

# Installation

## Local devices

### Install on Ubuntu

<https://www.mongodb.com/docs/manual/tutorial/install-mongodb-on-ubuntu/>

### Install on Windows

<https://www.mongodb.com/docs/manual/tutorial/install-mongodb-on-windows/>

### Install on MacOS

<https://www.mongodb.com/docs/manual/tutorial/install-mongodb-on-os-x/>

## On Cloud Cluster

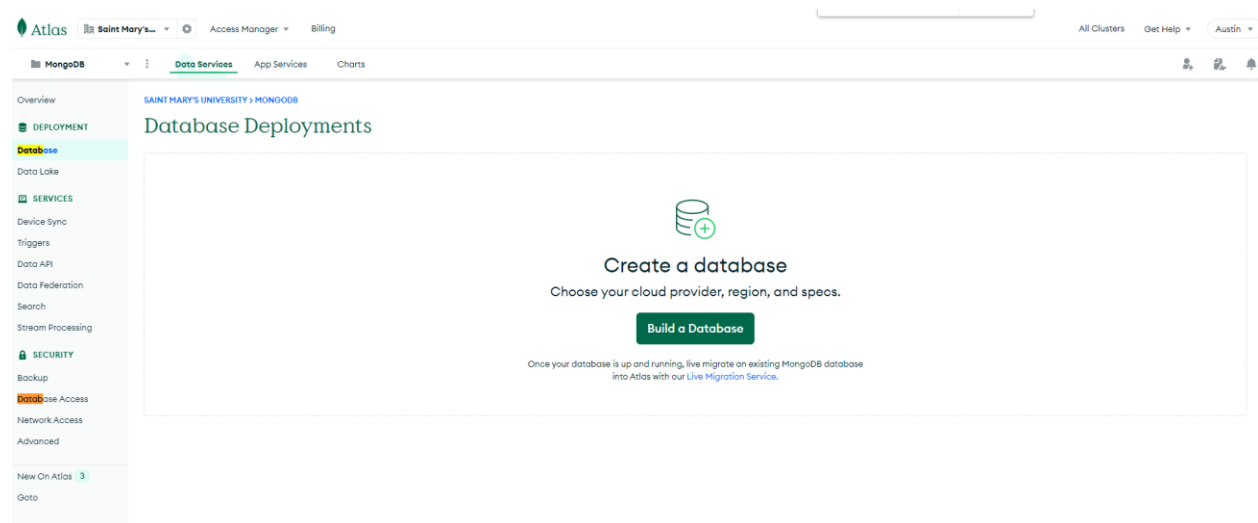
### Sign up

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

## Create a Cluster

A database cluster is a collection of databases that is managed by a single instance of a running database server.

<https://www.mongodb.com/docs/atlas/tutorial/create-new-cluster/>



Choose Shared, AWS, N. Virginia (Default)



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

**SERVERLESS**

\$0.10/1M reads

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

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

**M0**

FREE

For learning and exploring MongoDB in a cloud environment.

STORAGE	RAM	vCPU
512 MB	Shared	Shared

Provider

Region

**N. Virginia (us-east-1)**

★ Recommended ⓘ Low carbon emissions ⓘ

Name

You cannot change the name once the cluster is created.

DemoCluster

Tag (optional)

Create your first tag to categorize and label your resources; more tags can be added later. [Learn more.](#)

Select or enter key : Select or enter value

## Or select “advanced configuration options”

[CLUSTERS](#) > [CREATE A SHARED CLUSTER](#)

### Create a Shared 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](#).

Serverless

Dedicated

**FREE 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, N. Virginia (us-east-1)

★ Recommended region ⓘ CD Dedicated tier region ⓘ CD Carbon data currently unavailable ⓘ

**NORTH AMERICA**

Oregon (us-west-2) ★

N. Virginia (us-east-1) ★

Ohio (us-east-2) ★ CD

N. California (us-west-1) CD

Montreal (ca-central-1) ★ CD

**SOUTH AMERICA**

Sao Paulo (sa-east-1) ★

**EUROPE**

Paris (eu-west-3) ★

Stockholm (eu-north-1) ★

Ireland (eu-west-1) ★

Frankfurt (eu-central-1)

London (eu-west-2) ★ CD

Zurich (eu-central-2) ★ CD

Milan (eu-south-1) ★ CD

Spain (eu-south-2) ★ CD

**MIDDLE EAST**

Bahrain (me-south-1) ★

UAE (me-central-1) ★ CD

Hyderabad (ap-south-2) ★ CD

**AUSTRALIA**

Sydney (ap-southeast-2) ★

Melbourne (ap-southeast-4) ★ CD

**ASIA**

Mumbai (ap-south-1) ★

Seoul (ap-northeast-2) ★

Singapore (ap-southeast-1) ★

Hong Kong (ap-east-1) ★

Tokyo (ap-northeast-1) ★

Jakarta (ap-southeast-3) ★ CD

Osaka (ap-northeast-3) ★ CD

**AFRICA**

Cape Town (af-south-1) ★

#### Cluster Tier

M0 Sandbox (Shared RAM, 512 MB Storage)  
Encrypted

Hourly price is for a MongoDB replica set with 3 data bearing servers.

