Chapter 2: The MongoDB Query Language + Atlas

Lab 2.0: Create an Atlas Sandbox Cluster

Problem:

In this lab you will have to complete two different tasks:

- Create an Atlas Account
- Create Atlas Sandbox Cluster

Creating a new MongoDB Atlas Account:

If you do not have an existing Atlas account, go ahead and create an Atlas Account by filling in the required fields.

Creating an Atlas Sandbox Cluster:

1. After creating a new account, you will be prompted to create your first cluster:
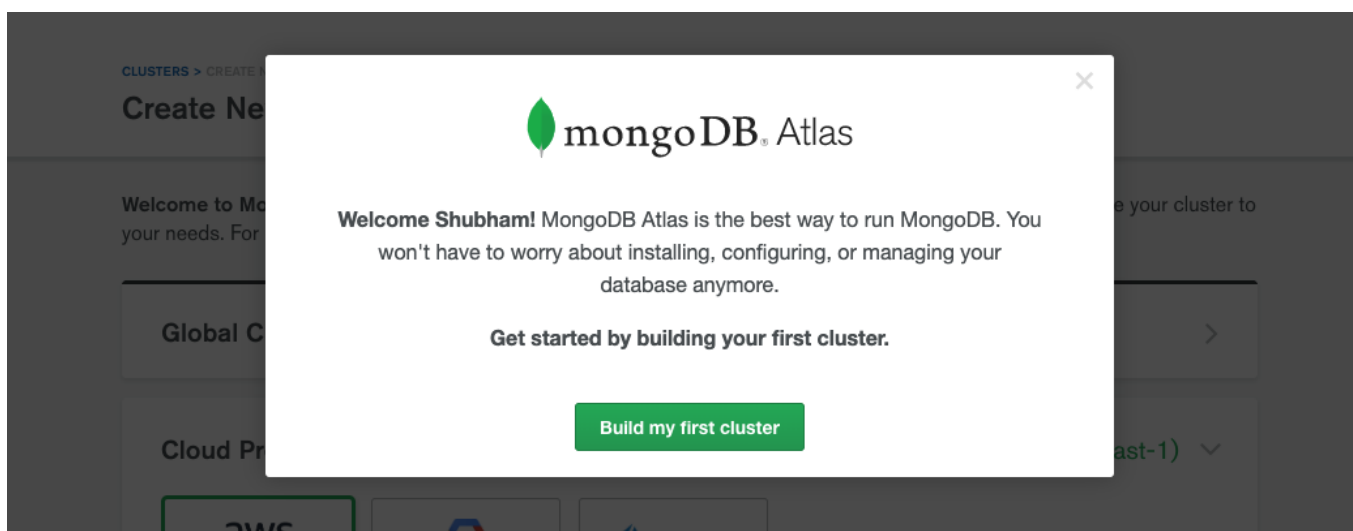
2. You will now choose a cloud provider for your cluster.

   Select AWS as the cloud provider and for the `Region` select the location closest to you that has the label `Free Tier Available:` Please note the default location is `N.Virginia (us-east-1) Free Tier Available`

Cloud Provider & Region

AWS, N. Virginia (us-east-1)

aws | Google Cloud Platform | Azure

Create a **free tier cluster** by selecting a region with `FREE TIER AVAILABLE` and choosing the **M0** cluster tier below.

★ recommended region ⓘ

NORTH AMERICA	EUROPE	AUSTRALIA
🇺🇸 N. Virginia (us-east-1) ★ `FREE TIER AVAILABLE`	🇮🇪 Ireland (eu-west-1) ★	🇦🇺 Sydney (ap-southeast-2) ★
🇺🇸 Ohio (us-east-2) ★	🇬🇧 London (eu-west-2) ★	ASIA
🇺🇸 N. California (us-west-1)	🇫🇷 Paris (eu-west-3) ★	🇯🇵 Tokyo (ap-northeast-1) ★
🇺🇸 Oregon (us-west-2) ★	🇩🇪 Frankfurt (eu-central-1) ★ `FREE TIER AVAILABLE`	🇰🇷 Seoul (ap-northeast-2)
🇨🇦 Montreal (ca-central-1)	SOUTH AMERICA	🇸🇬 Singapore (ap-southeast-1) ★ `FREE TIER AVAILABLE`
	🇧🇷 Sao Paulo (sa-east-1)	🇮🇳 Mumbai (ap-south-1) `FREE TIER AVAILABLE`

3. Select Cluster Tier `M0 Sandbox`:

Cluster Tier

M0 Sandbox (Shared RAM, 512 MB Storage)
Encrypted

Base hourly rate is for a MongoDB replica set with **3 data bearing servers**.

