

## MONGODB INSTALLATION STEPS

Signup on MongoDB Atlas to set up a server on their website:

<https://www.mongodb.com/cloud/atlas/register>

Fill up your details, use your personal email address, not your TTA email:

### Sign up

See what Atlas is capable of for free

First Name\*

This field is required

Last Name\*

Company

Email\*

Password\*

☐ I agree to the [Terms of Service](#) and [Privacy Policy](#).

Create your Atlas account

After registering, verify your email address :



## Great, now verify your email



Check your inbox at **jessica@techtalent.academy** and click the verification link inside to complete your registration. This link will expire shortly, so verify soon!

**Don't see an email?** Check your spam folder.

**Link expired?** [Resend verification email](#)

Login in to their website here:

<https://account.mongodb.com/account/login?signedOut=true>

You should see the following window after login :

cloud.mongodb.com/v2/63b7f8b010e4511061783917#/clusters

Atlas Jessica's Or... Access Manager Billing All Clusters Get Help Jessica

Project 0 Data Services App Services Charts

DEPLOYMENT

Database

Data Lake PREVIEW

SERVICES

Triggers

Data API

Data Federation

SECURITY

Database Access

Network Access

Advanced

New On Atlas 1

Goto

JESSICA'S ORG - 2023-01-06 > PROJECT 0

## Database Deployments

Current IP Address not added. You will not be able to connect to databases from this address.

Add Current IP Address Do not me show again

### Create a database

Choose your cloud provider, region, and spec

Build a Database

Once your database is up and running, live migrate an existing MongoDB database into Atlas with our [Live Migration Service](#).

IMBot from MongoDB · 1m ago

Welcome 🌟

What can I help you with?

I'd like to learn more about pricing

I have some questions about MongoDB

Thanks, I'm just browsing

Click on **Build a Database**.

Choose the **Free shared plan** :

NEW

**Serverless**

For application development and testing, or workloads with variable traffic. Minimal configuration required.

- ✓ Pay only for the operations you run
- ✓ Resources scale seamlessly to meet your workload
- ✓ Always-on security and backups

Create

Starting at  
**\$0.10/1M reads**

ADVANCED

**Dedicated**

For production applications with sophisticated workload requirements. Advanced configuration controls.

- ✓ Network isolation and fine-grained access controls
- ✓ On-demand performance advice
- ✓ Multi-region and multi-cloud options available

Create

Starting at  
**\$0.08/hr\***  
\*estimated cost \$56.94/month

FREE

**Shared**

For learning and exploring MongoDB in a cloud environment. Basic configuration options.

- ✓ No credit card required to start
- ✓ Explore with sample datasets
- ✓ Upgrade to dedicated clusters for full functionality

Create

Starting at  
**FREE**

[I'll do this later](#)

[View all features](#)

[Advanced Configuration Options](#)

Dont change any following settings unless you are in a different region than the UK, click on a region that is closer to were you are located :

Cloud Provider & Region

AWS, Ireland (eu-west-1)

aws

Google Cloud

Azure

★ Recommended region ⓘ

🏷️ Dedicated tier region ⓘ

NORTH AMERICA

🇺🇸 Oregon (us-west-2) ★

🇺🇸 N. Virginia (us-east-1) ★

🇺🇸 Ohio (us-east-2) ★ 🏷️

🇺🇸 N. California (us-west-1) 🏷️

🇨🇦 Montreal (ca-central-1) ★ 🏷️

EUROPE

🇩🇪 Frankfurt (eu-central-1)

🇸🇪 Stockholm (eu-north-1) ★

🇮🇪 Ireland (eu-west-1) ★

🇫🇷 Paris (eu-west-3) ★

🇬🇧 London (eu-west-2) ★ 🏷️

AUSTRALIA

🇦🇺 Sydney (ap-southeast-2) ★

ASIA

🇸🇬 Singapore (ap-southeast-1) ★

🇰🇷 Seoul (ap-northeast-2) ★

🇮🇳 Mumbai (ap-south-1) ★

🇯🇵 Tokyo (ap-northeast-1) ★

FREE

Free forever! Your M0 cluster is ideal for experimenting in a limited sandbox. You can upgrade to a production cluster anytime.

Back

Create Cluster

Click on **Create Cluster**.

4

Create the following **username and password** : use root for both! It will be easier to remember in case you forgot the password.

Data Services

App Services


Charts


Username and Password


Certificate

Create a database user using a username and password. Users will be given the *read and write to any database privilege* by default. You can update these permissions and/or create additional users later. Ensure these credentials are different to your MongoDB Cloud username and password.

**Username**

**Password** 

 Autogenerate Secure Password

 Copy


Create User

Click on **Create User**.

Leave My local enviromenet selected :

## 2 Where would you like to connect from?


Enable access for any network(s) that need to read and write data to your cluster.



**My Local Environment**

Use this to add network IP addresses to the IP Access List. This can be modified at any time.

ADVANCED



**Cloud Environment**

Use this to configure network access between Atlas and your cloud or on-premise environment. Specifically, set up IP Access Lists, Network Peering, and Private Endpoints.

Click on **Add my current IP address** to link it to the server :

Add entries to your IP Access List

Only an IP address you add to your Access List will be able to connect to your project's clusters.

