Instructions to Set Up MongoDB Atlas and MongoDB Compass

Step 1: Set Up MongoDB Atlas

1. Sign Up for MongoDB Atlas:

- Go to the MongoDB Atlas website.
- Click on "Try Free" and sign up for an account if you don't have one.

2. Create a New Cluster:

- o Once signed in, click on "Build a Cluster".
- Choose your cloud provider (AWS, Google Cloud, or Azure) and the region where you want your cluster to be located.
- Select the free tier option (M0 Sandbox) for a free cluster.
- o Click "Create Cluster".

3. Whitelist Your IP Address:

- Click on the "Network Access" tab in the Atlas dashboard.
- o Click "Add IP Address".
- Select "Allow Access from Anywhere" (0.0.0.0/0) or add your current IP address.
- o Click "Confirm".

4. Create a Database User:

- Click on the "Database Access" tab.
- Click "Add New Database User".
- Create a new user with a username and password. Make sure to save these credentials as you'll need them to connect to your database.
- Set the user permissions to "Read and write to any database".

5. Connect to Your Cluster:

- In the Atlas dashboard, click on "Clusters".
- Click the "Connect" button next to your cluster.
- Select "Connect with MongoDB Compass".
- Click "Copy" to copy the connection string provided.

Step 2: Install MongoDB Compass

1. Download and Install MongoDB Compass:

- Go to the MongoDB Compass download page.
- Select your operating system (Windows, macOS, Linux) and download the installer.
- Run the installer and follow the on-screen instructions to complete the installation.

Step 3: Connect to MongoDB Atlas Using MongoDB Compass

1. Open MongoDB Compass:

• Launch MongoDB Compass from your applications or start menu.

2. Connect to Your Cluster:



- In the "New Connection" window, paste the connection string you copied from the Atlas dashboard.
- Replace <username> and <password> with the database user credentials you created in the Atlas setup.
 - Example: mongodb+srv://<username>:<password>@cluster0.mongodb.net/test? retryWrites=true&w=majority
- Click "Connect".

Step 4: Create and Manage Your Database in MongoDB Compass

1. Create a Database and Collection:

- Once connected, click on the "Create Database" button.
- Enter a database name (e.g., movieDB) and a collection name (e.g., movies).
- Click "Create Database".

2. Insert Documents:

- Select your database and collection.
- Click on the "Insert Document" button.
- Enter your JSON data in the editor and click "Insert".

3. Query Your Data:

- Click on the "Filter" tab.
- Enter your query in the filter box using MongoDB query syntax.
- Click on the "Find" button to execute the query.

Step 5: Generate MongoDB URI for Application Use

1. Generate Connection String:

- In the Atlas dashboard, click on "Clusters".
- Click the "Connect" button next to your cluster.
- Select "Connect your application".
- Copy the connection string provided.

2. Customize Connection String:

- o Replace <username> and <password> with the database user credentials you created.
- Replace <dbname> with the name of the database you want to connect to.
 - Example: mongodb+srv://<username>:<password>@cluster0.mongodb.net/ <dbname>?retryWrites=true&w=majority

Summary

• Set Up MongoDB Atlas:

• Sign up, create a cluster, whitelist IP, create a database user, connect to cluster.

• Install MongoDB Compass:

Download and install Compass for your OS.



- Connect to Atlas Using Compass:
 - Use the connection string to connect Compass to your Atlas cluster.
- Create and Manage Database:
 - Create a database and collection, insert documents, and query data using Compass.
- Generate MongoDB URI:
 - Customize and use the connection string to connect your application to MongoDB Atlas.

Resources



