Lab 12A: MongoDB Setup Guide

How to setup MongoDB

Although MongoDB can be installed locally, for the lab we will use MongoDB Atlas, a cloud-based platform, which is simpler to setup and use.

1. Sign up for a free [MongoDB Atlas](#) account to get started.
2. Create and connect to a database cluster.
3. Follow steps on the website to complete your setup. You will create a user and password which you must remember as it will allow you to connect to MongoDB database.

4. Install MongoDB shell (mongosh) from the Download center. Download the MSI and run the setup.
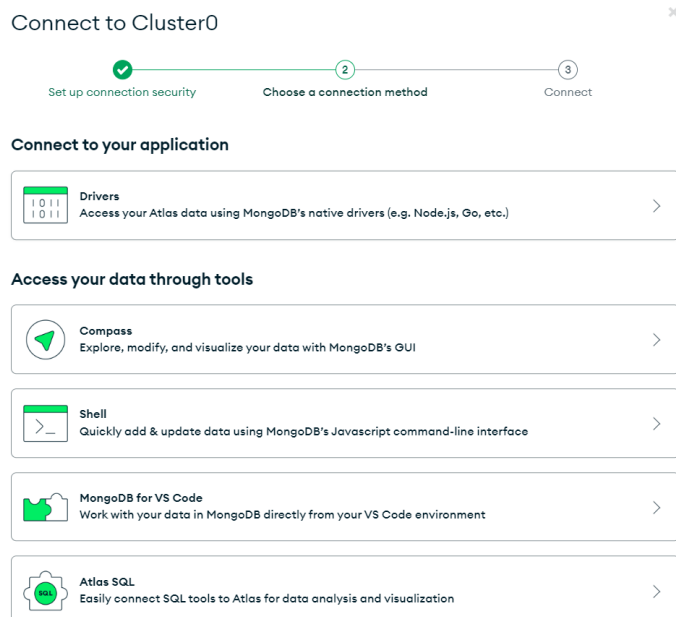   [Install mongosh — MongoDB Shell](#)

Install from MSI

❶ Open the MongoDB Shell download page.
   Open the MongoDB Download Center.

❷ In the *Platform* dropdown, select *Windows 64-bit (8.1+) (MSI)*

❸ Click *Download.*

❹ Double-click the installer file.

❺ Follow the prompts to install `mongosh`.

5. Once installation is completed, validate the successful installation on the command line by executing the following:
   `mongosh --version`

6. Connect to the database by selecting "Shell" as your connection method on MongoDB Atlas. This will lead to a window that provides you a connection string which you can copy to your command line interface to connect with the MongoDb database.
   Proceed to copy/paste the code and run it. You will be prompted for a password you created for your cluster.
7. You are now connected to the MongoDB database.

Connect to Cluster0   ✕

✔ ──────────── ② ──────────── ③
Set up connection security   Choose a connection method   Connect

Connect to your application

▷ **Drivers**
  Access your Atlas data using MongoDB's native drivers (e.g. Node.js, Go, etc.)   ›

Access your data through tools

◈ **Compass**
  Explore, modify, and visualize your data with MongoDB's GUI   ›

>_ **Shell**
  Quickly add & update data using MongoDB's Javascript command-line interface   ›

▣ **MongoDB for VS Code**
  Work with your data in MongoDB directly from your VS Code environment   ›

⬡ **Atlas SQL**
  Easily connect SQL tools to Atlas for data analysis and visualization   ›

8. Connect on the Command line to execute the following:

     a. show dbs
     b. use iba_db
     c. db.createCollection("test")
     d. db.test.insertOne({"name": "testname", "marks" :80})
     e. db.test.find()
     f. db.createCollection("restaurants")
     g. Show dbs

9. For a seamless import of large amounts of data, we will also set up MongoDB Compass. On MongoDB Atlas website, select Compass as the option to connect and proceed to download.

10. Once downloaded, provide the connection string to set up the database.

11. Head over to the created collection – "restaurants". You will see options like below. Select Add data and import the provided *restaurants.json* file to add the documents to the collection.

12. Once imported, close MongoDB compass and connect again through the Mongoshell on CMD to execute the Mongo Queries from Lab12B on the CLI.