IP Address	Description	
<input type="text" value="Enter IP Address"/>	<input type="text" value="Enter description"/>	<input type="button" value="Add My Current IP Address"/>
<input type="button" value="Add Entry"/>		

Click on **Finish and Close** at the bottom of the page :

**Finish and Close**

You should get the following pop up window :

## Congratulations on setting up access rules!


You will now be able to connect to your deployments. You can continue to add and update access rules in [Database Access](#) and [Network Access](#).

- ☒ Hide Quickstart guide in the navigation. You can visit [Project Settings](#) to access it in the future.

**Go to Databases**

Click on **Go to Databases**.

Close the next window, don't do any set up :



# Introducing Termination Protection

Now, you can prevent any user from accidentally deleting a cluster.

Setup

Close

Now you have created a cluster. You should see the following :

DEPLOYMENT

Database

Data Lake

PREVIEW

SERVICES

Triggers

Data API

Data Federation

SECURITY

Database Access

Network Access

Advanced

New On Atlas 1

Goto

JESSICA'S ORG - 2023-01-06 > PROJECT 0

Database Deployments

Find a database deployment...

+ Create

Cluster0

Connect

View Monitoring

Browse Collections

...

FF

Enhance Your Experience

For production throughput and richer metrics, upgrade to a dedicated cluster now!

Upgrade

Learn More

R 0

W 0

Last 7 seconds

100.0/s

Connections 0

Last 7 seconds

100.0

In 0.0 B/s

Out 0.0 B/s

Last 7 seconds

100.0 B/s


Data Size 0

Last 7 seconds

512.0 MB

VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED APP SERVICES	ATLAS SEARCH
5.0.14	AWS / Ireland (eu-west-1)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked	Create Index

Click on **Browse Collections** to add databases on your cluster:




VERSION  
5.0.14

REGION  
AWS Ireland (eu-west-1)

OverviewReal TimeMetricsCollectionsSearchProfilerPerformance AdvisorOnline Arch

DATABASES: 0COLLECTIONS: 0

VISUALIZE YOUR DATAREFRESH



## Explore Your Data

- **Find:** run queries and interact with documents
- **Indexes:** build and manage indexes
- **Aggregation:** test aggregation pipelines
- **Search:** build search indexes

Load a Sample DatasetAdd My Own Data

[Learn more in Docs and Tutorials](#)

Click on **Load a sample dataset**.

## Load Sample Dataset

We've created a sample dataset to help you test features on ClusterO.

[Sample Dataset](#)

Size: ~350 MB

Cancel

Load Sample Dataset

Click on **Load sample dataset**.

It might take 5-10 good minutes to load the files.



DATABASES: 0 COLLECTIONS: 0

VISUALIZE YOUR DATA

REFRESH



## Explore Your Data

- **Find:** run queries and interact with documents
- **Indexes:** build and manage indexes
- **Aggregation:** test aggregation pipelines
- **Search:** build search indexes

Loading Sample Dataset...

Add My Own Data

[Learn more in Docs and Tutorials](#)

Come back to check when the loading is done.

When the loading is done you should get a list of databases on the left side of the window:

DATABASES: 9 COLLECTIONS: 22

VISUALIZE YOUR DATA

REFRESH

+ Create Database

Search Namespaces

- ▼ sample\_airbnb
  - listingsAndReviews
- ▶ sample\_analytics
- ▶ sample\_geospatial
- ▶ sample\_guides
- ▶ sample\_mflix
- ▶ sample\_restaurants
- ▶ sample\_supplies
- ▶ sample\_training
- ▶ sample\_weatherdata

### sample\_airbnb.listingsAndReviews

STORAGE SIZE: 52.12MB LOGICAL DATA SIZE: 89.99MB TOTAL DOCUMENTS: 5555 INDEXES TOTAL SIZE: 620KB

Find Indexes Schema Anti-Patterns Aggregation Search Indexes

INSERT DOCUMENT

FILTER { field: 'value' }

OPTIONS

Apply

Reset

```
{
  "_id": "10006546"
  "listing_url": "https://www.airbnb.com/rooms/10006546"
  "name": "Ribeira Charming Duplex"
  "summary": "Fantastic duplex apartment with three bedrooms, located in the
    histori..."
  "space": "Privileged views of the Douro River and Ribeira square, our
    apartment ..."
  "description": "Fantastic duplex apartment with three bedrooms, located in
    the histori..."
  "neighborhood_overview": "In the neighborhood of the river, you can find
    several restaurants as ..."
  "notes": "Lose yourself in the narrow streets and staircases zone, have
    lunch in..."
}
```

Now we need to connect to our server using a GUI to retrieve and manipulate data from the databases. We will be using **MongoDB compass**. Download the software here choosing the right version for your operating system:

<https://www.mongodb.com/try/download/compass>

## MongoDB Compass Download

Easily explore and manipulate your database with Compass, the GUI for MongoDB. Intuitive and flexible, Compass provides detailed schema visualizations, real-time performance metrics, sophisticated querying abilities, and much more.

Please note that MongoDB Compass comes in three versions: a **full version** with all features, a **read-only version** without write or delete capabilities, and an **isolated edition**, whose sole network connection is to the MongoDB instance.

