

Using Atlas & Compass as an interface to Mongodb Atlas

Last amended: 25th Nov, 2025
Myfolder: Ubuntu_kibana VM=>/home/ashok/Documents/mongodb//mongodb atlas
My folder: D:\Documents\OneDrive\Documents\mongodb

Notes:

1. For Mongodb Atlas , ALWAYS use Google Chrome and NOT Firefox.
2. Complete Help of MongoDB Atlas Charts is available at [this link](#). See **the left panel** of this help.
3. Data can be imported into Atlas using Mongodb Compass. Compass is installable on Windows

1. Install MongoDB Compass on Windows or Mac, as the case maybe. Download from [this link](#) and install. Installation is straight forward.
2. See this [YouTube video](#) for working in Compass.
3. When Compass starts, an Add New Connection button appears for it to be connected to MongoDB server. We will connect it to MongoDB atlas.
4. In Chrome, reach MongoDB Atlas and log into it using a Google Account.
5. Go to [this link](#) to register yourself with MongoDB Atlas and follow the simple steps

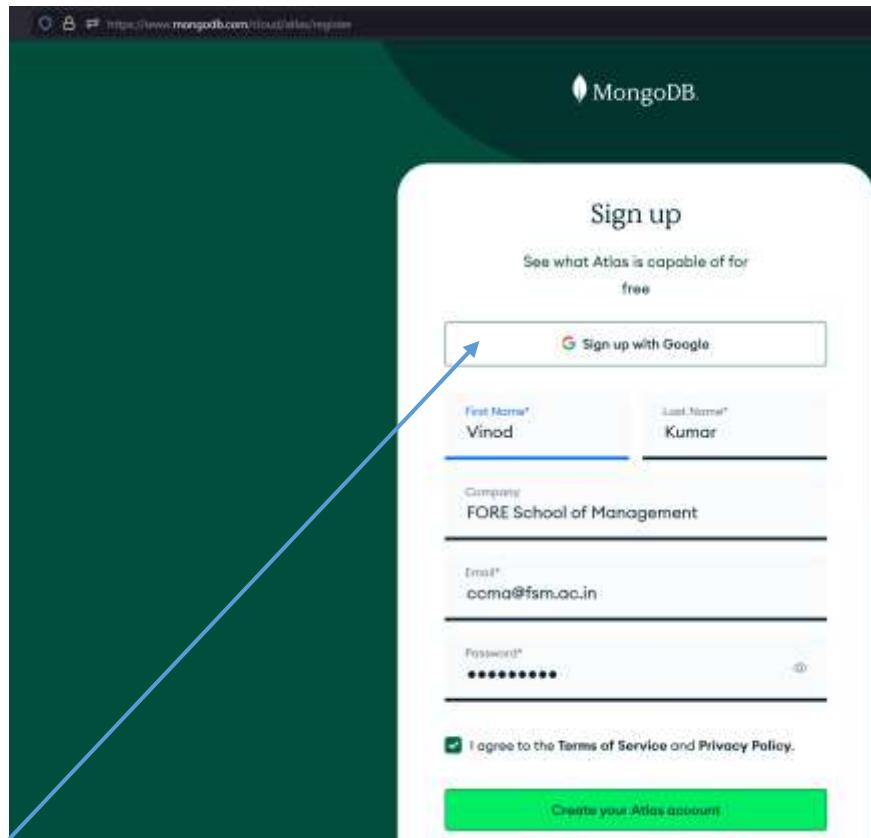


Figure 1: Sign in with your google account OR Write your name. You must write **FORE School of Management**. Specify your emailid and password.

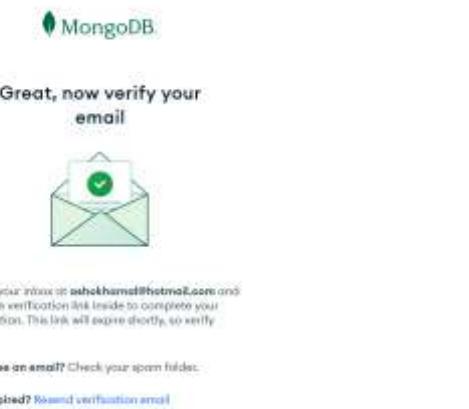


Figure 2: If you did not login with Google Account, then, verify your email. After verification, you are taken to login screen.

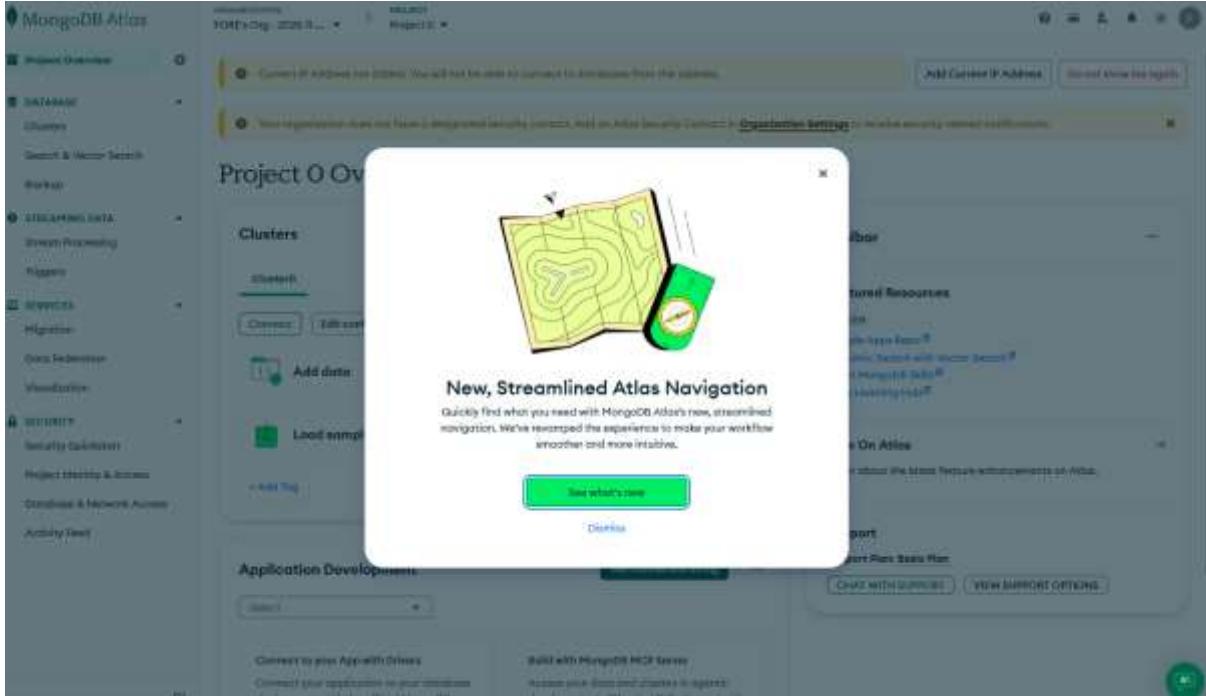


Figure 3: Click Dismiss



Enable your multi-factor authentication methods

Secure your account across MongoDB

Secure your MongoDB account across MongoDB Atlas, University, Community, and Support with Multi-Factor-Authentication (MFA). Setting up MFA will help reduce risks from outside threats to your account. [Learn More](#)

Setup Backup MFA Methods

In addition, you will also be setting up an additional method in this setup. This is a precaution in the case you lose access to your first MFA enabled device and to avoid being locked out.

