt - mongo
2020-05-07T11:18:36.849-0400 I CONTROL [initandlisten] ** WARNING: Access control is not enabl
ed for the database.
2020-05-07T11:18:36.849-0400 I CONTROL [initandlisten] **      Read and write access to da
ta and configuration is unrestricted.
2020-05-07T11:18:36.849-0400 I CONTROL [initandlisten]
---
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
>
```

Execute the following command to see all existing databases in your MongoDB:

```
> show dbs\show dbs    ← this is the command
admin    0.000GB        ← this is the output
config   0.000GB
local    0.000GB
```

```
Administrator: Command Prompt - mongo
2020-05-07T11:18:36.849-0400 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2020-05-07T11:18:36.849-0400 I CONTROL [initandlisten] **           Read and write access to data and configuration is unrestricted.
2020-05-07T11:18:36.849-0400 I CONTROL [initandlisten]
---
Enable MongoDB's free cloud-based monitoring service, which will then receive and display metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you and anyone you share the URL with. MongoDB may use this information to make product improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
> show dbs
admin    0.000GB
config   0.000GB
local    0.000GB
> _
```

A new MongoDB database is created when you insert data to the database.

To create a new database, execute the following command:

> **use library**

The “use” command, makes a database your current one. However, since we have not inserted data into the “library” database, you will not see this database as an existing one. We run the “use library” command to tell MongoDB that our current database will be the “library” database.

Now, insert data (a document) into the “library” database.

Remember you are currently in the library database

```
> db.book.insertOne({"title": "Blue Sky"})
{
  "acknowledged" : true,
  "insertedId" : ObjectId("5eb42fa3062af495b2bfba9c")
}
```

“book” is a collection that stores documents. We later learn about collections and documents.

We stored data for a book in our “library” database.

Now, if you show the list of databases, you will see the new database “library” in your list:

```
> show dbs
admin    0.000GB
config   0.000GB
library  0.000GB  ← note it now appears
local    0.000GB
```

To have a Windows batch file start MongoDB for you then insert these lines into the file

```
start call "C:\Program Files\MongoDB\Server\4.4\bin\mongod.exe"
start call "C:\Program Files\MongoDB\Server\4.4\bin\mongo.exe"
```