For more information, see our [documentation pages](#).

### Compass

The full version of MongoDB Compass, with all features and capabilities.

### Readonly Edition

This version is limited strictly to read operations, with all write and delete capabilities removed.

### Isolated Edition

This version disables all network connections except the connection to the MongoDB instance.

### Learn more

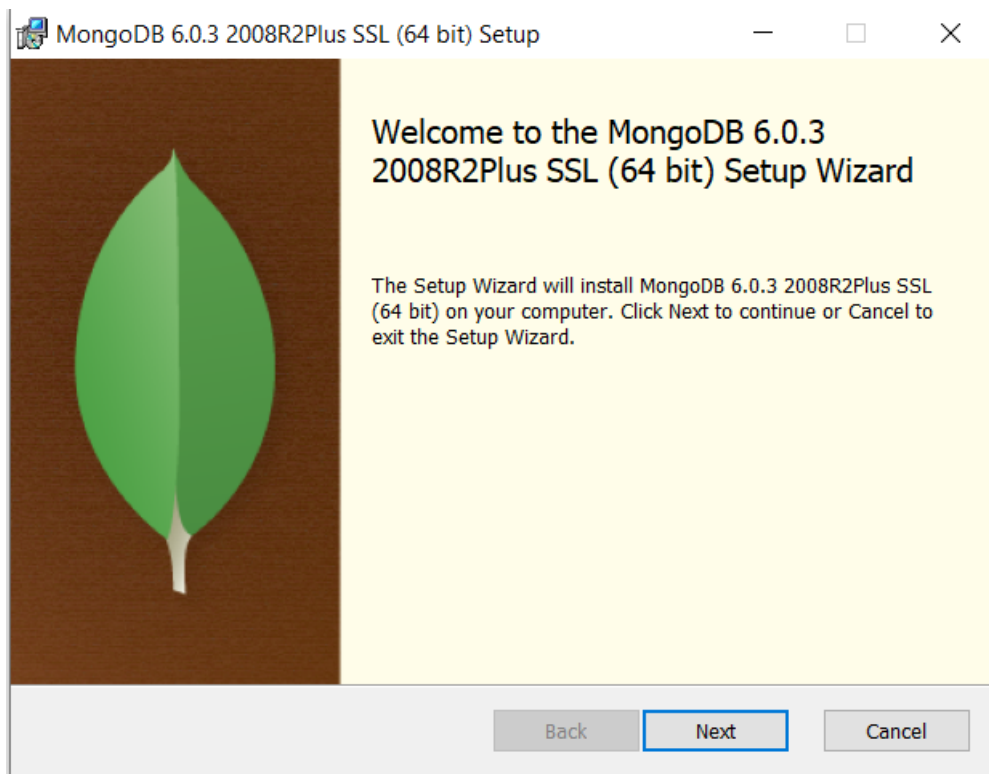
Version

1.34.2 (Stable)