[Set up now](#)

[Remind me later](#)

Figure 4: Again, if you did not login with Google account, do not enable Multi-factor authentication. click '**Remind me later**'

6. Cluster creation

We need to create a cluster first. By default, cluster is named as Cluster0. Do not try to change the name.

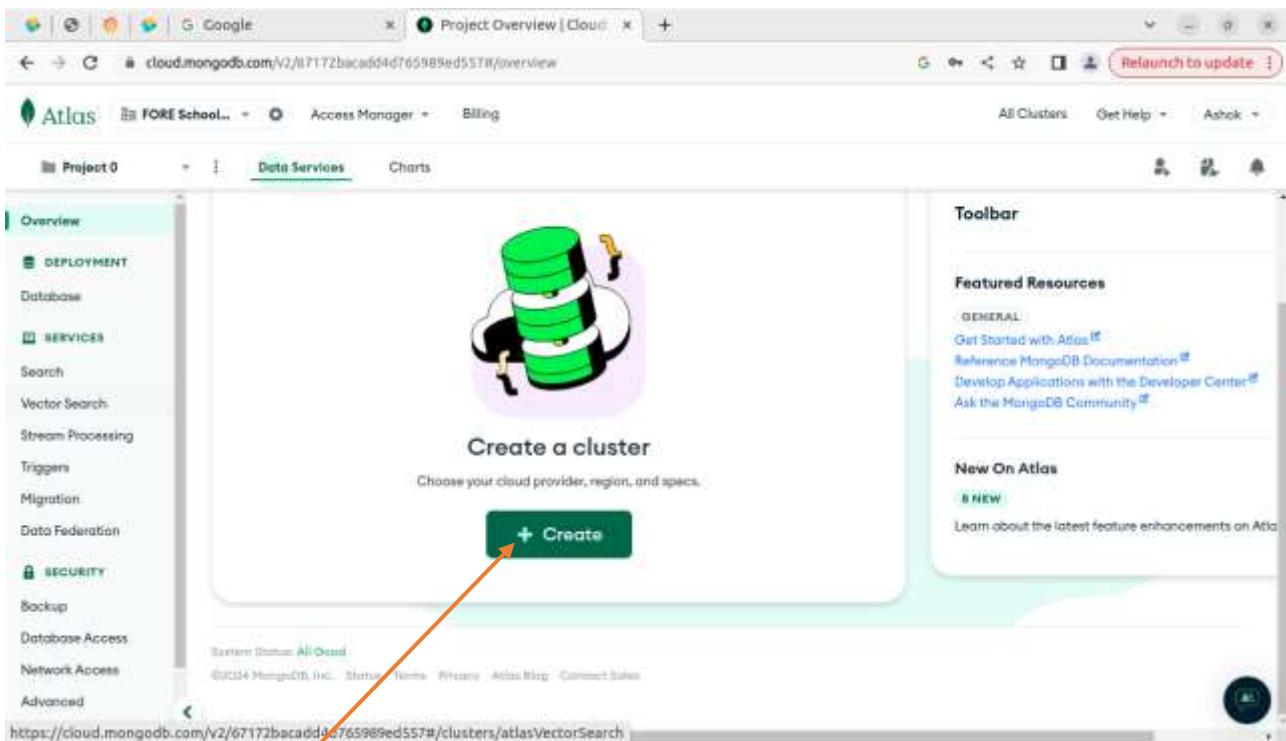


Figure 5: Click on *Create a Cluster* button, if cluster is *NOT* already created.

7. Cluster Deployment

For cluster deployment, there are a number of options. We will select the last one, i.e. the free option. Under this option, we can have a max data of 500mb.

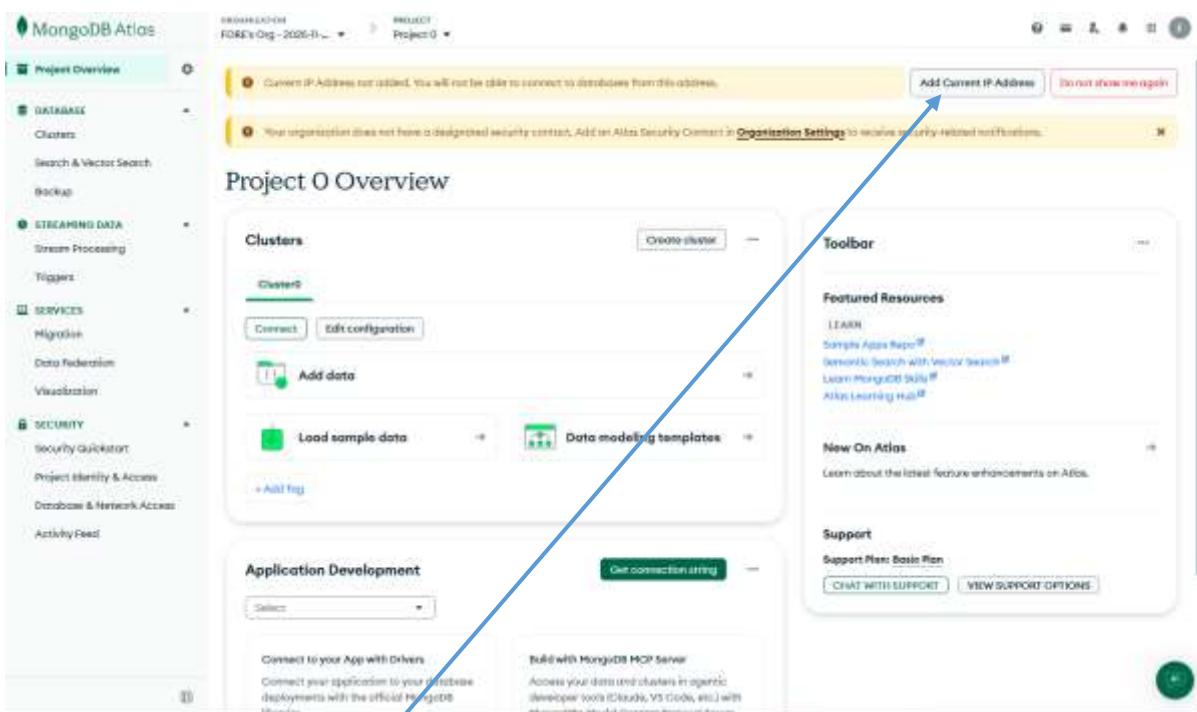


Figure 6: Click the button '**Add current IP address**' so that you can work from your **current location**. If you intend to work from another location, that IP Address will also have to be added.

