

## Create and Insert in MongoDB Cloud

### Prerequisite

In order to create a database, collection, or perform any operations in MongoDB Cloud, we will be using MongoDB Atlas. So, you need to Sign in to MongoDB Atlas. You can create an account and sign in from <https://account.mongodb.com/account/login>

Also, to connect to the MongoDB database created on Atlas in local machine, you will have to make sure MongoDB Server is running on your machine as a Service. Install MongoDB Server on your system and make sure it is running as a Service. You can refer to the **02\_Installing MongoDB.pdf** provided for the step by step instructions.

In order to connect to the MongoDB database on MongoDB Compass, you need to have MongoDB Compass installed and launch the instance on your system. Refer to <https://www.mongodb.com/try/download/compass> for step by step instruction to download and install MongoDB Compass.

### Create database, collection and insert document in MongoDB Atlas

1. Go to the MongoDB Cloud website (<https://account.mongodb.com/account/login>) and create an account if you don't already have one.
2. Once you're logged in, click the "Create a Project" button to create a new project.
3. Enter a name for your project and choose the preferred cloud provider, region, and billing plan.
4. After your project is created, click the "+" button ("Create a new deployment") to create a new cluster and follow the prompts to select your preferred cloud provider, region, and cluster tier. You can also customize additional settings, such as enabling backup options or selecting a specific MongoDB version.
5. Once your cluster is created, click on the "+ Create Database" button to create a new database. Enter a name for your new database. You will also have to give 1 collection name to be created within the database.
6. Inside your newly created database, you can create as many collections as you want. You need to click on the "+" button besides the database name to create a new collection.
7. To insert a document in the collection, select the collection name and click on the "Insert document" button. This will open a new document editor where you can input your data. You need to input data manually in JSON format. Here's an example of how you can insert a document manually:

```
{
```

```
"name": "John Doe",  
"age": 30,  
"email": "john.doe@example.com"  
}
```

## Connecting to the MongoDB Cloud database in MongoDB Compass

### 1) Get Your MongoDB Atlas Connection String:

- a) Log in to your MongoDB Atlas account.
- b) Navigate to the cluster you want to connect to and click the "Connect" button.
- c) Make sure to click on the "Add Current IP Address" button to whitelist the IP Address of your local machine so you can connect to the cloud from your local machine.
- d) Select "Compass" option and copy the connection string. Make sure you edit the string with your password.

### 2) Connect to Your MongoDB Atlas Cluster:

- a) Open MongoDB Compass and follow these steps:
  - i) On the initial screen, you'll see a URI field for "New Connection". Click on "Edit Connection String" and paste your connection string here in the URI field.
  - ii) MongoDB Compass will parse the connection string and extract necessary details like the hostname, username, password, and authentication database.
  - iii) Click on "Connect".

### 3) Authenticate (if necessary):

- a) If your MongoDB Atlas cluster requires authentication, MongoDB Compass will prompt you for the username and password (If not already provided in the connection string). Enter the credentials and click "Connect".

### 4) Explore Your Data:

- a) Once connected, MongoDB Compass will display your databases and collections in the left sidebar. You can navigate through your data, perform queries, and manage your databases and collections through the GUI provided by MongoDB Compass.

Note that you may need to configure your MongoDB Cloud account to allow incoming connections from your application or network. This can be done through your MongoDB Cloud account dashboard's "Network Access" settings.

## Connecting to the MongoDB Cloud database using mongosh shell

### 1) Get Your MongoDB Atlas Connection String:

- a) Log in to your MongoDB Atlas account.

- b) Navigate to the cluster you want to connect to and click the "Connect" button.
  - c) Make sure to click on the "Add Current IP Address" button to whitelist the IP Address of your local machine so you can connect to the cloud from your local machine.
  - d) Select "Shell" option and copy the connection string. Make sure you edit the string with your password.
- 2) **Connect to Your MongoDB Atlas Cluster in mongosh shell:**
- a) Open your terminal or command prompt and run the following command, replacing **"your\_connection\_string"** with the actual connection string you obtained from MongoDB Atlas:  
`mongosh "your_connection_string"`
- For example:
- ```
mongosh  
"mongodb+srv://username:password@clustername.mongodb.net/mydatabase"
```
- When prompted, enter your MongoDB Atlas cluster's username and password.
- 3) **Explore Your Data:** Once connected, you can start executing MongoDB commands directly in the **mongosh** shell. You can interact with databases, collections, and documents in your MongoDB Atlas cluster just as you would with a local MongoDB instance.