Introduction to

Hands-On Workshop

Lab 1 - Atlas

Overview

In this lab, you will deploy a MongoDB cluster using **MongoDB Atlas** - MongoDB's cloud-based database-as-a-service.

Prerequisites

To successfully complete this workshop:

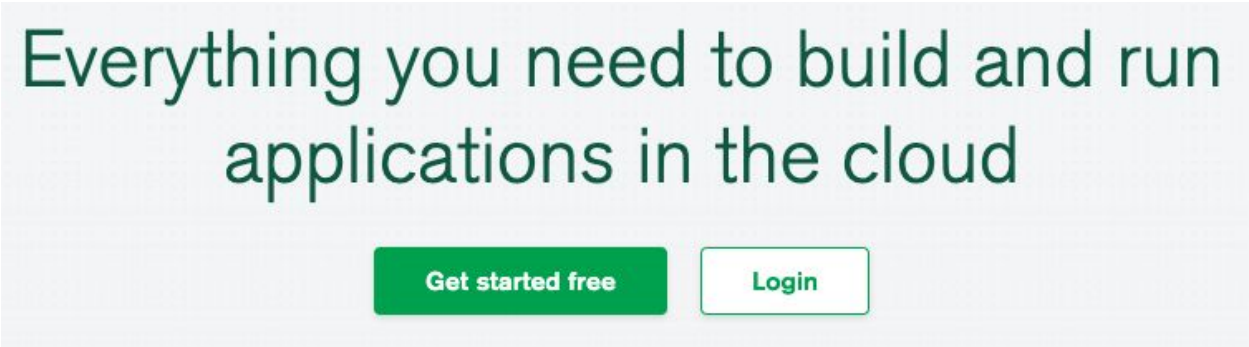
- You must be able to make outgoing requests from your computer to MongoDB Atlas servers which will be running on port 27017. Please confirm that port 27017 is not blocked by your network by clicking http://portquiz.net:27017. If successful, you will see a page load that indicates you can make outgoing requests on port 27017.
- Privileges to install software on your computer. We will be installing MongoDB Compass in this workshop.

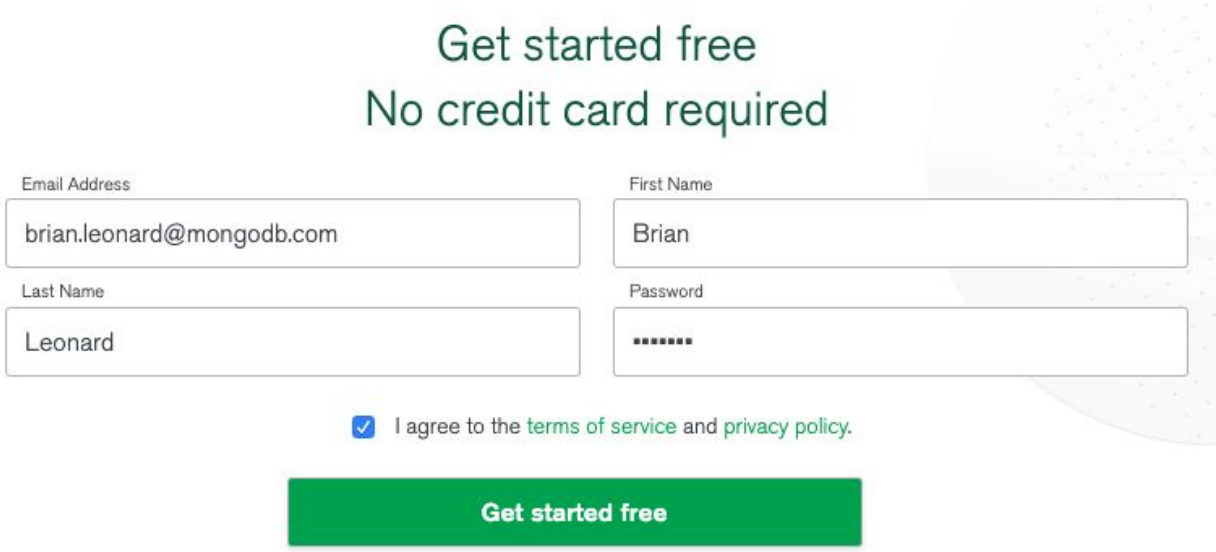
Hands-On Exercises

Exercise 1 - Create the Cluster

Create an Account or Log In to Atas

We'll be using MongoDB Atlas, our fully managed MongoDB-as-a-service, for this workshop. Go to https://cloud.mongodb.com and either create a new account or log into an existing account you may have previously created.