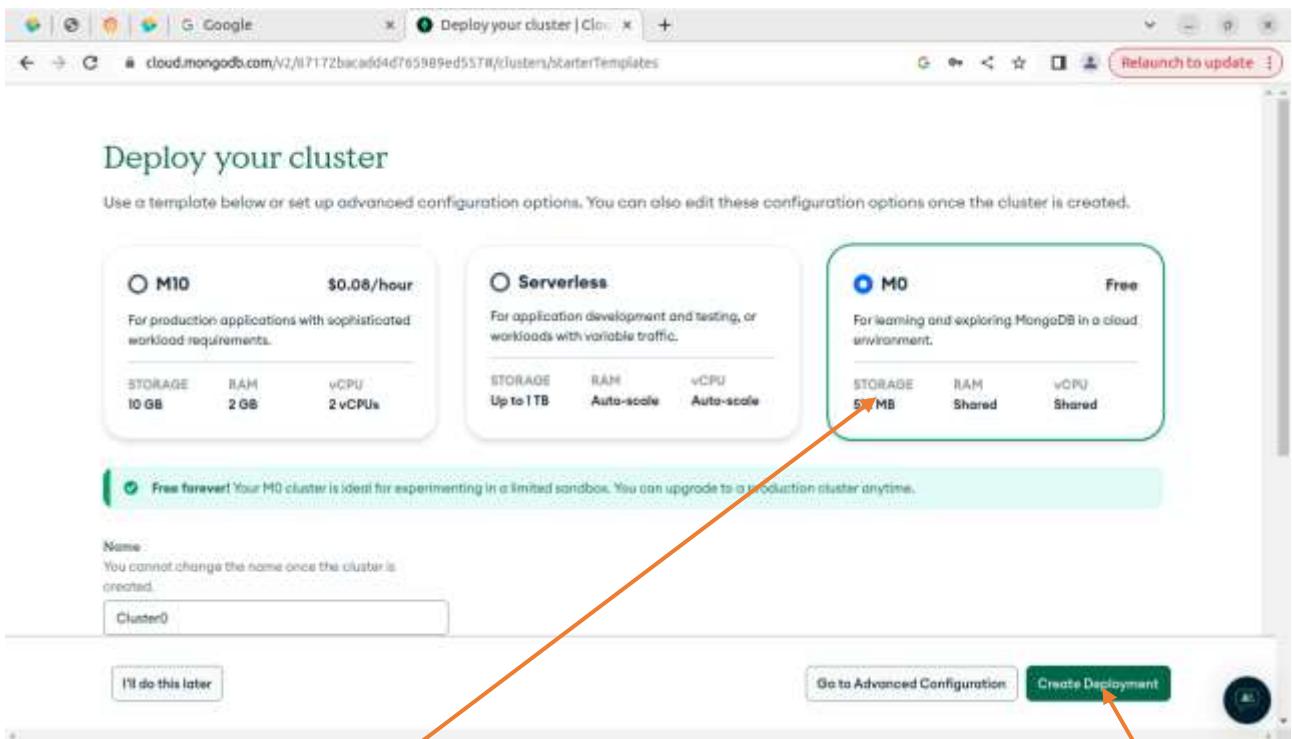


Figure 7: Select the free option M0 and accept all other default options. Click 'Create Deployment' button

8. Database User Creation

Database user is different from the user with which you logged into Atlas. A database user creation and allocating him proper role are a must. Keep your user password simple to remember; Recommended password: ashok. This user will have *atlasAdmin* powers. You will be able to drop a database in *Compass*, only if you have *atlasAdmin* role.

MongoDB Atlas

ORGANIZATION FORE School of Man...

Project Overview

DATABASE Clusters

Search & Vector Search

Backup

STREAMING DATA Stream Processing

Triggers

SERVICES Migration

Data Federation

Visualization

SECURITY Database & Network Access

Activity Feed

Clusters

Cluster0

Connect Edit config

Browse collection

+ Add Tag

Application Development

Python

Search

Figure 8: On the left panel click **Database and Network Access**.

Keep carefully the user and password.

Database & Network Access

PROJECT Project 0

Database Users

User ID	Description	Authentication Method	MongoDB Roles	Resources	Actions
A_gastum		SCRAM	atlasAdmin,root	All Resources	EDIT DELETE

LEARN SECURITY FUNDAMENTALS + ADD NEW DATABASE USER

Figure 9: Click on **Add a New Database User**. You are asked to create a database user. Do it. Keep the password simple. First click on Create Database user. And then click on Choose a connection method. This user has **atlasAdmin** role,

Add New Database User

Create a database user to grant an application or user access to databases and collections in your clusters in this project. Granular access control can be configured with default privileges or custom roles. You can grant access to project or organization using the corresponding [Access Manager](#)

Authentication Method

Password	Certificate	AWS IAM	Federated A (MongoDB 7.0 c
-----------------	--------------------	----------------	---------------------------------------

MongoDB uses [SCRAM](#) as its default authentication method.

Password Authentication

ashokharnal	SHOW
••••••••	
Autogenerate Secure Password	Copy

This password contains special characters which will be URL-encoded.

User Description

Add an optional description to your user.

Admin user

Figure 10: Select the Password method of login, name the user and his password, write his description and select a role (see below)

User Description

Add an optional description to your user.

Admin user

Database User Privileges

Configure role based access control by assigning database user a mix of one built-in role, multiple custom roles, and multiple specific privileges. A user will gain access to all actions within the roles assigned to them, not just the actions those roles share in common. You must choose at least one role or privilege. [Learn more about roles.](#)

Built-in Role

Select one [built-in role](#) for this user.

Atlas admin

1 SELECTED

Custom Roles

Select your [pre-defined custom role\(s\)](#). Create a custom role in the [Custom Roles](#) tab.

Specific Privileges

Select multiple privileges and what database and collection they are associated with. Leaving collection blank will grant this role for all collections in the database.

Figure 11: In the same window as above, select role as Admin role

The screenshot shows the 'Database Users' section of the MongoDB Atlas interface. On the left, there's a sidebar with 'DATABASE ACCESS' (selected), 'Custom Roles', 'NETWORK ACCESS', 'IP Access List', 'Peering', 'Private Endpoint', and 'Advanced'. The main area has tabs for 'ORGANIZATION' (FORE School of Man...) and 'PROJECT' (Project D). A message says 'We are deploying your changes to your cluster: configuring MongoDB...'. Below it, the title 'Database Users' is followed by a table:

User ID	Description	Authentication Method	MongoDB Roles	Resources	Actions
atlasadmin	Admin user	SCRAM	atlasAdmin@admin	All Resources	<button>Edit</button> <button>Delete</button>
govt001		SCRAM	atlasAdmin@admin	All Resources	<button>Edit</button> <button>Delete</button>

A red arrow points from the 'Edit' button for the first user to the text 'You can click on Edit to modify roles' in Figure 12.

Figure 12: Two users are here with atlasAdmin roles/. You can click on Edit to modify roles

9. IP access list

The screenshot shows the 'IP Access List' section of the MongoDB Atlas interface. The sidebar is identical to Figure 12. The main area has tabs for 'ORGANIZATION' (FORE School of Man...) and 'PROJECT' (Project D). A message says 'You will only be able to connect to your cluster from the following list of IP Addresses:'. Below it, the title 'IP Access List' is followed by a table:

IP Address	Comment	Status	Actions
162.27.89.128/32 (includes your current IP address)		Active	<button>Edit</button> <button>Delete</button>
106.252.81.244/32	Created as part of the Auto-Setup process	Active	<button>Edit</button> <button>Delete</button>

Figure 13: You can work in Atlas only from these IPs. If you change your working place, Add that IP also. This done, click on Clusters on the left panel to reach below.

