

## My Courses > M220JS



**Course Ends:** 59d:03hr:47m  
15 juin à 17:00 UTC

**Chapter Labs Due:** 59d:03hr:47m  
15 juin à 17:00 UTC

### Chapter 0: Introduction and...



LESSONS

HANDOUTS

#### Lessons

Lecture: Welcome To M220JS

Lecture: MongoDB URI

Quiz

Lecture: Setting Up Atlas

Lab (Ungraded): Create or Reuse  
Atlas Cluster

Lecture: OVERVIEW

Lecture: README: Setting Up  
mflix

Ticket: Connection

[Next Chapter](#)

[Report an issue](#)



[Course Overview](#)



[View Discussion](#)

## Chapter 0: Introduction and Setup

# Lab (Ungraded): Create or Reuse Atlas Cluster

### Problem:

### Reusing an Atlas Account

If you previously created an Atlas account, you can reuse it for this course.

Go ahead and create a new **Project**. We will be creating an Atlas free tier cluster (M0) in that project.

### Creating an Atlas Account

In this lab/lesson, you will create your own Atlas Sandbox Cluster that you will be using throughout this course for performing write operations.

We have already created an Atlas account for you using your MongoDB University credentials. Go ahead and click on this [link](#) and follow the instructions below for setting up your own Atlas cluster.

### Log into your Atlas Account

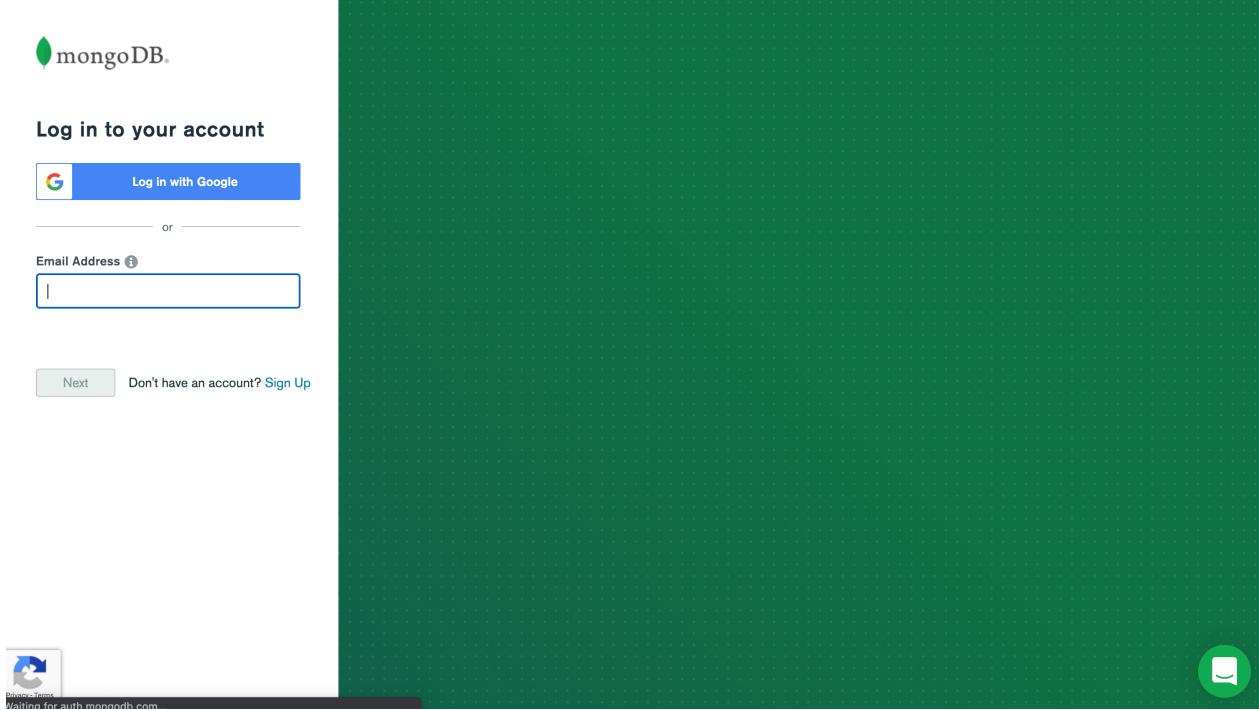
- Once you click on the link mentioned above, you will see this form for creating your own free account. You don't have to fill this form as your account already exists. Please click on Sign in at the bottom of the form.

The screenshot shows a landing page for MongoDB University with a "Get Started with MongoDB Atlas" section. To the right is a "Create your free account" form. The form fields are: Your Company (optional), Your Work Email, First Name, Last Name, and Password. Below the form is a checkbox for agreeing to terms and privacy policy, and a "Get started" button. At the bottom of the form, there is a link "Already have an account? [Sign in](#)".