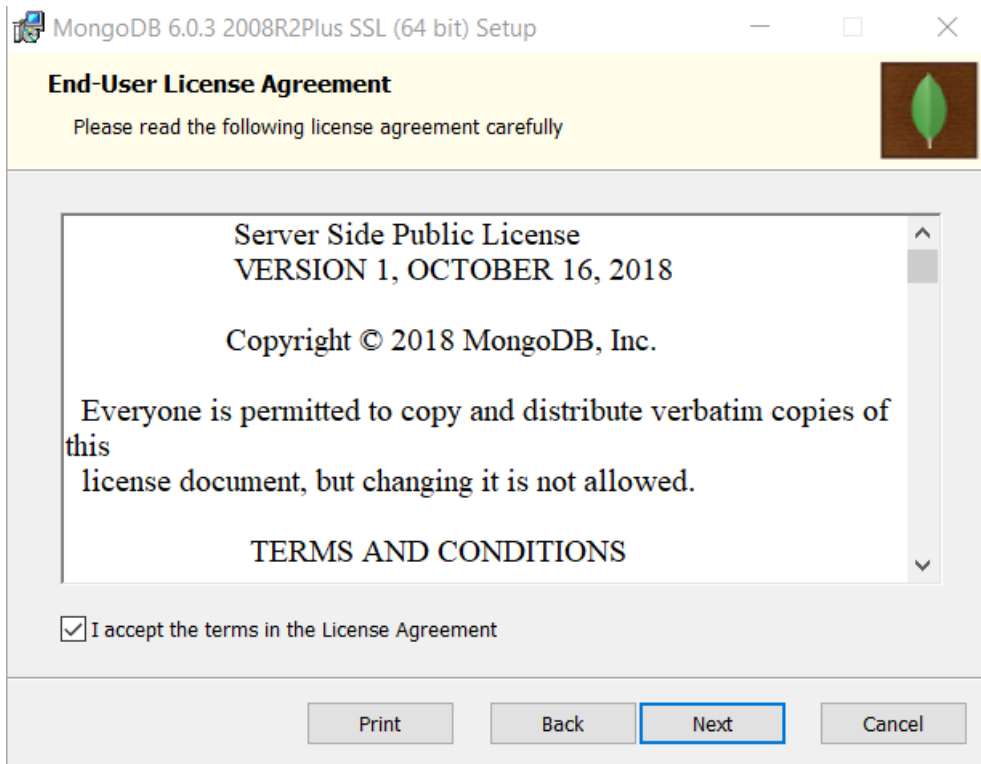


## Follow the installation set up:

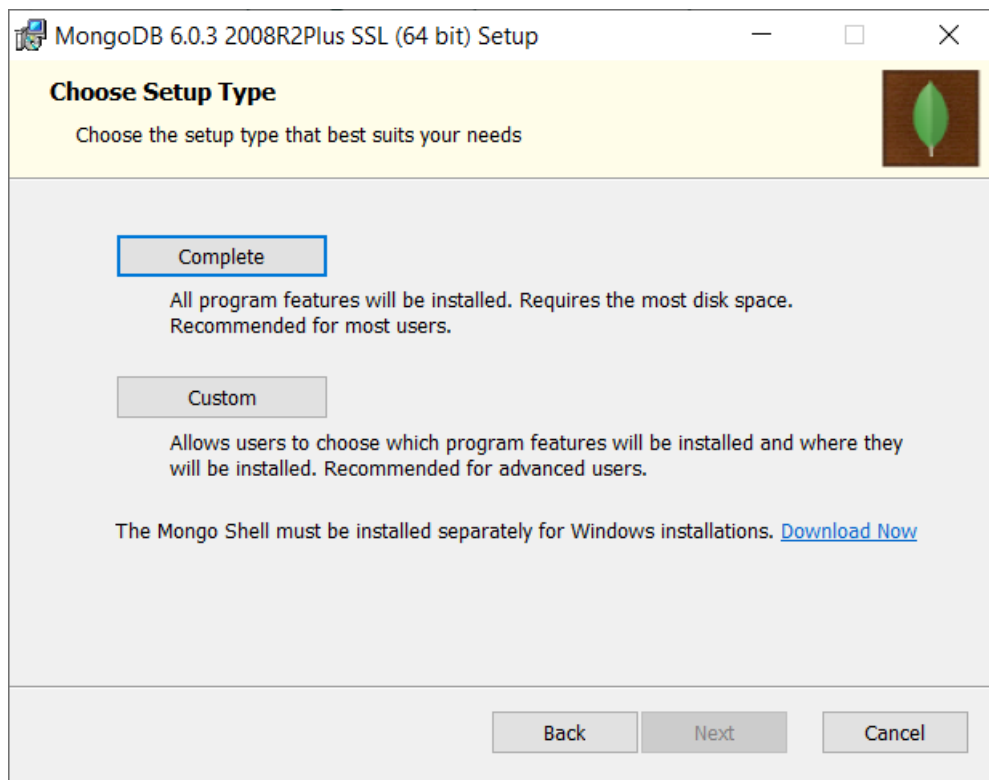
Click next:



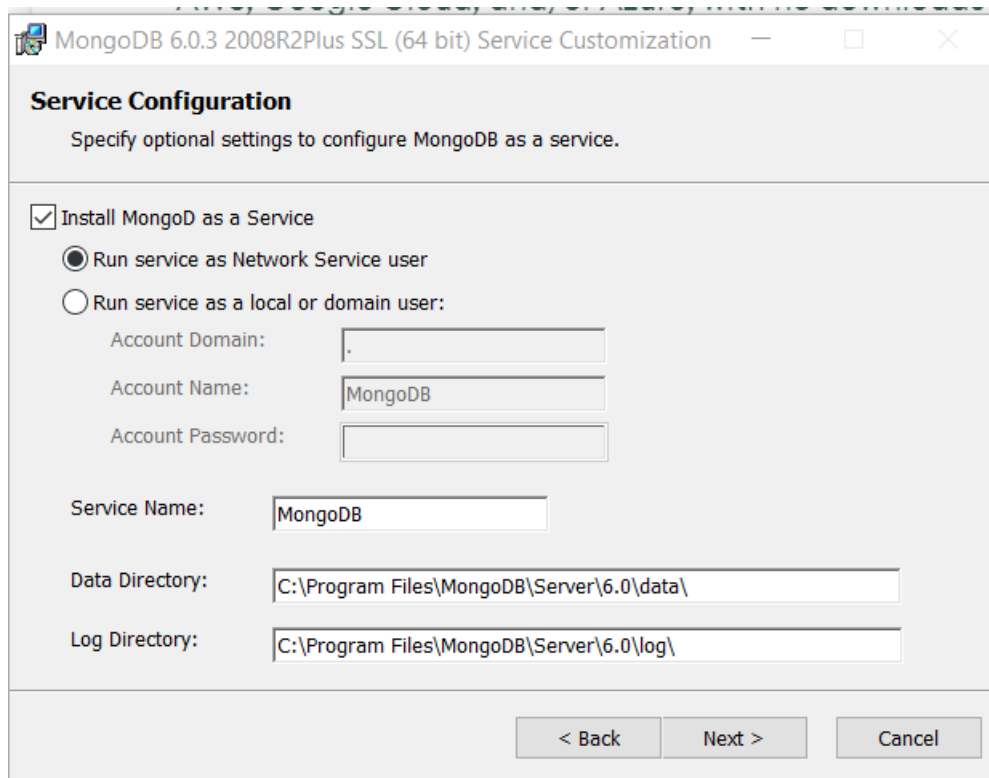
Check the box to accept terms and Click next:



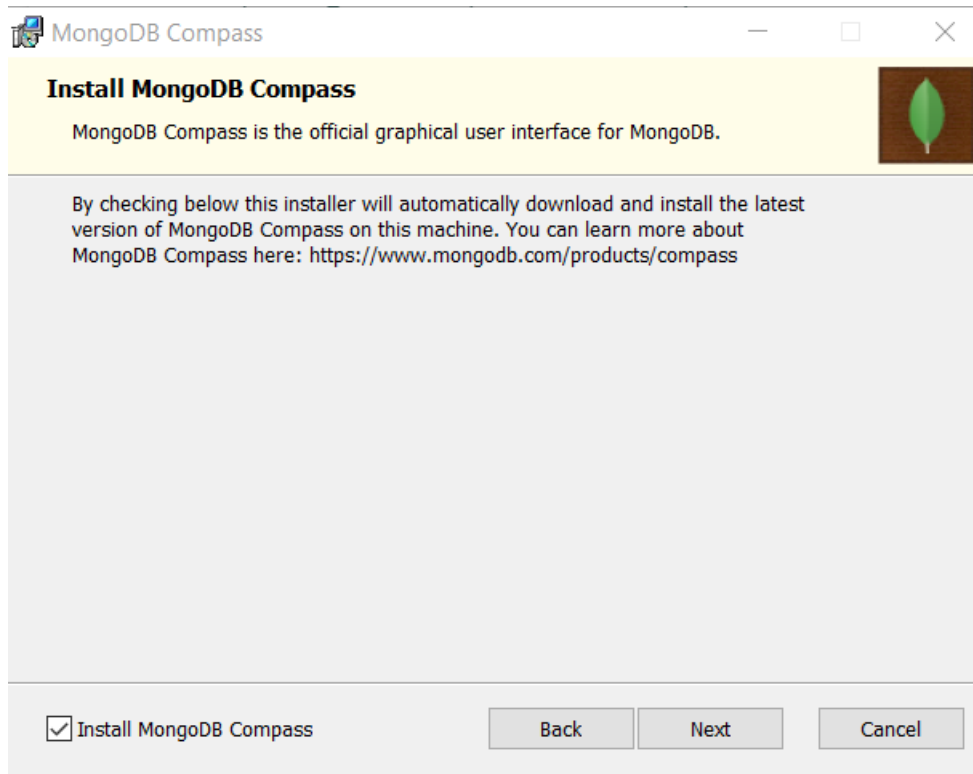
Choose complete and Click next:



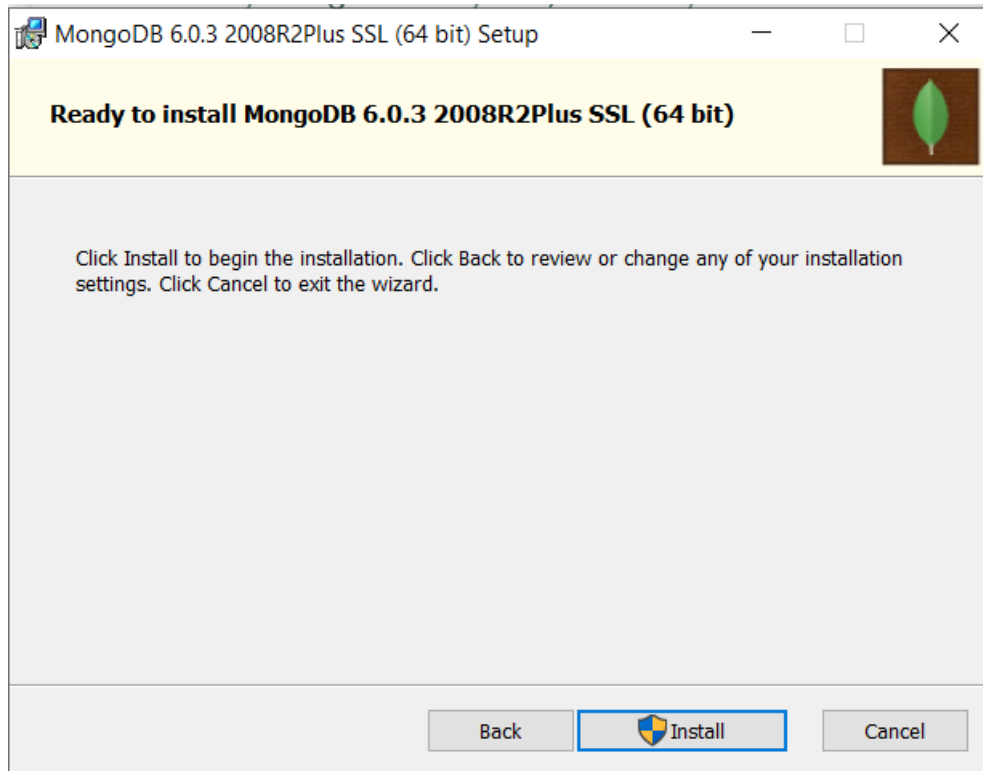
Click next (don't change anything):