10. Back to our Cluster

The screenshot shows the MongoDB Atlas interface. On the left, there's a sidebar with sections like Project Overview, DATABASE (Clusters selected), Search & Vector Search, BACKUP, STREAMING DATA, SERVICES, and SECURITY. The main area is titled 'Clusters' and shows 'Cluster0'. It has tabs for Connect, View Monitoring, and Browse Collections. Below these are sections for 'Learn about MongoDB Monitoring', 'Connections', 'Latency', and 'Data Size'. At the bottom, it shows cluster details: Version 0.0.14, Host AWS / Mumbai (ap-south-1), Type Replica Set - 3 nodes, BACKUPS Inactive, LINKED APP SERVICES None Linked, ATLAS BILL Connect, and ATLAS SEARCH Search index.

Figure 14: Click on Clusters on the left panel to reach here. Then click Connect button.

11. Get Connection string for Compass

Compass provides an excellent interface to many tasks in Atlas. We need to connect our Compass with Atlas. First, ensure that Compass is started. Then in Atlas, proceed as below:

Connect to Cluster0



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



Model Context Protocol (MCP) Server

Access your data in agentic developer tools (Claude, Cursor, VS Code, Windsurf)

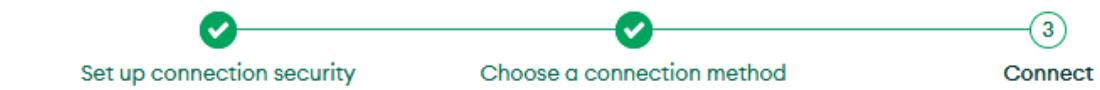


Go Back

Close

Figure 15: Click on Compass

Connect to Cluster0



Connecting with MongoDB Compass



1. Select your operating system and download MongoDB Compass



Compass is an interactive tool for querying, optimizing, and analyzing your MongoDB data.

2. Copy the connection string, then open MongoDB Compass

Use this connection string in your application

The screenshot shows a connection string input field containing "mongodb+srv://<db_username>:<db_password>@cluster0.hzcbfrs.mongodb.net/" with a copy icon. Below the field, text instructs to replace "<db_password>" with the password for the "<db_username>" user. A blue vertical line points from the "REDACTED" placeholder in the connection string to the "<db_password>" placeholder in the instructions. The page also includes a sidebar with "RESOURCES" and links to "Connect with Compass", "Access your Database Users", "Import and Export Data", and "Troubleshoot Connections".

Figure 16: Select your OS and copy the connection string to notepad. You have to fill in db_username and itspassword.

Here is the modified connection string:

Copied one

`mongodb+srv://<db_username>:<db_password>@cluster0.hzcbfrs.mongodb.net/`

Modified one

`mongodb+srv://ashokharnal:Gautam*8@cluster0.hzcbfrs.mongodb.net/`

12. Connect compass and create Database

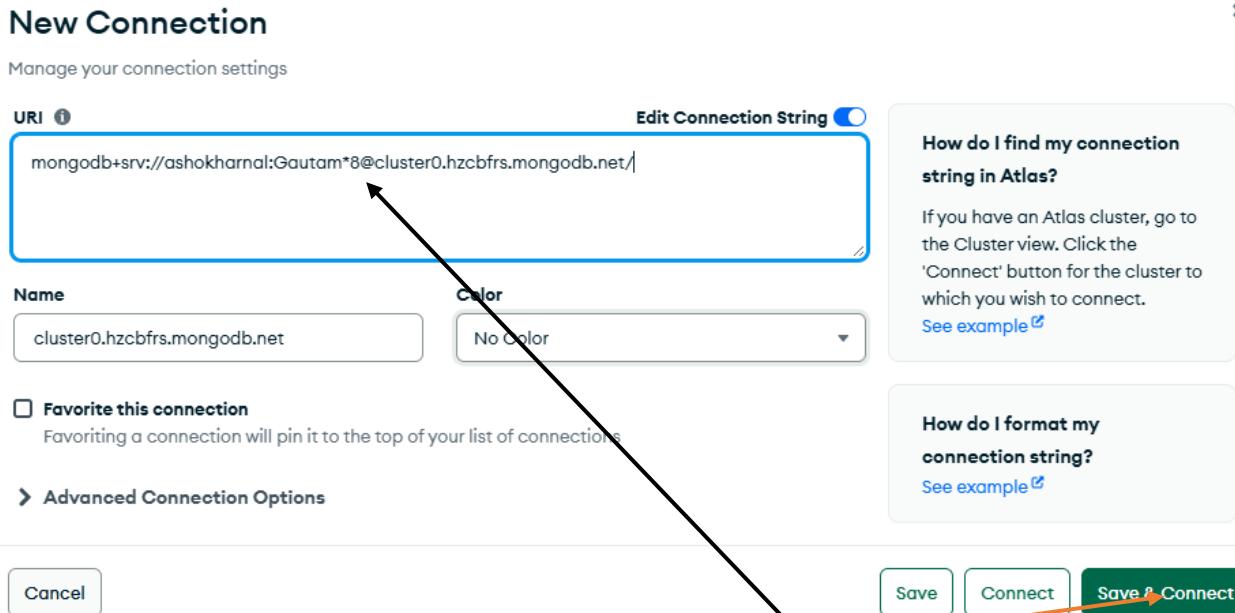


Figure 17: In Compass, click *Add new connection* and fill in the connection URL (overwrite any other connection url). Click *Save and Connect*

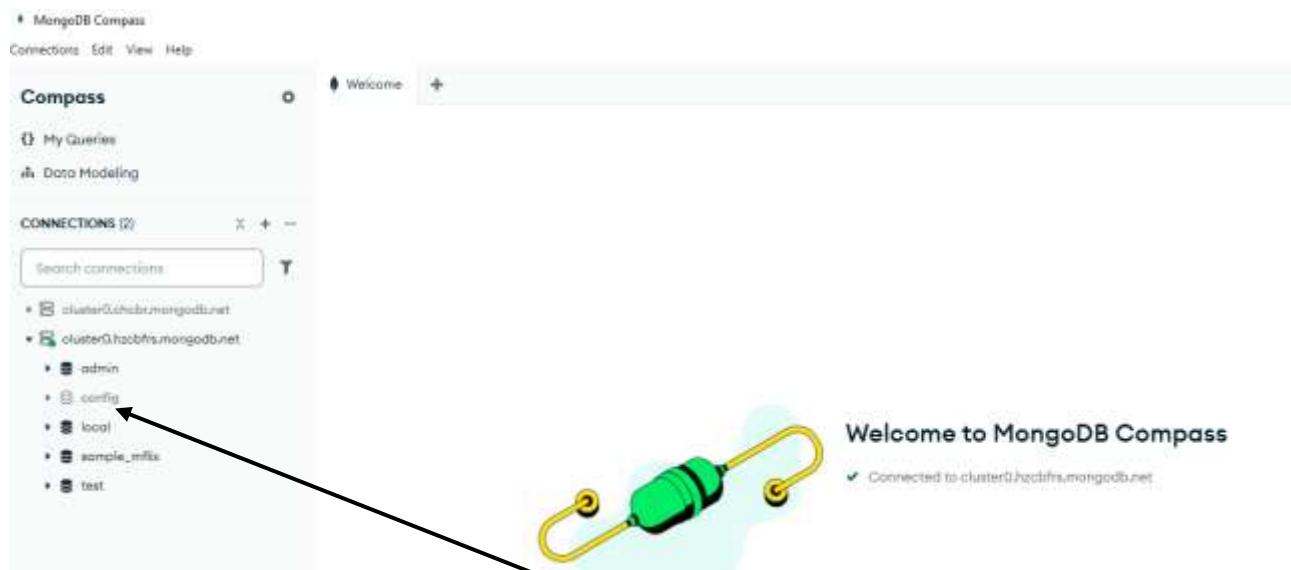


Figure 18: After connection, we get some new objects coming from Atlas.