Shared Clusters for development environments and low-traffic applications

Tier	RAM	Storage	VCPU	Price
M0 Sandbox	Shared	512 MB	Shared	Free forever
M0 clusters are best for getting started, and are not suitable for production environments.				
500 max connections   Low network performance   100 max databases   500 max collections				
M2	Shared	2 GB	Shared	<a href="#">\$1 / month</a>
M5	Shared	5 GB	Shared	<a href="#">\$15 / month</a>

#### Additional Settings

MongoDB 6.0, No Backup

Turn on Backup (M2 and up) ☐

[See Backup Solutions for Paid Clusters \(M2+\)](#)

Termination Protection ☐

When enabled, prevent any user from accidentally deleting this cluster. Termination protection will need to be disabled before this cluster can be deleted.

[Learn more.](#)

#### Cluster Details

DemoCluster

##### Cluster Name

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

DemoCluster

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

##### Apply Tags to Cluster NEW

Use tags to efficiently label and categorize your clusters. [Learn more.](#)

Key	Value	Actions
<input type="text" value="Select a key or enter your own"/>	<input type="text" value="Select a value or enter your own"/>	
<a href="#">+ Add tag</a>		
1 TAG		

## Setup Admin User and Password

# Security Quickstart

To access data stored in Atlas, you'll need to create users and set up network security controls. [Learn more about security setup](#)

### 1 How would you like to authenticate your connection?

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

**Username and Password**


**Certificate**

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


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**

smucisyadmin

**Password** 

UltraStrongPassword

 Autogenerate Secure Password

 Copy


**Create User**

## Setup Database General User and Password


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. You can manage existing users via the [Database Access Page](#).

**Username**

smucisyuser

**Password** 

oLvWu31T0xG4FngN

 Autogenerate Secure Password

 Copy


Create User


**Username**

**Authentication Type**

smucisyadmin

Password


 EDIT

 REMOVE

Setup IP Access List

✔ 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.

*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

0.0.0.0/0

All Network







Add My Current IP Address

Add Entry

IP Access List	Description	
134.41.53.63/32	My IP Address	<div><div>EDIT</div><div>REMOVE</div></div>
0.0.0.0/0	All Network	<div><div>EDIT</div><div>REMOVE</div></div>

# Database access level setup

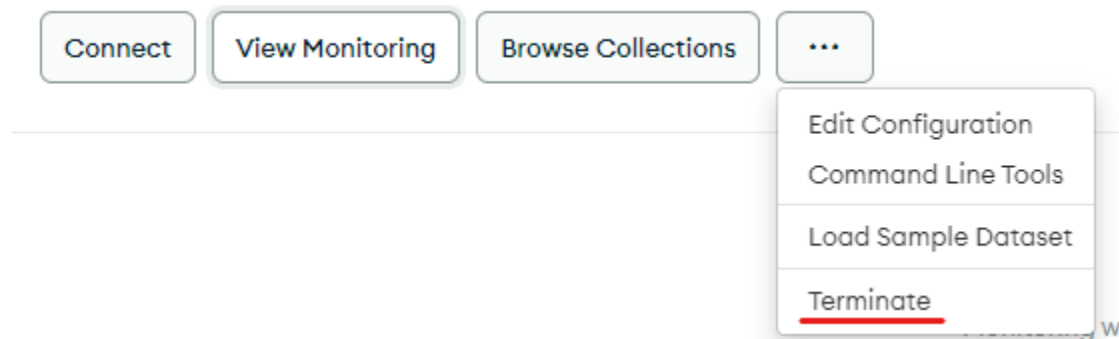
## Database Access

Database Users				
Custom Roles				
+ ADD NEW DATABASE USER				
User Name	Authentication Method	MongoDB Roles	Resources	Actions
 smucisadmin	SCRAM	atlasAdmin@admin	All Resources	 EDIT  DELETE
 smucisuser	SCRAM	readAnyDatabase@admin	All Resources	 EDIT  DELETE

## How to Use Python with MongoDB

<https://www.mongodb.com/languages/python>

## Database Termination



## Airbnb Sample Data

<http://insideairbnb.com/get-the-data/>

## Git Hub repo link

<https://github.com/HalifaxDing/MongoDB>