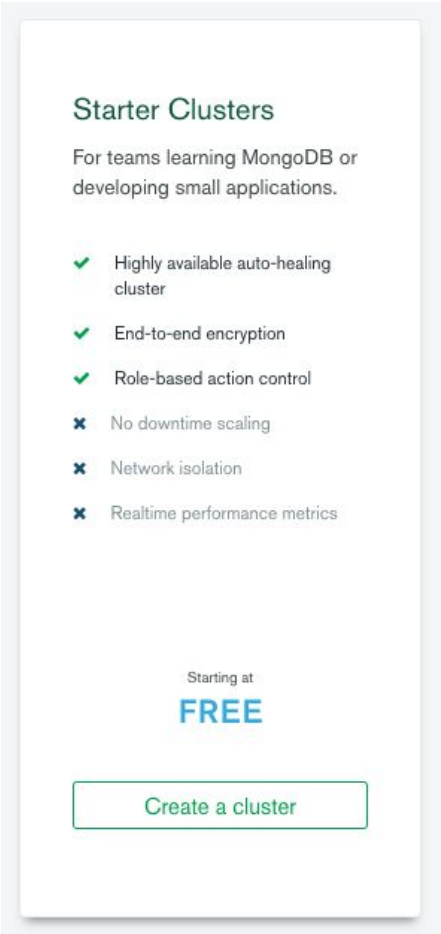




Create a Free Tier Cluster

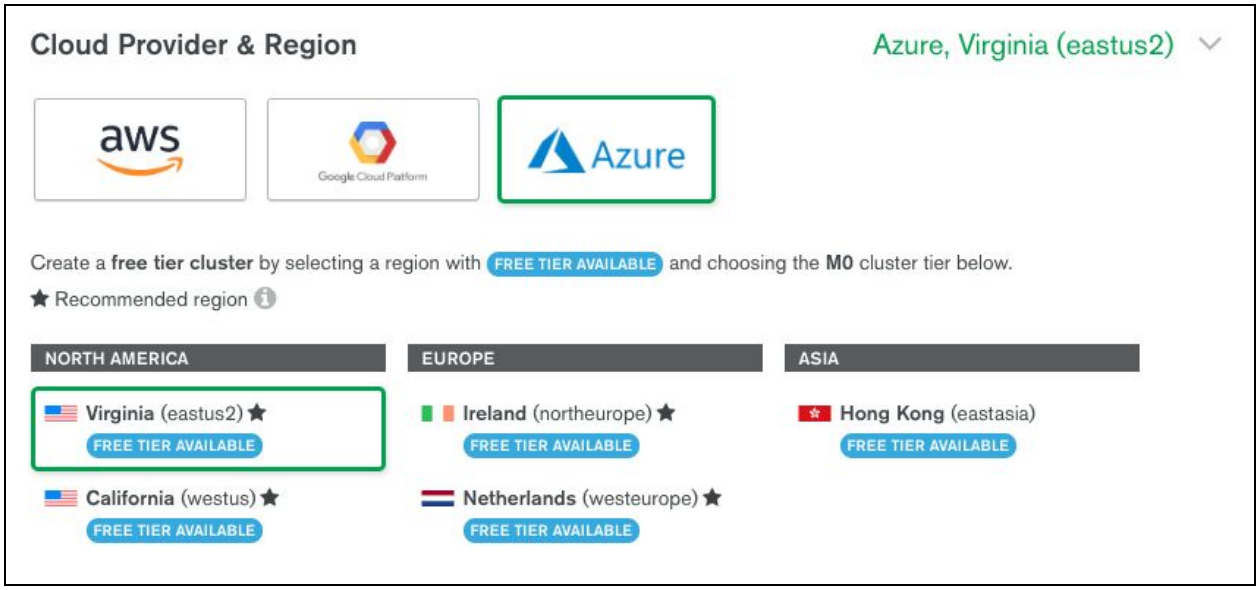
In the opening welcome screen, you will see three separate panels for Starter Clusters, Single-Region Clusters, and Multi-Region Clusters, as well as an option on the bottom-right for “Advanced Configuration Items”. Each of these panels leads to a different set of pre-selected options appropriate for the desired cluster type.