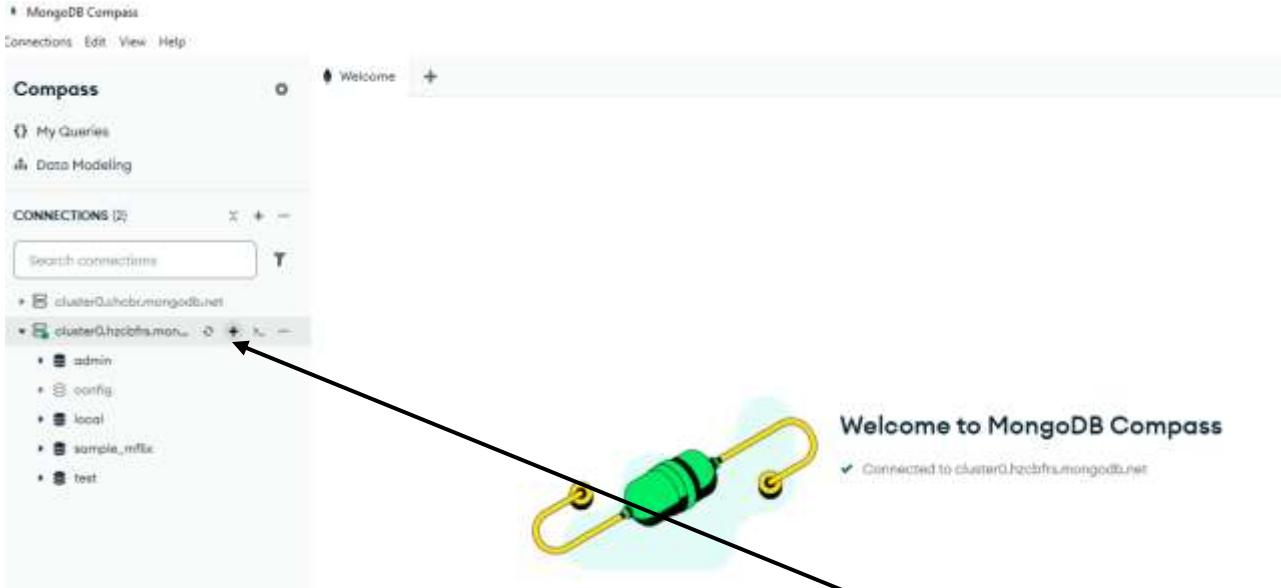


Figure 19: To create a database and within it a collection, click on this + sign against the connection

13. Create Database

A database in MongoDB has a number of collections. Collections are akin to tables in SQL databases.

Create Database

Database Name

healthcare

Collection Name

cardiacHealth

Time-Series

Time-series collections efficiently store sequences of measurements over a period of time. [Learn More ↗](#)

› Additional preferences (e.g. Custom collation, Clustered collections)

Cancel

Create Database

Figure 20: Name your database and collection and click Create Database button.

14. Importing data into Collection

The screenshot shows the MongoDB Compass application interface. On the left, the 'Connections' sidebar lists several databases, including 'cluster0.azabfrs.mongodb.net' and 'cluster0.azabfrs.mongodb.net' which contains the 'cardiacHealth' database. The main workspace displays the 'cardiacHealth' collection under the 'Documents' tab. A message states 'This collection has no data'. Below the message is a green button labeled 'Import data'. At the top right, there is a 'Find' button.

Figure 21: Click Import Data to import any csv file or JSON file in the Collection cardiacHealth.

Import

To collection healthcare.cardiacHealth

Import file: healthcare_dataset.csv

Options

Select delimiter

Ignore empty strings

Stop on errors

Specify Fields and Types Learn more about data types

<input checked="" type="checkbox"/> Name	<input checked="" type="checkbox"/> Age	<input checked="" type="checkbox"/> Gender	<input checked="" type="checkbox"/> Blood Type	<input checked="" type="checkbox"/> Medical Condition	<input checked="" type="checkbox"/> Date of
<input type="button" value="String"/>	<input type="button" value="Int32"/>	<input type="button" value="String"/>	<input type="button" value="String"/>	<input type="button" value="String"/>	<input type="button" value="Date"/>
Bobby JacksOn	30	Male	B-	Cancer	2024-01-31
LesLie TErRy	62	Male	A+	Obesity	2019-08-20
DaNnY sMiTH	76	Female	A-	Obesity	2022-09-22
andrEw waTtS	28	Female	O+	Diabetes	2020-11-18

Figure 22: Status after importing. Click again on Import button to commit/.

MongoDB Compass - cluster0.0.usbfrs.mongodb.net/cardioHealth

Connections Edit View Collection Help

Compass

- My Queries
- Data Modeling
- CONNECTIONS (1)
- Search connections
- cluster0.0.usbfrs.mongodb.net
- cluster0.0.usbfrs.mongodb.net
 - admin
 - config
 - healthcare
 - cardioHealth
 - local
 - sample_mflix
 - test

cluster0.0.usbfrs.mongodb.net > healthcare > cardioHealth

Documents (56K) Aggregations Schema Indexes Validation

Time query: { field: 'value' } or: `Generate query`

ADD DATA EXPORT DATA UPDATE DELETE

Explain Reset Find Options

26 1-26 of 56600

Sally Jackson

Name : "Sally Jackson"
Age : 38
Gender : "Male"
Blood Type : "O+
Medical Condition : "Cancer"
Date of Admission : 2024-01-31T00:00:00+00:00
Doctor : "Matthew Smith"
Hospital : "Sons and Villas"
Insurance Provider : "Blue Cross"
Billing Amount : 10000.20185978166
Room Number : 321
Admission Type : "Urgent"
Discharge Date : 2024-02-01T00:00:00+00:00
Medication : "Paracetamol"
Test Results : "Normal"

Lucie Terry

Name : "Lucie Terry"
Age : 62
Gender : "Male"
Blood Type : "A+
Medical Condition : "Diabetes"
Date of Admission : 2023-09-20T00:00:00+00:00
Doctor : "Samantha Parker"
Hospital : "Ville Inc."
Insurance Provider : "Medicare"
Billing Amount : 33333.332734577888

Figure 23: Our data in the collection.

15. Back in Atlas

Back in Atlas, click on cluster0 within the Clusters.

MongoDB Atlas

PROJECT FORE School of Man...

Clusters

cluster0 Connect View Monitoring Browse Collections ...