- After clicking on Sign in, you will be taken to the Atlas Login page. Please wait for a

few seconds and you will be automatically logged into your Atlas account if you are logged into your MongoDB University account in a different tab / window.

If not, then please enter the email address and password that you used while logging into MongoDB University.



After getting logged into your Atlas account, you should be able to see this page if you have never created any organization in Atlas.

A screenshot of the MongoDB Organizations page. The top navigation bar includes "See Product Tour", "All Clusters", and a user dropdown for "Shubham". The left sidebar has sections for "PREFERENCES" (2FA, Personalization, Invitations), "Organizations" (selected), and "Public API Access". The main content area is titled "Organizations" and shows a grid icon with a plus sign. A message reads "You don't belong to any Organizations" with a subtext about creating one. A "Create an Organization" button is present. At the bottom, there's a link to "Learn more about what Organization can do in our docs. Organizations and Projects".

## Create an Atlas Organization

3. Now, we are going to create an Atlas Organization. Atlas provides a hierarchy based

on organizations and projects to facilitate the management of your Atlas clusters.

You can put multiple Projects under an Organization.

Click on **Create an Organization**:

The screenshot shows the 'Organizations' section of the MongoDB Atlas interface. On the left, there's a sidebar with 'PREFERENCES' and several tabs: '2FA', 'Personalization', 'Invitations', 'Organizations' (which is highlighted in green), and 'Public API Access'. The main area is titled 'Organizations' and features a large green button with a white plus sign and the text '+ Add Organization'. Below this, it says 'You don't belong to any Organizations' and provides instructions: 'To get started, create an Organization. Within an Organization you can create projects, invite users, and setup a billing account.' A red underline is under the 'Create an Organization' button. At the bottom, there's a link to 'Learn more about what Organization can do in our docs.' and a 'Feature Requests' button.

4. Enter the organization name as "MDBU" and click **Next**.

The screenshot shows the 'Create Organization' page. The left sidebar has the 'Organizations' tab selected. The main form starts with 'Name Your Organization' input field containing 'MDBU', which is underlined in red. Below it is a 'Select Cloud Service' section with two options: 'MongoDB Atlas' (selected with a radio button) and 'Cloud Manager'. A table compares features between the two:

Features	MongoDB Atlas	Cloud Manager
Automated database configuration	✓	✓
Continuous backup and point-in-time recovery	✓	✓
Queryable backup snapshots	✓	✓
Fine grained database monitoring & customizable alerts	✓	✓
Real-time performance panel	✓	✓
Data explorer	✓	✓

At the bottom left is a 'Feature Requests' button, and at the top right are 'See Product Tour', 'All Clusters', and 'Shubham' buttons.

5. Next click on **Create Organization**. You don't have to make any changes on this page.

The screenshot shows the 'Create Organization' step in the MongoDB Atlas interface. On the left, a sidebar lists 'PREFERENCES' (2FA, Personalization, Invitations, Organizations, Public API Access) with 'Organizations' selected. The main area has tabs for 'Name and Service' (selected) and 'Add Members'. A large input field for 'Invite new or existing users via email address...' is present. Below it, a dropdown menu shows 'Organization Owner' with a red box highlighting the dropdown arrow. At the bottom are 'Cancel', 'Go Back', and 'Create Organization' buttons.

#### Organization Permissions

**Organization Owner**  
Provides root access to the organization, including: Project Owner access to all projects; access to administer organization settings, users, and teams; access to delete the organization; and all permissions granted to the roles below.

**Organization Project Creator**  
Provides project creation access as well as permissions granted to the Organization Member role.

**Organization Billing Admin**  
Provides access to administer billing information for the organization as well as permissions granted to the Organization Member role.

**Organization Read Only**  
Provides read-only access to everything in the organization, including all projects in the organization.

Now, you have successfully created your Atlas organization. Next we will create a **Project** under this organization.

The screenshot shows the 'Projects' section in the MongoDB Atlas interface. The left sidebar has 'ORGANIZATION' selected, with 'Projects' highlighted. Other options include 'Alerts', 'Activity Feed', 'Settings', 'Access Manager', 'Billing', and 'Support'. The main area shows a search bar 'Find a project...' and a table with columns 'Project Name', 'Clusters', 'Users', 'Teams', 'Alerts', and 'Actions'. A green 'New Project' button is at the top right.