Shared Clusters for development environments and low-traffic applications

Tier	RAM	Storage	vCPU	Base Price
✓ M0 Sandbox	Shared	512 MB	Shared	Free forever

M0 clusters are best for getting started, and are not suitable for production environments.

100 max connections | Low network performance | 100 max databases | 500 max collections

4. Click on *Cluster Name*, enter "Sandbox" in the corresponding textbox, and click "Create Cluster":

Create New Cluster

Welcome to MongoDB Atlas! We've recommended some of our most popular options, but feel free to customize your cluster to your needs. For more information, check our documentation.

Global Cluster Configuration	>
Cloud Provider & Region	AWS, Singapore (ap-southeast-1) >
Cluster Tier	M0 Sandbox (Shared RAM, 512 MB Storage) > Encrypted
Additional Settings	MongoDB 4.0, No Backup >

Cluster Name — Sandbox ⌄

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

```
Sandbox
```
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.*   Cancel   **Create Cluster**

5. After creating the cluster, you will be redirected to the account dashboard:

mongoDB. Atlas   All Clusters

⚠ Please set your time zone   Usage This Month:$0.00 details   Shubham ⌄

CONTEXT
Project 0 ▾

ATLAS
Clusters
Data Lake BETA

SECURITY
Database Access
Network Access
Advanced

PROJECT
Access Management
Activity Feed
Alerts ⓪
Settings

SERVICES
Charts
Stitch
Triggers

HELP
Docs
Support ●

MONGODB > PROJECT 0

Clusters

Build a New Cluster

🔍 Find a cluster...

SANDBOX

● Sandbox
Version 4.0.12

CONNECT   METRICS   COLLECTIONS   ⋯

CLUSTER TIER
M0 Sandbox (General)

REGION
AWS / Singapore (ap-southeast-1)

TYPE
Replica Set - 3 nodes

LINKED STITCH APP
None Linked

Operations R: 0 W: 0   100.0/s
                                                    ●0
Last 6 Hours

Connections   0   100 max
                                                    ●0
Last 6 Hours

Logical Size   0.0 B   512.0 MB max
                                                    ●0.0 B
Last 6 Hours

Enhance Your Experience
For dedicated throughput, richer metrics and enterprise security options, upgrade your cluster now!

Upgrade

Go to the `Settings` option and change the project name to "M001":

6. Next, 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 "Network Access" tab and then click on "Add IP Address".

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

Add Whitelist Entry

Add a whitelist entry using either CIDR notation or a single IP address. Learn more.

| ADD CURRENT IP ADDRESS | ALLOW ACCESS FROM ANYWHERE |

Whitelist Entry:

0.0.0.0/0

Comment:

Optional comment describing this entry

☐ Save as temporary whitelist

Cancel   Confirm

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

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

Click on the "Database Access" tab and then click on "ADD NEW USER".

Create a user with the following credentials:

- username: **m001-student**
- password: **m001-mongodb-basics**

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

Add New User

SCRAM Authentication

SCRAM is MongoDB's default authentication method.

m001-student

e.g. new-user_31

m001-mongodb-basics   HIDE

🔑 Autogenerate Secure Password

User Privileges

| Atlas admin | Read and write to any database | Only read any database | Select Custom Role ⬍ |

Add Default Privileges

☐ Save as temporary user   Cancel   Add User

Congratulations on creating your first Atlas application! You now have a MongoDB database that you can access from anywhere in the world. Next, we will populate it with data to analyze and manipulate in the upcoming labs.

I have created the Atlas Sandbox Cluster.

Attempts Remaining: Correct Answer ✅ ⚪ ⚪

Check all answers that apply:

☑ Yes

See detailed answer

Proceed to next section

Assignment is Due

15d:03hr:48m
Dec 10, 17:00 UTC

Your Grade

PASS/FAIL
Submitted