Click next:



Click Install:



Click on the MongoDB app to open the software, you should see the following window:

Compass

New connection +

Saved connections

Recents

### New Connection

Connect to a MongoDB deployment

URI Edit Connection String

mongodb+srv://username:password@cluster0-jtpxd.mongodb.net/admin

Invalid connection string

Advanced Connection Options

Save Save & Connect Connect

**New to Compass and don't have a cluster?**  
If you don't already have a cluster, you can create one for free using [MongoDB Atlas](#).  
[CREATE FREE CLUSTER](#)

**How do I find my connection string in Atlas?**  
If you have an Atlas cluster, go to the Cluster view. Click the 'Connect' button for the cluster to which you wish to connect.  
[See example](#)

**How do I format my connection string?**  
[See example](#)

To create a new connection to our previous cluster, we need to go back to the **MongoDB Atlas website** where you should still be logged in and go to connexion, click on **Connect**:

cloud.mongodb.com/v2/63b7f8b010e4511061783917#/clusters

Atlas Jessica's Org... Access Manager Billing All Clusters Get Help Jessica

Project 0 Data Services App Services Charts

## Database Deployments

Find a database deployment...

Sample dataset successfully loaded. Access it in Data Explorer by clicking the Collections button, or with the MongoDB Shell. [VIEW DATASET](#)

Cluster0 Connect View Monitoring Browse Collections ...

**Enhance Your Experience**  
For production throughput and richer metrics, upgrade to a dedicated cluster now!  
[Upgrade](#) [Learn More](#)

**Connections** 3.0  
Last 2 hours

**In 15.1 B/s Out 3.6 KB/s**  
Last 2 hours

**Data Size** 512.0 MB  
Last 2 hours

VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED APP SERVICES	ATLAS SEARCH
5.0.14	AWS / Ireland (eu-west-1)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked	<a href="#">Create Index</a>

You should get the following window:



## Connect to Cluster0

✓ Setup connection security

Choose a connection method

Connect

Choose a connection method [View documentation](#)

Get your pre-formatted connection string by selecting your tool below.



### Connect with the MongoDB Shell

Interact with your cluster using MongoDB's interactive Javascript interface



### Connect your application

Connect your application to your cluster using MongoDB's native drivers



### Connect using MongoDB Compass

Explore, modify, and visualize your data with MongoDB's GUI



### Connect using VS Code

Connect to a MongoDB host in Visual Studio Code



Go Back

Close

Click on **Connect using MongoDB Compass**.

## Connect to Cluster0

✓ Setup connection security > ✓ Choose a connection method > Connect

I do not have MongoDB Compass

I have MongoDB Compass

### 1 Select your operating system and download MongoDB Compass

macOS 64-bit (10.14+) ▼

Download Compass (1.34.2)

or

Copy download URL

### 2 Copy the connection string, then open MongoDB Compass.

mongodb+srv://root:<password>@cluster0.jdnipdo.mongodb.net/test



You will be prompted for the password for the **root** user's (Database User) username.  
When entering your password, make sure that any special characters are [URL encoded](#).

Having trouble connecting? [View our troubleshooting documentation](#)

Go Back

Close

Copy the following string above shown by the red arrow. This is a connexion string to the database server we will be using in MongoDB Compass.

**Go back to MongoDB Compass** software you installed on your pc and paste the link your copied from MongoDB Atlas:



Compass

New connection +

☆ Saved connections

🕒 Recents

New Connection

Connect to a MongoDB deployment

☆ FAVORITE

URI ⓘ Edit Connection String ☒

mongodb+srv://root:password@cluster0.jdnipdo.mongodb.net/test

> Advanced Connection Options

Save Save & Connect Connect

Now you need to change the password <password> in the string by the one you created earlier which was: root.

Do the following modification on the string:

New Connection

Connect to a MongoDB deployment

☆ FAVORITE

URI ⓘ Edit Connection String ☒

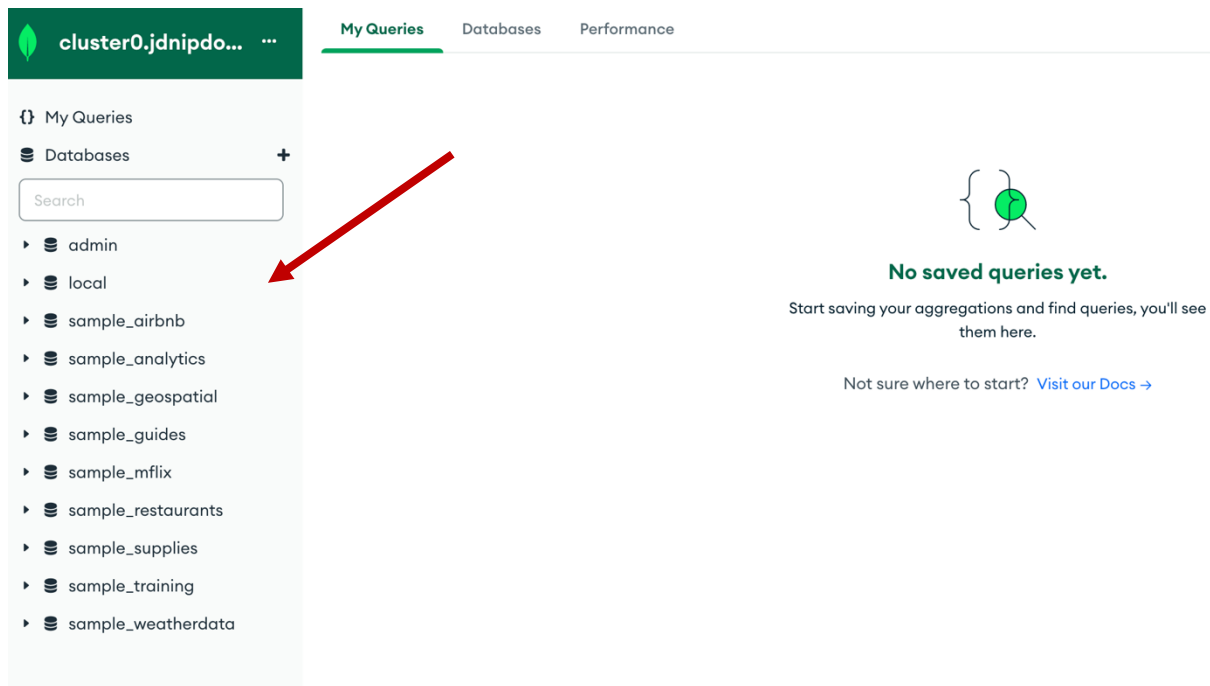
mongodb+srv://root:root@cluster0.jdnipdo.mongodb.net/test

> Advanced Connection Options

Save Save & Connect Connect

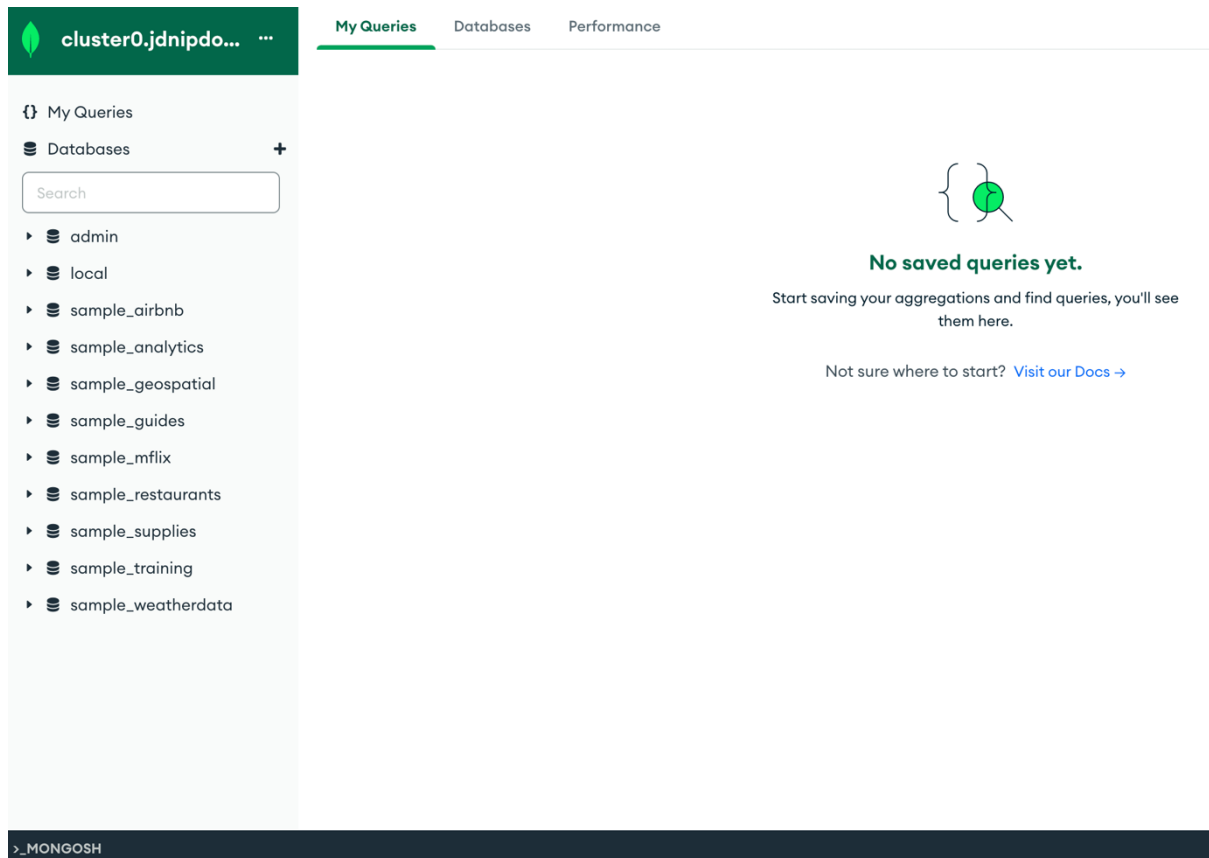
Click on **Connect**.