## Create an Atlas Project

6. Click on **New Projects** to create a new project.

The screenshot shows the 'Projects' section in the MongoDB Atlas interface. The left sidebar has 'ORGANIZATION' selected, with 'Projects' highlighted. Other options include 'Alerts', 'Activity Feed', 'Settings', 'Access Manager', 'Billing', and 'Support'. The main area shows a search bar 'Find a project...' and a table with columns 'Project Name', 'Clusters', 'Users', 'Teams', 'Alerts', and 'Actions'. A green 'New Project' button is at the top right.

7. Enter **M220** as the name of your project and click Next.

MDBU > PROJECTS

## Create a Project

Name Your Project: M220

Next

8. Then click on **Create Project**. You don't have to make any changes on this page.

MDBU > PROJECTS

## Create a Project

✓ Name Your Project: M220

Add Members and Set Permissions

Project Member Permissions

- Project Owner**: Has full administration access
- Project Cluster Manager**: Can update clusters
- Project Data Access Admin**: Can access and modify a cluster's data and indexes, and kill operations
- Project Data Access Read/Write**: Can access a cluster's data and indexes, and modify data
- Project Data Access Read Only**: Can access a cluster's data and indexes
- Project Read Only**: May only modify personal preferences

Cancel Go Back Create Project

Now, you have successfully created a project under the MDBU organization. Next, you will create your own Atlas cluster.

MDBU > PROJECTS

## Clusters

Find a cluster...

Build a Cluster

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

## Create your own Atlas Cluster

9. Click on **Build a Cluster** to build your first cluster.

The screenshot shows the MongoDB Atlas interface. The top navigation bar includes 'MDBU', 'Atlas' (which is highlighted with a red box), 'Realm', and 'Charts'. On the left, a sidebar under 'DATA STORAGE' has 'Clusters' selected (highlighted with a green box). Below the sidebar is a search bar with 'Find a cluster...'. In the center, there's a large 'Create a cluster' button with a database icon above it. Below the button, the text reads 'Choose your cloud provider, region, and specs.' and 'Once your cluster is up and running, live migrate an existing MongoDB database into Atlas with our [Live Migration Service](#).'. A small note at the bottom left says 'Available as a fully managed service across 60+ regions on AWS, Azure, and Google Cloud'.

10. Click on **Create a Cluster** for **Free** category.

The screenshot shows the 'Choose a path. Adjust anytime.' page. It features three main categories: 'Shared Clusters', 'Dedicated Clusters', and 'Dedicated Multi-Region Clusters'. Each category has a 'Create a cluster' button. A red arrow points to the 'Shared Clusters' section. The 'Shared Clusters' section includes a 'FREE' badge. The 'Dedicated Clusters' section starts at '\$0.08/hr\*' and the 'Dedicated Multi-Region Clusters' section starts at '\$0.13/hr\*'. Both dedicated sections include a note: '\*estimated cost \$56.94/month' and '\*estimated cost \$98.55/month' respectively.

11. After that, you would be able to see this page. At the bottom, click on **Cluster Name** and change it to **mflix** and then click on **Create Cluster**.

The screenshot shows the MongoDB Atlas cluster creation process across three pages. The first page is 'Cloud Provider & Region' with AWS selected. The second page is 'Cluster Tier' with M0 Sandbox selected. The third page is 'Cluster Name' where the user is typing 'mflix'. A red arrow points to the 'Cluster Name' input field.

**Cloud Provider & Region**

AWS, N. Virginia (us-east-1) ▾

**Cluster Tier**

M0 Sandbox (Shared RAM, 512 MB Storage) >  
Encrypted

**Additional Settings**

MongoDB 4.2, No Backup >

**Cluster Name**

Cluster0 >

**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

★ Recommended region ⓘ

**NORTH AMERICA**

■ N. Virginia (us-east-1) ★

■ Oregon (us-west-2) ★

**EUROPE**

■ Ireland (eu-west-1) ★

■ Frankfurt (eu-central-1) ★

**ASIA**

■ Singapore (ap-southeast-1) ★

■ Mumbai (ap-south-1)

**AUSTRALIA**

■ Sydney (ap-southeast-2) ★

**Cluster Tier**

M0 Sandbox (Shared RAM, 512 MB Storage) >  
Encrypted

**Additional Settings**

MongoDB 4.2, No Backup >

**Cluster Name**

mflix ▾

One time only: once your cluster is created, you won't be able to change its name.

mflix

Cluster names can only contain ASCII letters, numbers, and hyphens.

**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

Atlas will take 2-3 minutes to deploy your free tier cluster.

The screenshot shows the MongoDB Atlas Clusters page. A blue banner at the top states: "We are deploying your changes: 0 of 3 servers complete (current action: provisioning 3 servers)". Below this, the cluster details for "mflix" are shown: Version 4.2.8, M0 Sandbox (General) tier, AWS / N. Virginia (us-east-1) region, Replica Set - 3 nodes type, and None Linked linked realm app. A message on the right says "Your cluster is being created. New clusters take between 1-3 minutes to provision." A "Create a New Cluster" button is visible in the top right.