Learn about MongoDB Monitoring

R: 0.82 W: 0.00 Connections: 9.0 I: 71.40 kB/s O: In: 322.15 B/s Out: 114.44 MB / 102.98 MB (22%) Data Size: 114.44 MB / 102.98 MB (22%)

WARMUP	region	TYPE	REPLICAS	SECURE	LINKED APP SERVICES	ATLAS USE	ATLAS SEARCH
B.0.6	AWS Mumbai (ap-south-1)	Replica Set - 3 nodes	Inactive	None Linked	Connect	Search Index	

Add Tag

Figure 24: Click cluster0

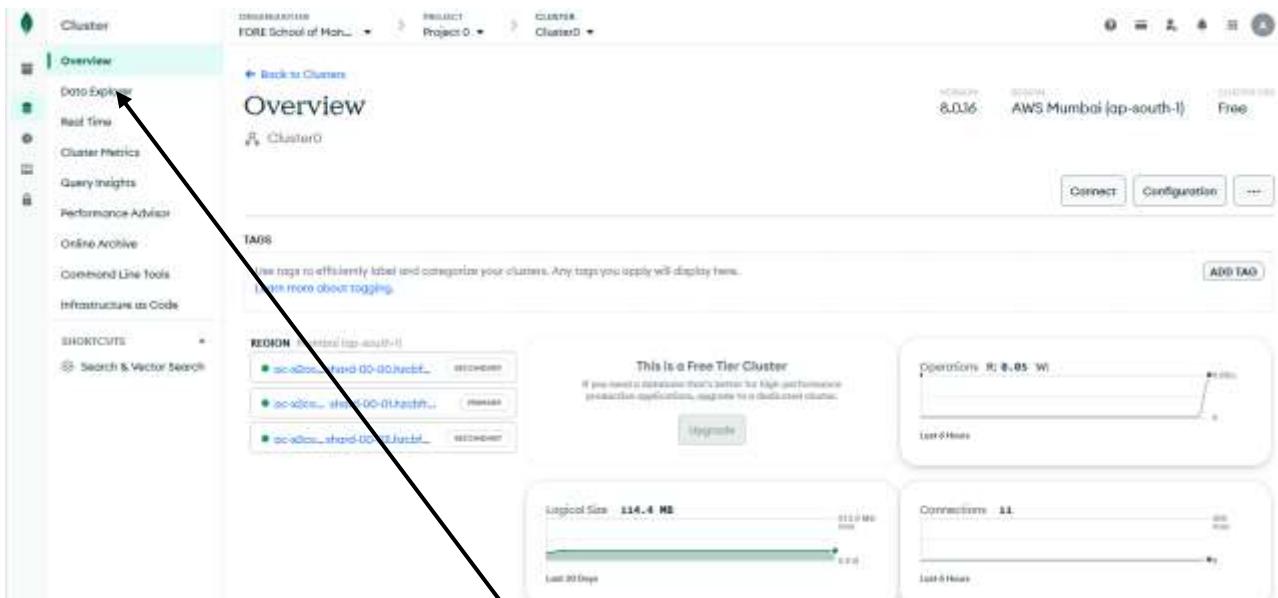


Figure 25: Cluster0 opens. Click Data Explorer to see data.

16. Data Visualization

To visualize data, click on Visualize your data button.

