

NOSQL DATABASE

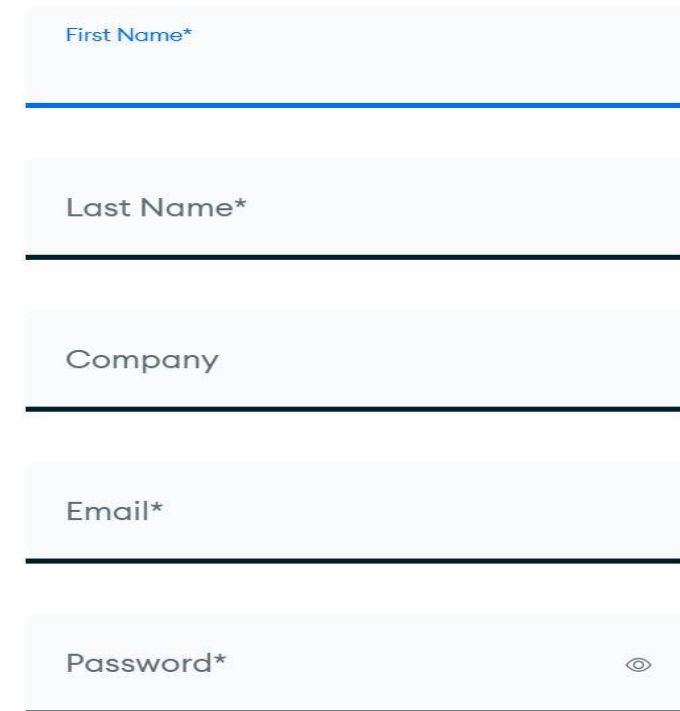
MONGODB DAY 4

Lecture 4 Agenda

- Objective :
 - Cloud Database Using Mongo Atlas

Mongo Atlas – Registration

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



The screenshot shows the registration form for MongoDB Atlas. It consists of five input fields stacked vertically: 'First Name*' with a blue border, 'Last Name*' with a dark border, 'Company' with a dark border, 'Email*' with a dark border, and 'Password*' with a dark border and an eye icon for toggling visibility. Below the fields is a checkbox for agreeing to the Terms of Service and Privacy Policy. The form is set against a white background with a light gray border.

First Name*

Last Name*

Company

Email*

Password*

☐ I agree to the **Terms of Service** and **Privacy Policy**.

Activate Windows
Go to Settings to activate Windows.

Mongo Atlas – Create Account



Deploy your database

Use a template below or set up [advanced configuration options](#). You can also edit these configuration options once the cluster is created.

M10**\$0.08/hour**

For production applications with sophisticated workload requirements.

STORAGE	RAM	vCPU
10 GB	2 GB	2 vCPUs

ACCESS ADVANCED FEATURES

SERVERLESS**\$0.10/1M reads**

For application development and testing, or workloads with variable traffic.
[View pricing details](#)

STORAGE	RAM	vCPU
Up to 1 TB	Auto-scale	Auto-scale

MINIMAL MANAGEMENT

M0**FREE**

For learning and exploring MongoDB in a cloud environment.

STORAGE	RAM	vCPU
512 MB	Shared	Shared

ACCESS BASIC FEATURES

\$0.08/hour

Create

[Access Advanced Configuration](#)

Pay-as-you-go! You will be billed hourly and can terminate your cluster anytime. Excludes variable [data transfer](#), [backup](#), and taxes.

[I'll deploy my database later](#)

Activate Windows
Go to Settings to activate Windows.

Mongo Atlas - Create User

Your first user will have permission to read and write any data in your project.

Username and Password

Certificate



We autogenerated a username and password for your first database user in this project using your MongoDB Cloud registration information.



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

mibrahimelsalamony

Password




Autogenerate Secure Password



Copy


Create User

Mongo Atlas – Deploy Environment & Allowed IPs [Network Access]



My Local Environment

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



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.

ADVANCED

i We added your current IP address. You can connect to your cluster locally from this device. **x**

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. You can manage existing IP entries via the [Network Access Page](#).

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"/>		

IP Access List	Description	
45.240.162.26/32	My IP Address	<input type="button" value="EDIT"/> <input type="button" value="REMOVE"/>

Mongo Atlas - Cluster

[CLUSTERS](#) > CREATE A SHARED CLUSTER

Create a Shared Cluster

Serverless

Dedicated

Shared

For learning and exploring MongoDB in a sandbox environment. Basic configuration controls.

No credit card required to start. Upgrade to dedicated clusters for full functionality. Explore with sample datasets. Limit of one free cluster per project.

Cloud Provider & Region

AWS, Bahrain (me-south-1)

aws

Google Cloud

Azure

★ Recommended region ⓘ

🏷️ Dedicated tier region ⓘ

NORTH AMERICA

EUROPE

AUSTRALIA

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

Mongo Atlas - Connect

Database Deployments

Edit Config

+ Create

Cluster0

Connect

View Monitoring

Browse Collections

...

FREE

SHARED

Visualize Your Data

Build dashboards and charts, and embed them in your apps with MongoDB Charts.