For this workshop, we will be using the free option. In the panel titled “Starter Clusters”, Click **Create a Cluster**.

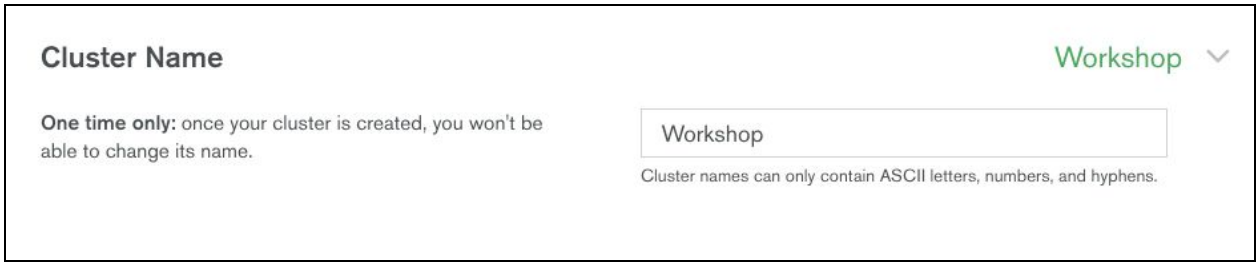


Take a moment to browse the available options (Cloud Provider & Region, Cluster Tier, Additional Settings). Note that this is a restricted set of options, based on our selection of the Free cluster tier.

Return to the Cloud Provider & Region and select your preferred cloud provider (AWS, Google Cloud Platform or Azure). Within your desired provider, select the region closest to you that has a FREE TIER AVAILABLE



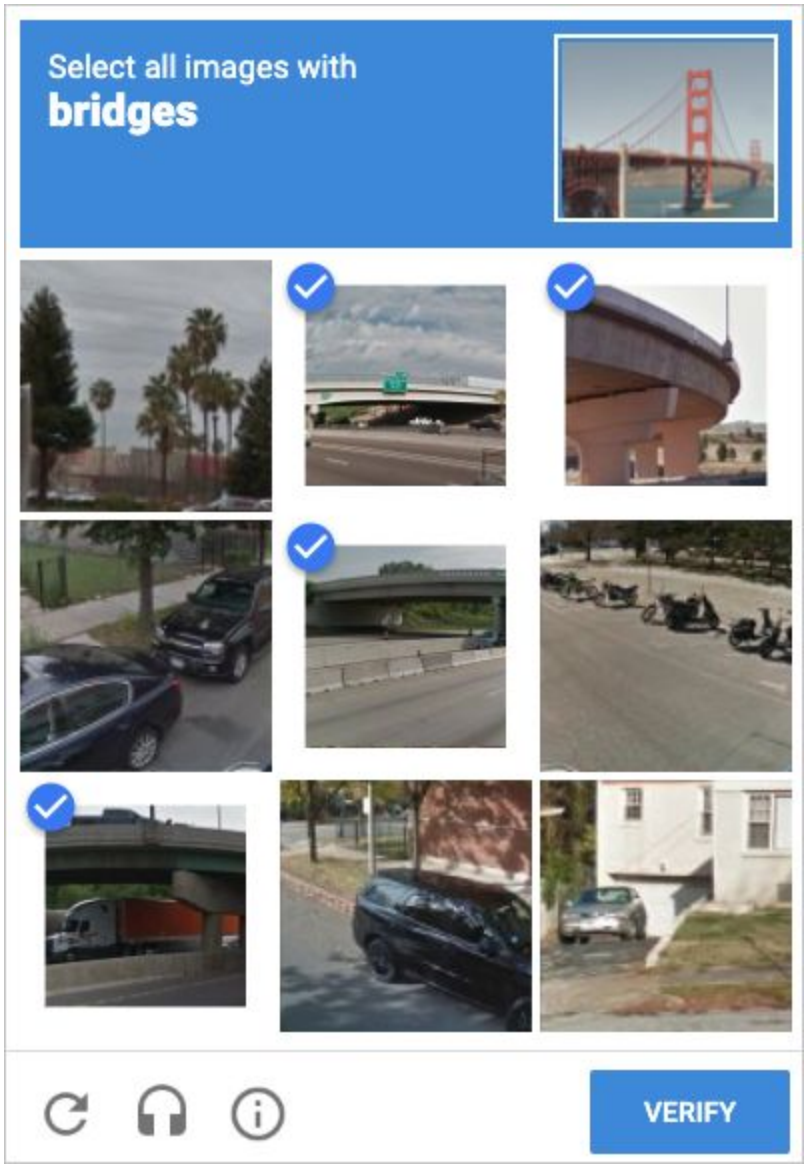
and set the Cluster Name to **Workshop**:



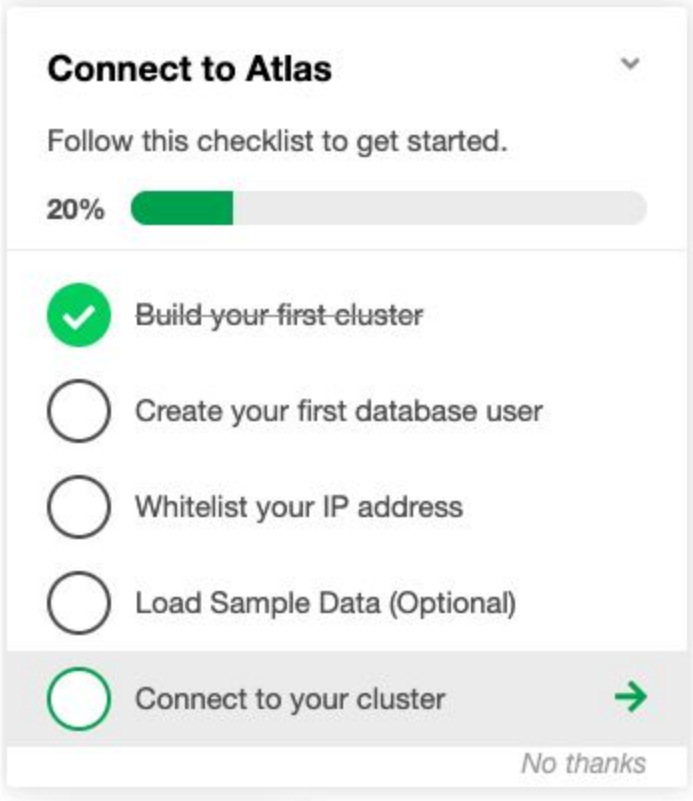
The remaining defaults will suffice.

Click **Create Cluster**:

At some point along the way you may be presented with a reCAPTCHA to ensure you're not a bot:



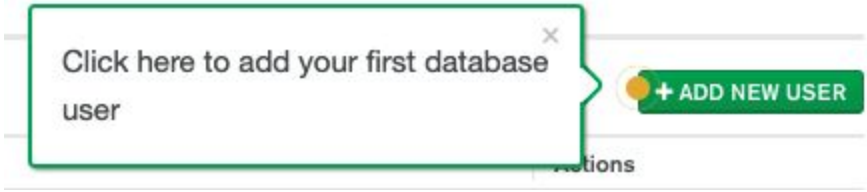
While the cluster is provisioning, let's work through the remaining getting started items:



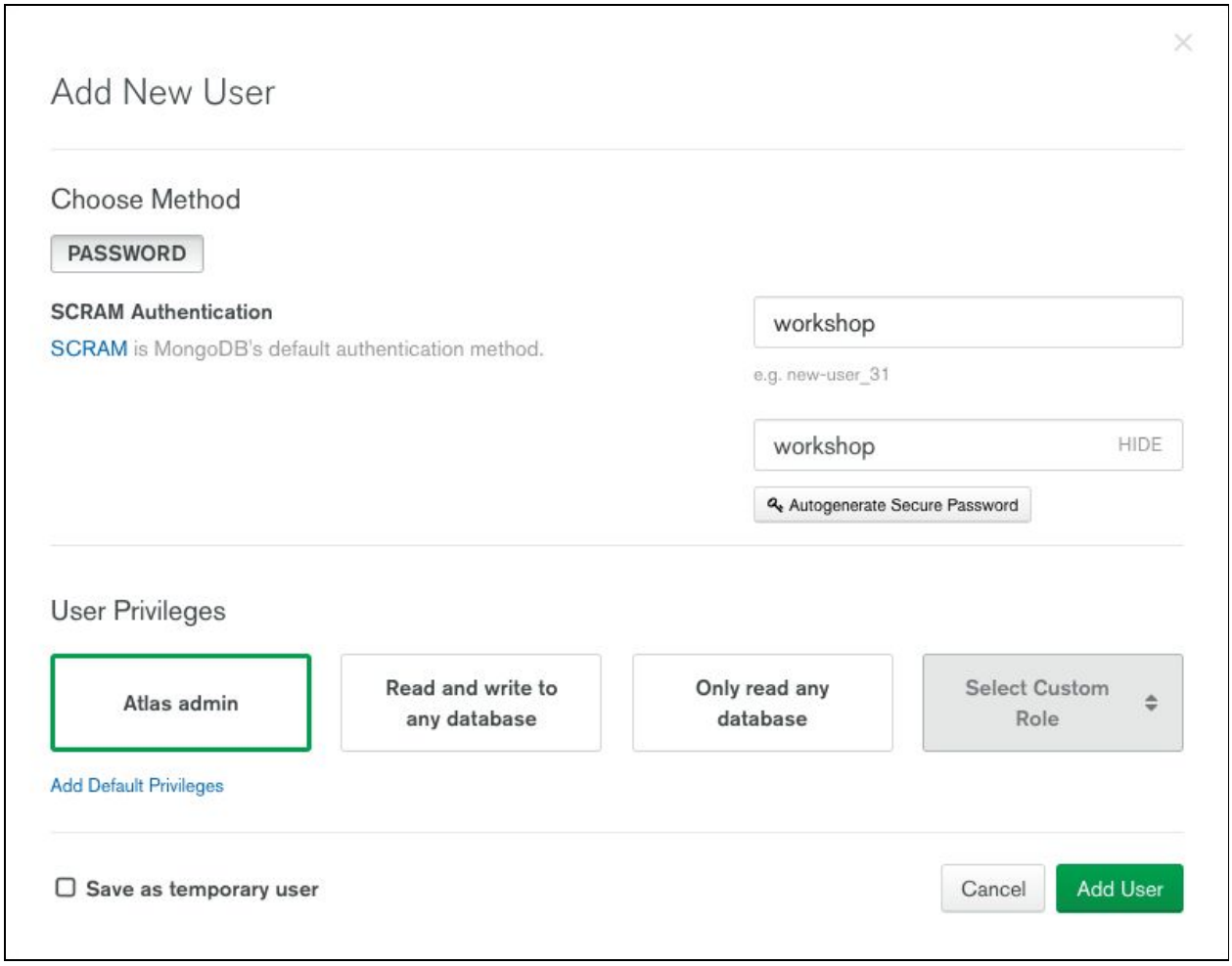
Exercise 2 - Create A Database User

All MongoDB Atlas database users must be authenticated. Under Security, select **Database Access**:

Click **Add New User**:



Set the username to **workshop** and the password to **workshop:**

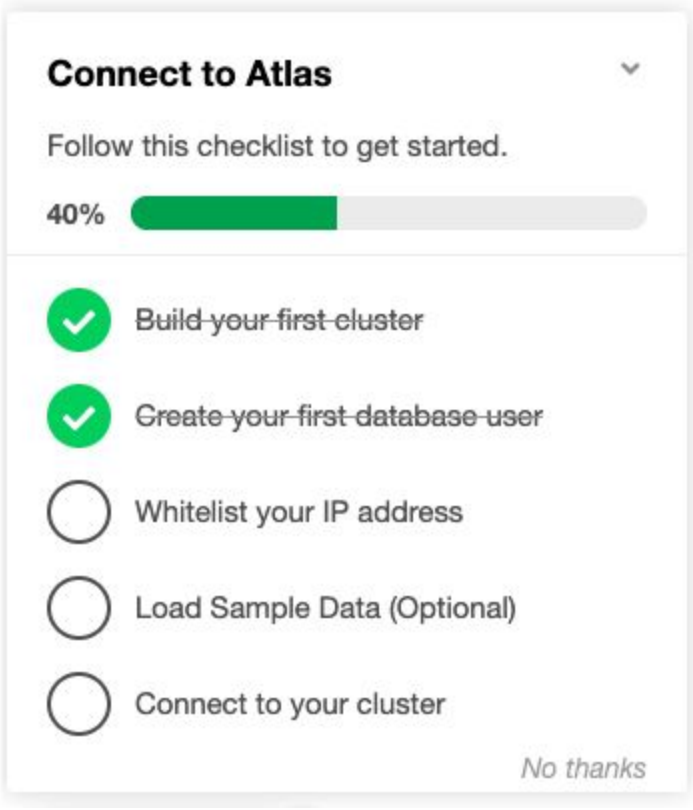


Note the powerful role-based access control available. For this workshop, give the user **Atlas admin** privileges.

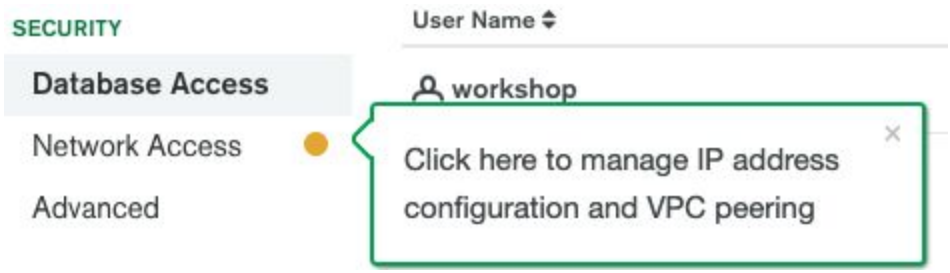
Click **Add User**.

Exercise 3 - Configure the Firewall

By default, the Atlas database blocks connections from all sources. The next step is to whitelist our network IP address with the cluster's firewall:

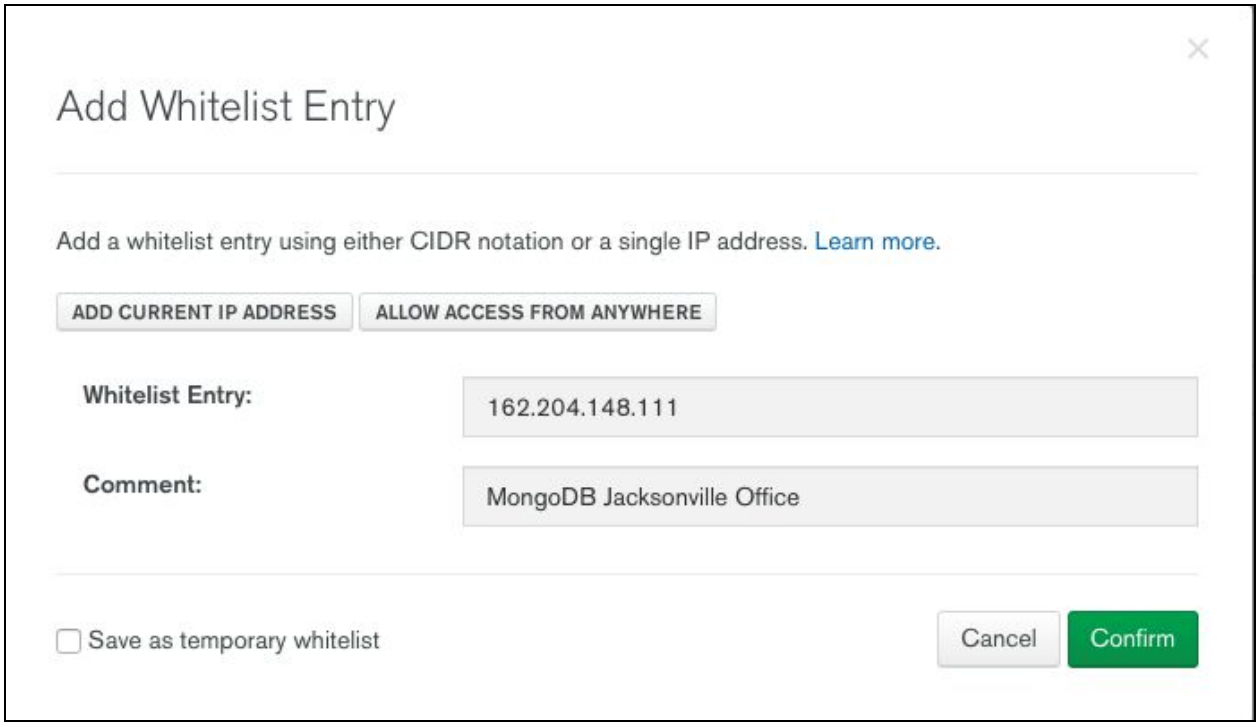


Under Security, select **Network Access**:



And then **Add IP Address:**

Click **ADD CURRENT IP ADDRESS**, which will auto-detect your network's public IP address. The **Comment** is also important, so we can easily map where the database connections are coming from as the list of whitelisted IP addresses grows:



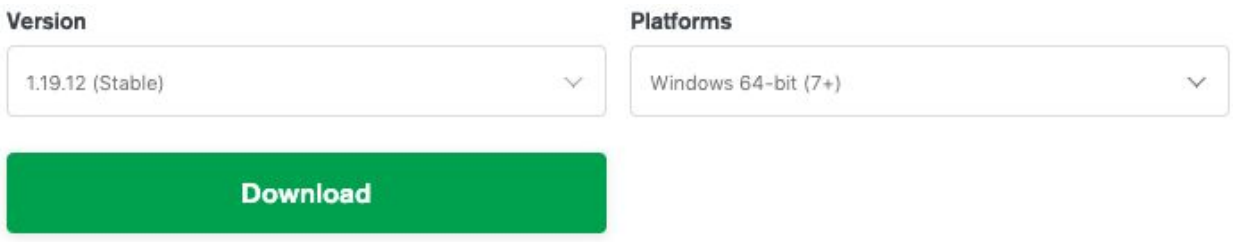
Click **Confirm**.

Exercise 4 - Prepare for the Next Lab

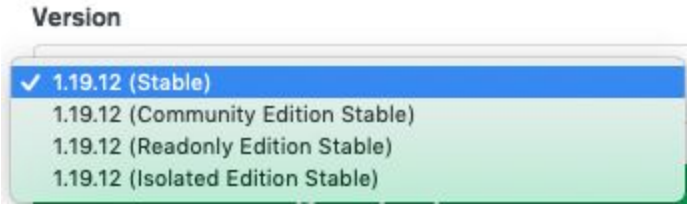
In the next lab, we will be using a desktop tool, called **MongoDB Compass**, as well as a sample dataset. Let's get these items now so that we're ready to go.

First, **download and install Compass**. Go to the download page and select the latest Version and appropriate Platform:

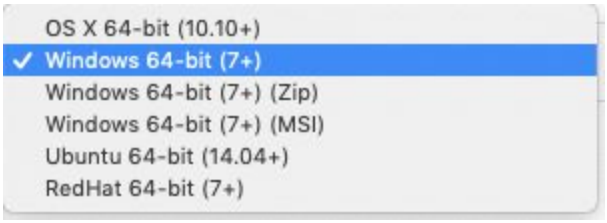
> *Note, don't use the Compass download link in Atlas as it downloads the Community Edition of Compass.*



Make sure you select the “Stable” version, which contains the enterprise features we’ll use in a moment:



Also, if you lack the administrative privileges to install software on your Windows laptop, select the **Windows 64-bit (7+)** option, which is the executable:



Once downloaded, install Compass on your local workstation.

Next, **download the sample dataset** from GitHub. For this workshop, we’re going to load a Yelp-like collection of New York City restaurants. If you have the *wget* utility, you can get the dataset as follows:

```
wget
https://raw.githubusercontent.com/mongodb/docs-assets/primer-dataset/primer-dataset.json
```

Or, more simply:

```
wget http://bit.ly/MongoWorkshopData
```

If you don’t have *wget*, just open the link in your browser **and wait for the page load to complete.** Then save the file (in Chrome, for example, select File > Save Page As).

The dataset is 11.9 MB and has 25K restaurants.

That’s it! You’re all set for the next lab.