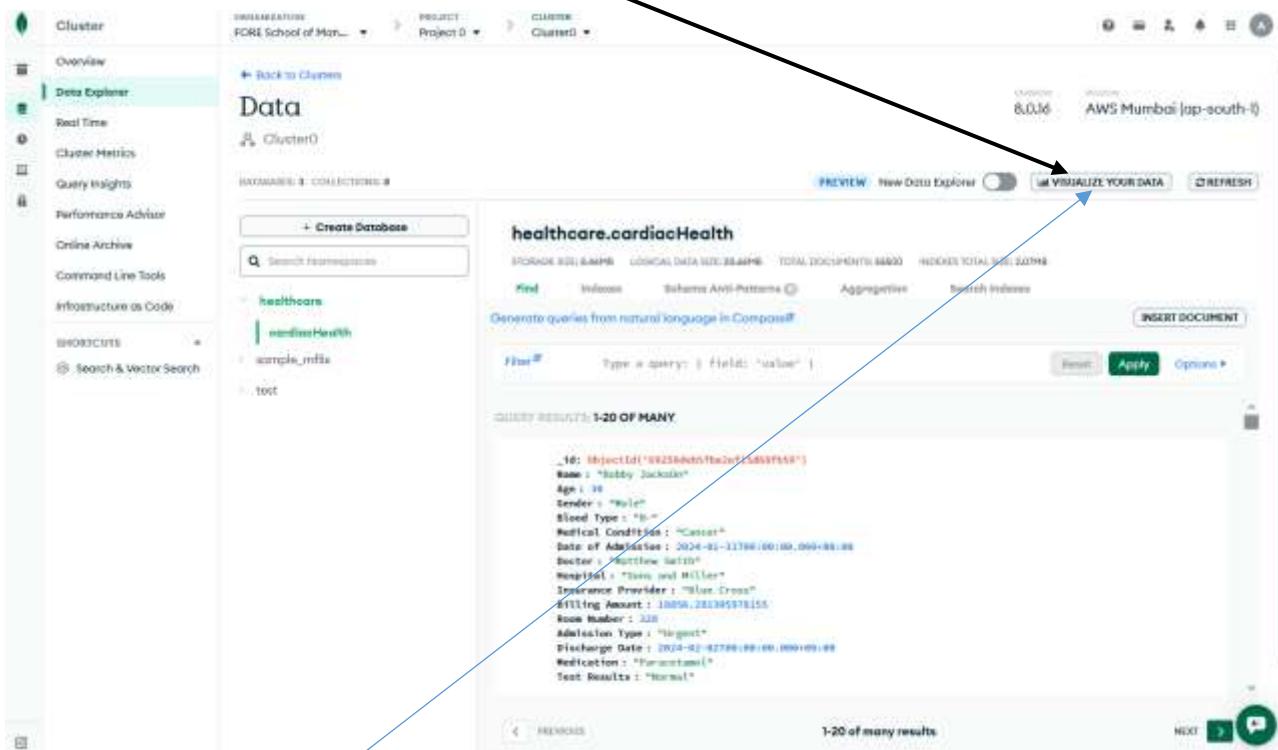


Figure 26: Click on Visualize your data

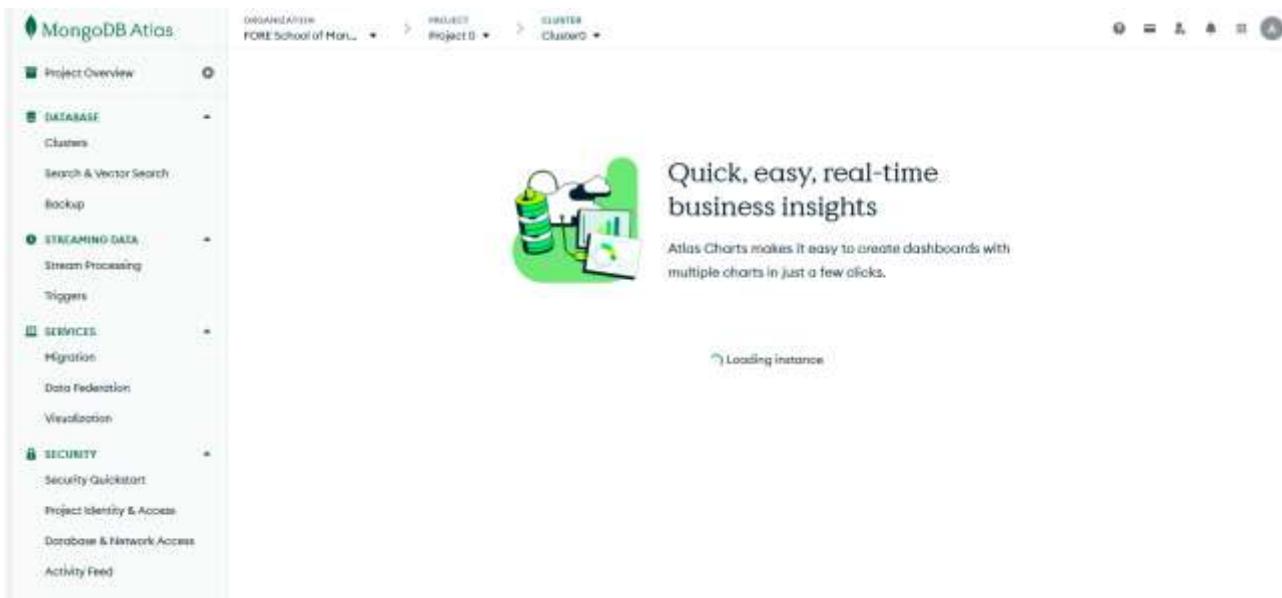


Figure 27: Visualization takes time to open as it first takes a sample of data and then only creates visualization.

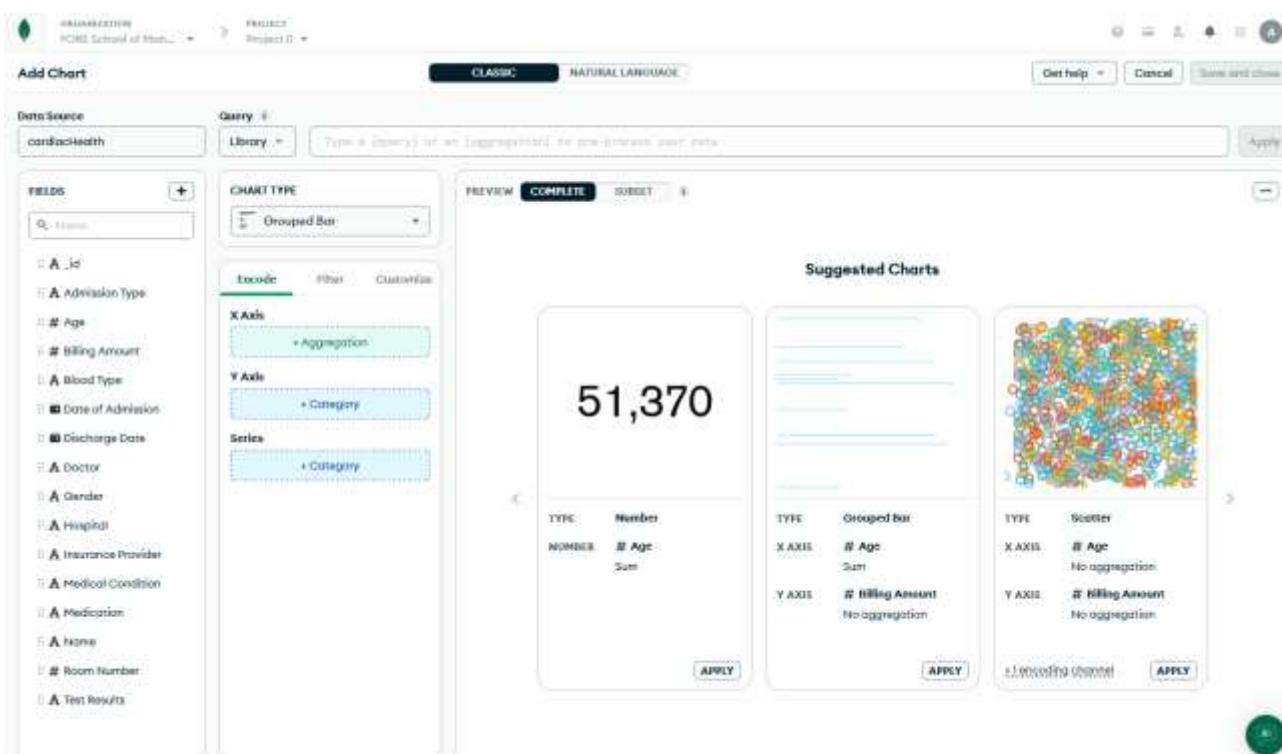


Figure 28: A sample visualization is created from a sample of cardiacHealth collection.

Solving Compass Atlas Connection String problems

1. Check database user privileges under Data Access page
Should be '*atlasAdmin*'
2. Check database user password or better change it

- under Data Access page
3. Under Network Access tab, permit connections from all IPs.
 4. Check your firewall/ant-virus software
 5. Lastly, create a login account from a different email.

17. Project0 page

A cluster occurs under a Project. Our *Cluster0* occurs under *Project0*.

The screenshot shows the MongoDB Atlas interface. At the top, it displays the URL <https://cloud.mongodb.com/v2/017172bacadd4d765989ed557ff/overview>. The main header says "Project Overview | Cloud". Below the header, there's a navigation bar with "Atlas", "FORE School...", "Access Manager", "Billing", "All Clusters", "Get Help", and a user profile "Ashok".

The left sidebar is titled "Project 0" and contains the following sections:

- OVERVIEW**
- DEPLOYMENT**
- Database**
- SERVICES**
- Search
- Vector Search
- Stream Processing
- Triggers
- Migration
- Data Federation
- SECURITY**
- Quickstart
- Backup
- Database Access
- Network Access
- Advanced

The main content area is titled "Overview" and shows "PORE SCHOOL OF MANAGEMENT : PROJECT0". It features a "Clusters" section with "Cluster0" listed. A message indicates "Sample Dataset successfully loaded! Browse this collection." with a "Browse collections" button. To the right, it shows "Data Size: 134.44 MB". Other buttons include "Edit configuration", "Migrate data", and "View monitoring". A "Create cluster" button is also present. On the right side, there's a "Toolbar" with links to "Featured Resources" (GENERAL, Get Started with Atlas, Reference MongoDB Documentation, Develop Applications with the Developer Center, Ask the MongoDB Community) and "New On Atlas" (B NEW, Learn about the latest feature enhancements on Atlas).

Figure 11: Cluster0 occurs under Project0. Note the total Data Size of database sample_mflix as 134mb

18. Drop database in Compass

You will be able to drop a database in Compass, only if you have *atlasAdmin* role. You can check your role by going to *Database Access* page in Atlas.