After a successful connection, you should see the databases from your cluster appearing in MongoDB compass on the left side:

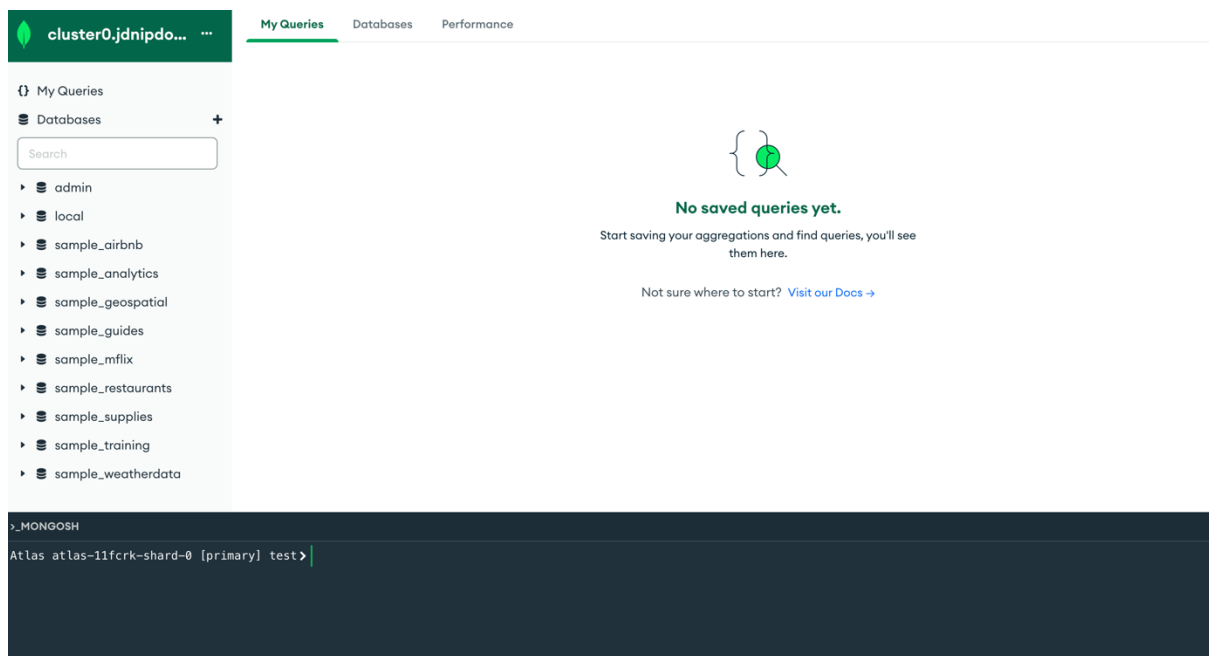


Click on some sample databases to see the data it contains. Date will be in the format of JSON, will talk about this format during the session.

Now we can use MongoDB SH (shell) from MongoDB Compass to do data fetching and modification to any databases there:



MongoDB SH is at the very bottom of the MongoDB Compass, you will need to drag up the window to reveal it more such as:



You should see a bigger black screen at the bottom now.

In MongoDB SH, write the command: **show dbs**

Hit enter.

You should see the list of databases:

The screenshot displays the MongoDB Atlas web interface. On the left sidebar, under 'Databases', a search bar is present, and a list of databases is shown: admin, local, oplog.rs, sample\_airbnb, sample\_analytics, sample\_geospatial, and sample\_guides. The main panel shows the 'sample\_mflix.movies' collection with tabs for Documents, Aggregations, Schema, Explain Plan, Indexes, and Validation. The 'Documents' tab is active, showing a filter bar and a query input field. Below the query field are buttons for 'ADD DATA' and 'EXPORT COLLECTION'. A document snippet is visible, showing fields like 'plot', 'genres', 'runtime', 'cast', 'num\_mflix\_comments', 'title', and 'fullplot'. At the bottom, a terminal window titled '>\_MONGOSH' shows the output of the 'show dbs' command, listing various databases and their sizes.

```
>_MONGOSH
> show dbs
< sample_airbnb      52.87 MiB
  sample_analytics    9.16 MiB
  sample_geospatial  1.67 MiB
  sample_guides       40.00 KiB
  sample_mflix        47.24 MiB
  sample_restaurants  6.65 MiB
  sample_supplies     1.13 MiB
  sample_training     51.01 MiB
  sample_weatherdata  3.30 MiB
  admin               336.00 KiB
  local               1.73 GiB
Atlas atlas-63gv0r-shard-0 [primary] test> show dbs
```

Write the command: **use sample\_mflix**

Hit enter.

Here you are telling Mongo Shell to use the database mflix that contains different tables with data regarding movies:

```
>_MONGOSH
sample_analytics      9.16 MiB
sample_geospatial    1.67 MiB
sample_guides         40.00 KiB
sample_mflix          47.24 MiB
sample_restaurants     6.65 MiB
sample_supplies        1.13 MiB
sample_training       51.01 MiB
sample_weatherdata     3.30 MiB
admin                 336.00 KiB
local                 1.73 GiB
> use sample_mflix
< 'switched to db sample_mflix'
Atlas atlas-63gv0r-shard-0 [primary] sample_mflix>
```

We will do data fetching during our next session using the MongoDB shell.