Dismiss

Explore Charts

R 0

W 0

Last 22 minutes

100.0/s

Connections 0

Last 27 minutes

1.0

In 5.5 B/s

Out 11.4 B/s

Last 22 minutes

56.5 B/s

Data Size

0.0 B / 512.0 MB (0%)

Last 27 minutes

512.0 MB

VERSION	REGION	CLUSTER TIER	TYPE	BACKUPS	LINKED APP SERVICES	ATLAS SQL	ATLAS SEARCH
6.0.9	AWS / N. Virginia (us-east-1)	M0 Sandbox (General)	Replica Set - 3 nodes	Inactive	None Linked	Connect	Create Index

Mongo Atlas - Connect

Connect to Cluster0

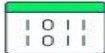
✓

2

3

Set up connection securityChoose a connection methodConnect


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

>

Mongo Atlas - Connect

Connect to Cluster0

✓

Set up connection security

✓

Choose a connection method

3

Connect

Connecting with MongoDB Compass

I don't have MongoDB Compass installed

I have MongoDB Compass installed

1. Choose your version of Compass

1.12 or later

See your Compass version in "About Compass"

2. Copy the connection string, then open MongoDB Compass

mongodb+srv://mibrahimelsalamony:<password>@cluster0.uyyxljg.mongodb.net/

Replace **<password>** with the password for the **mibrahimelsalamony** user.
When entering your password, make sure that any special characters are [URL encoded](#).

RESOURCES

[Connect with Compass](#)[Access your Database Users](#)

[Import and Export Data](#)[Troubleshoot Connections](#)

Go Back

Close

Mongo Atlas - Connect

The screenshot shows the MongoDB Compass interface. On the left, the 'Connect' menu is visible. The main panel displays the 'New Connection' dialog. The 'URI' field contains the connection string: `mongodb+srv://mibrahimelsalamony:*****@cluster0.uyyxljg.mongodb.net/`. The 'Authentication Method' is set to 'Username/Password'. The 'Username' field contains 'mibrahimelsalamony' and the 'Password' field is masked with dots. The 'Connect' button is highlighted. The 'Save & Connect' button is also visible. The 'Advanced Connection Options' tab is selected, showing 'General', 'Authentication', 'TLS/SSL', 'Proxy/SSH', 'In-Use Encryption', and 'Advanced' sub-tabs. The 'Authentication Method' sub-tab is active, showing options: 'None', 'Username/Password', 'OIDC (Preview)', 'X.509', 'Kerberos', 'LDAP', and 'AWS IAM'. The 'Username/Password' option is selected. The 'Save' button is at the bottom left. The 'Connect' button is at the bottom right. The 'Save & Connect' button is also at the bottom right. The 'Favorite' icon is at the top right. The 'Edit Connection String' toggle is at the top right. The 'New connection +' button is in the left sidebar. The 'Saved connections' and 'Recents' lists are also visible in the sidebar.

MongoDB Compass

Connect Edit View Help

Compass

New connection +

Saved connections

Recents

- localhost:27017
Aug 7, 2023, 1:04 PM
- localhost:27017
Aug 1, 2023, 10:22 AM
- localhost:27017
Feb 7, 2023, 11:33 AM
- localhost:27017
Feb 7, 2023, 10:33 AM
- localhost:27017
Feb 7, 2023, 9:07 AM
- localhost:27017
Feb 5, 2023, 1:05 PM
- localhost:27017
Feb 5, 2023, 11:18 AM
- localhost:27017
Feb 4, 2023, 11:22 PM
- localhost:27017
Feb 4, 2023, 3:30 PM
- localhost:27017
Jan 19, 2023, 1:02 PM

New Connection

Connect to a MongoDB deployment

FAVORITE

URI ⓘ Edit Connection String ☒

mongodb+srv://mibrahimelsalamony:*****@cluster0.uyyxljg.mongodb.net/

Advanced Connection Options

General Authentication TLS/SSL Proxy/SSH In-Use Encryption Advanced

Authentication Method

None Username/Password OIDC (Preview) X.509 Kerberos LDAP AWS IAM

Username

mibrahimelsalamony

Password

.....

Save Save & Connect Connect

Mongo Atlas – Create Database

Project 0

Data Services App Services Charts

Overview

DEPLOYMENT

Database

Data Lake

SERVICES

Device Sync

Triggers

Data API

Data Federation

Search

Stream Processing

SECURITY

Backup

Database Access

Network Access

Advanced

AHBS > PROJECT 0 > DATABASES

Cluster0

VERSION 6.0.9 REGION AWS N. Virginia (us-east-1)

Overview Real Time Metrics Collections Search Profiler Performance Advisor Online Archive Cmd Line Tools

DATABASES: 10 COLLECTIONS: 24

+ Create Database

Search Namespaces

Clinics

Physician

sample_airbnb

sample_analytics

sample_geospatial

sample_guides

sample_mflix

sample_restaurants

Clinics.Physician

STORAGE SIZE: 36KB LOGICAL DATA SIZE: 191B TOTAL DOCUMENTS: 6 INDEXES TOTAL SIZE: 36KB

Find Indexes Schema Anti-Patterns 0 Aggregation Search Indexes

INSERT DOCUMENT

Filter Type a query: { field: 'value' } Reset Apply More Options

QUERY RESULTS: 1-6 OF 6

_id: ObjectId('64f20277e873bc8313ca664d')

_id: "1,"

Questions ?



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