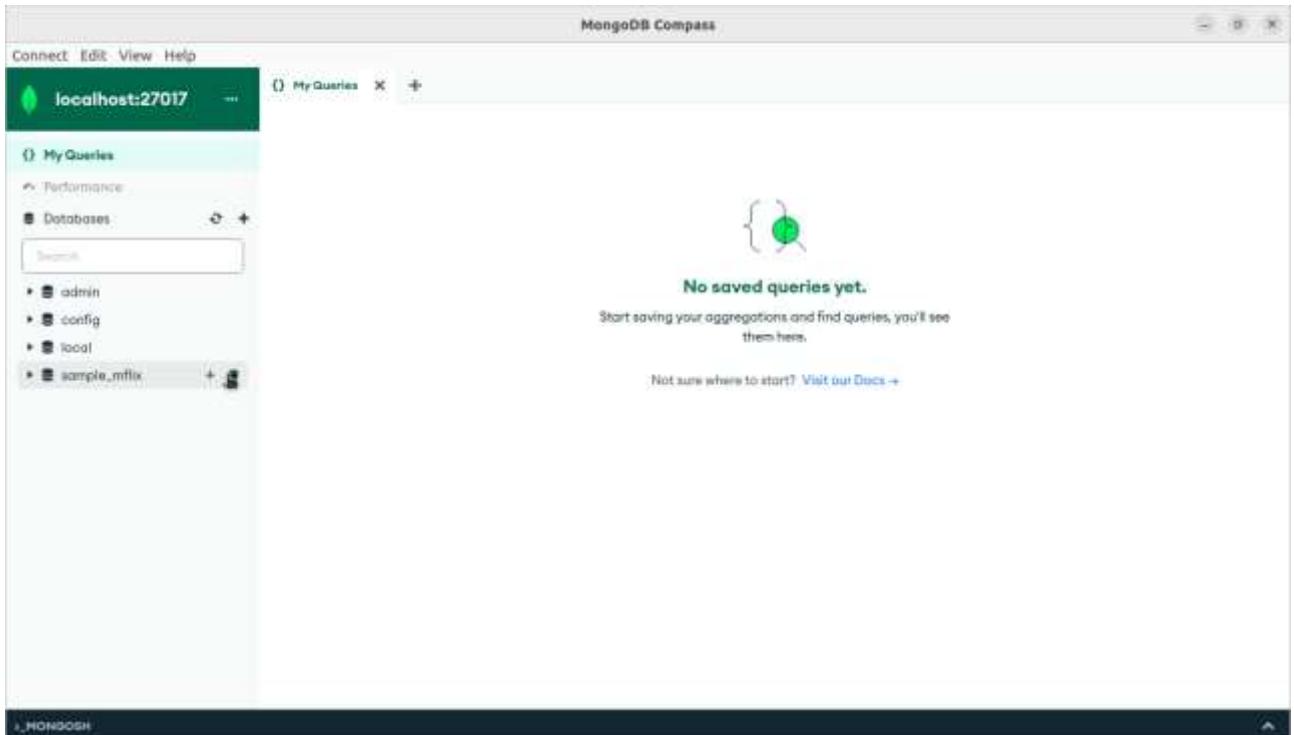


Figure 12: Back in **compass**, let us drop this database by clicking on the trash icon against it.

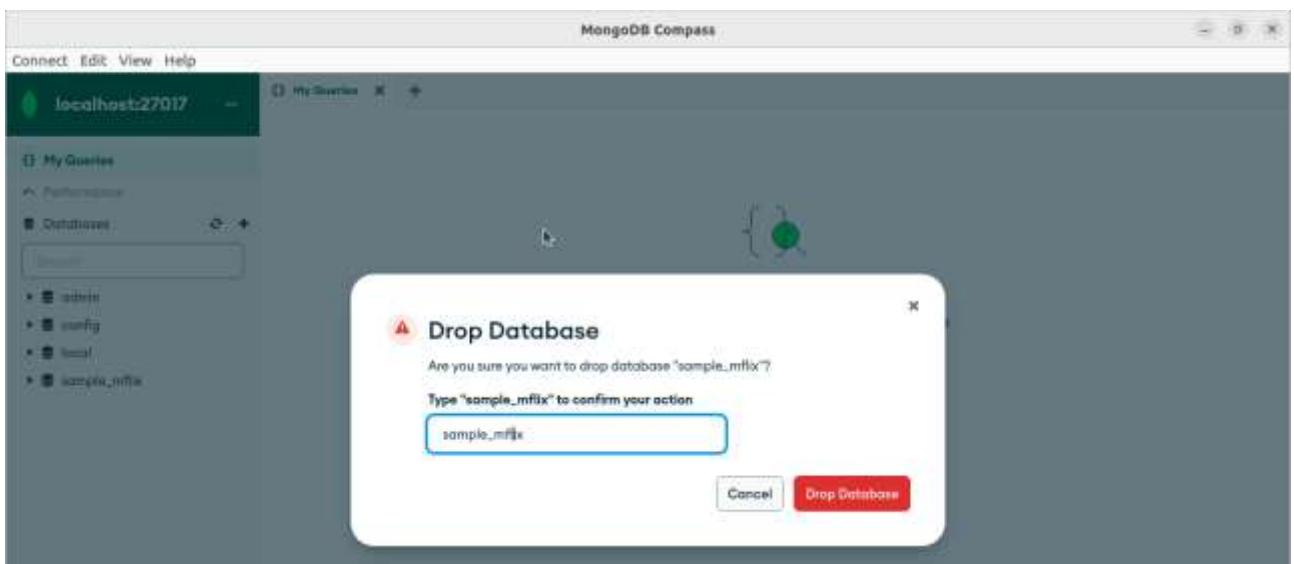


Figure 13: Click Drop database button

Back in Atlas, observe if database will be dropped?

The screenshot shows the MongoDB Atlas interface. On the left, a sidebar lists various services: Deployment, Database, Services (Search, Vector Search, Stream Processing, Triggers, Migration, Data Federation), Security (Quickstart, Backup, Database Access, Network Access, Advanced), and Monitoring (Metrics, CloudWatch Metrics). The main area is titled 'Clusters' and shows 'Cluster0'. It indicates that a 'Sample Dataset' has been successfully loaded and provides options to 'Connect', 'Edit configuration', 'Browse collections', 'Migrate data', and 'View monitoring'. Below this is an 'Application Development' section with a 'Get connection string' button. A 'Toolbar' on the right includes links to 'Featured Resources' (GENERAL: Get Started with Atlas, Reference MongoDB Documentation, Develop Applications with the Developer Center, Ask the MongoDB Community) and 'New On Atlas'.

Figure 14: In Project0 page, Click on **Browse Collections** again.

The screenshot shows the 'Cluster0 Data' page. The top navigation bar includes 'Project0', 'Data Services', and 'Charts'. The sidebar on the left is identical to Figure 14. The main content area is titled 'Cluster0' and shows 'FORE SCHOOL OF MANAGEMENT > PROJECT0 > DATABASES'. It displays 'VERSION: 7.0.14' and 'AWS Mumbai (ap-south-1)'. Below this, tabs for 'Overview', 'Real Time', 'Metrics', and 'Collections' are present, with 'Collections' being the active tab. It shows 'DATABASES: 0' and 'COLLECTIONS: 0'. A central callout says 'Explore Your Data' with sub-points: 'Find: run queries and interact with documents', 'Indexes: build and manage indexes', 'Aggregation: test aggregation pipelines', and 'Search: build search indexes'. At the bottom are buttons for 'Load a Sample Dataset' and 'Add My Own Data'.

Figure 15: No database or collection is available in Cluster0.