The screenshot shows the MongoDB Atlas Clusters page after the cluster has been created. The cluster details for "mflix" are identical to the previous screenshot. On the right, there are four metrics charts: "Operations R: 0 W: 0" (Last 6 Hours), "Logical Size 0.0 B" (Last 6 Hours), "Connections 0" (Last 6 Hours), and an "Enhance Your Experience" section with a "Upgrade" button. The "Logical Size" chart shows a maximum capacity of 512.0 MB.

Congratulations, now you have created your own Free Tier Atlas Cluster. Next we will configure the settings of this atlas cluster to whitelist your IP and to create your first user.

## Enable Cluster Access

12. First, configure the security settings of this cluster, by enabling the IP Whitelist:

Update your IP Whitelist so that your app can talk to the cluster. Click on the "Network Access" tab and then click on "Add IP Address".

**Network Access**

**IP Whitelist**

Whitelist an IP address  
Configure which IP addresses can access your cluster.

Add IP Address

Learn more

13. A new prompt will appear on the screen asking to "Add Whitelist Entry". Click on "Allow Access from Anywhere" and then click "Confirm".

Add IP Whitelist Entry

Atlas only allows client connections to a cluster from entries in the project's whitelist. Each entry should either be a single IP address or a CIDR-notated range of addresses. [Learn more](#).

ADD CURRENT IP ADDRESS **ALLOW ACCESS FROM ANYWHERE**

Whitelist Entry: 0.0.0.0

Comment: Optional comment describing this entry

This entry is temporary and will be deleted in 6 hours

Cancel **Confirm**

Whitelist an IP address  
Configure which IP addresses can access your cluster.

Add IP Address

Learn more

*Note that we do not generally recommend opening an Atlas cluster to allow access from anywhere. We are doing that for this class to minimize network issues that you might run into and to be able to provide you better support.*

14. Then, create the application MongoDB database user required for this course.

Click on "Database Access" tab and then click on "Add New Database User".

**Database Access**

**Database Users** **Custom Roles**

**Create a Database User**

Set up database users, permissions, and authentication credentials in order to connect to your clusters.

**Add New Database User**

[Learn more](#)

Create a user with the following credentials:

- username: **m220student**
- password: **m220password**

Give this user the privilege to **Read and write to any database**:

**Authentication Method**

**Password** **Certificate** (M10 and up) **AWS IAM** (MongoDB 4.4, M10 and up)

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

**Password Authentication**

m220student  
m220password [HIDE](#)

[Autogenerate Secure Password](#) [Copy](#)

**Database User Privileges**

Select a [built-in role or privileges](#) for this user.

**Read and write to any database**

**Temporary User**

This user is temporary and will be deleted after your specified duration of 6 hours, 1 day, or 1 week.

OFF

**Add User**

The screenshot shows the MongoDB Atlas Database Access interface. On the left, there's a sidebar with sections like DATA STORAGE, SECURITY, and Database Access (which is highlighted). The main area is titled "Database Access" and has tabs for "Database Users" (selected) and "Custom Roles". A message at the top says "We are deploying your changes (current action: configuring MongoDB)". Below that, it shows a table with one row:

User Name	Authentication Method	MongoDB Roles	Actions
m220student	SCRAM	readWriteAnyDatabase@admin	<button>EDIT</button> <button>DELETE</button>

## 15. Load Sample Dataset

Click on three dots adjacent to Collections, it will give you the option to *Load Sample Dataset*. This will load the Atlas sample dataset, containing the sample\_mflix database, into your cluster:

# Clusters

Find a cluster...

**SANDBOX**

● **mflix**  
Version 4.2.2

**CONNECT** **METRICS** **COLLECTIONS** **...**

**CLUSTER TIER**  
M0 Sandbox (General)

**REGION**  
AWS / N. Virginia (us-east-1)

**TYPE**  
Replica Set - 3 nodes

**LINKED STITCH APP**  
None Linked

Operations R:

⋮

Last 6 Hours

[Edit Configuration](#)  
[Command Line Tools](#)  
[Load Sample Dataset](#)  
[Terminate](#)

If you **cannot** use the Atlas cluster, you can load the dataset using `mongorestore` mentioned in the previous lecture.

Do you have an Atlas cluster ready for M220?

**Attempts Remaining:** ∞ Unlimited Attempts

**Choose the best answer:**

- Yep, I'm ready to start using my cluster!

Submit

[Proceed to next section](#)