Terraform Class Preparation

IMB Cloud Account

The class does require and IBM Cloud account. My understanding is that all students will have one for the start of the class.

In addition to console access (the GUI), students will also have to have command line (CLI) access to run Terraform.

CLI access requires a CLI plugin to be installed and configured on the student's computer.

The instructions for downloading and installing the plugin are located here:

https://cloud.ibm.com/docs/cli?topic=cli-getting-started

Some of the cloud commands may not work initially because the CLI plugin may need additional plugins that are resource specific, like object storage resources. Generally, if you need a plugin, the command line reply will tell you what you need and how to install it.

Problems Logging in

You may find that your login credentials are rejected at the CLI. If the credentials you are using are correct, this is probably because your account may disable CLI logins by default.

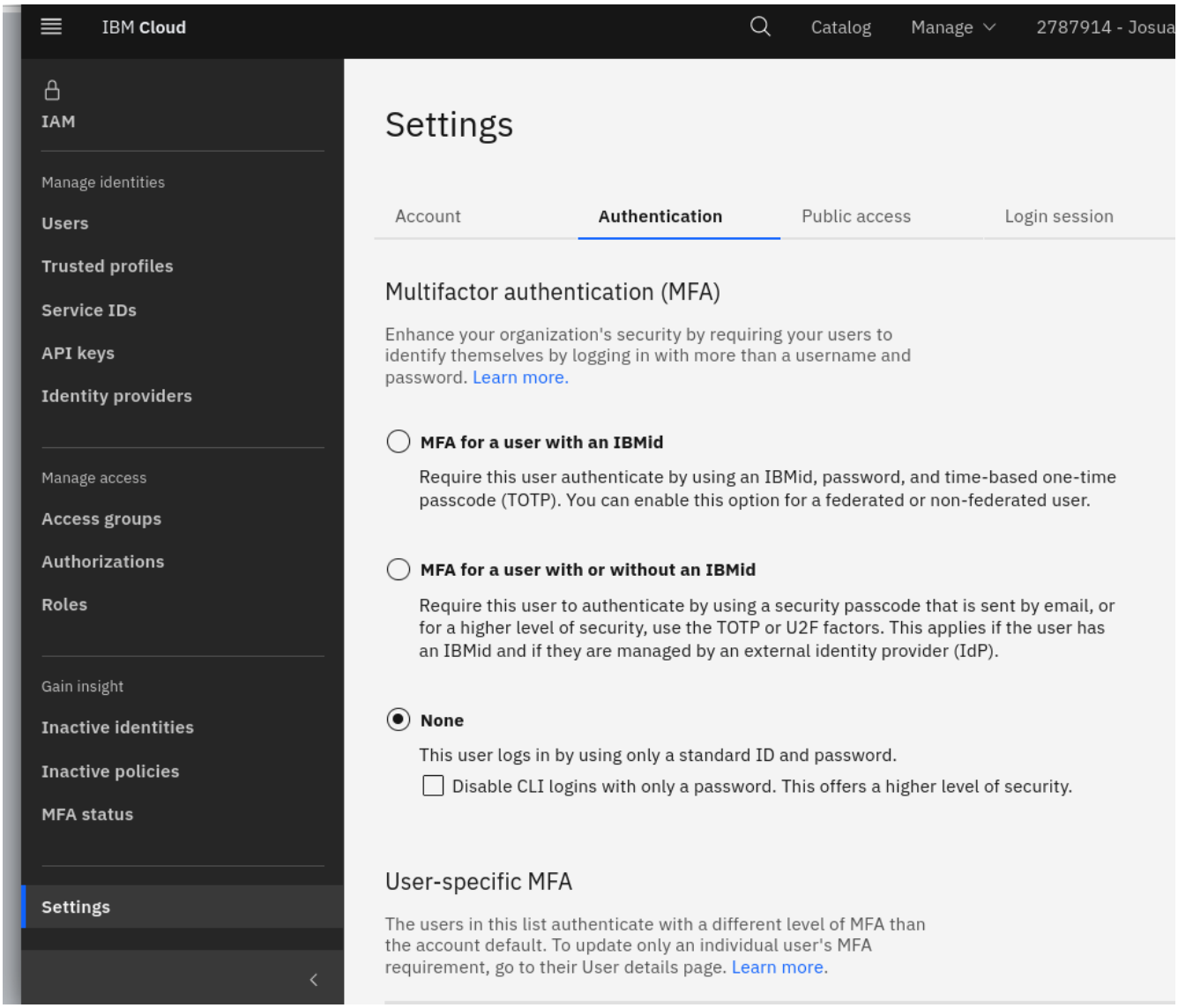
In the IBM Cloud Console, select Manage --> Access (IAM) --> Settings --> Authentication

Or this link copied from my my own account

https://cloud.ibm.com/iam/settings?tab=authentication

Under the MFA settings, the checkbox under the "none" radio button my be checked. Uncheck it to enable CLI logins with password. This is supposed to not be necessary if using an API key but I found for my account it was.

See next page for screenshot



Setting up the API key

You will also need to create an API key for command line access without having to log in.

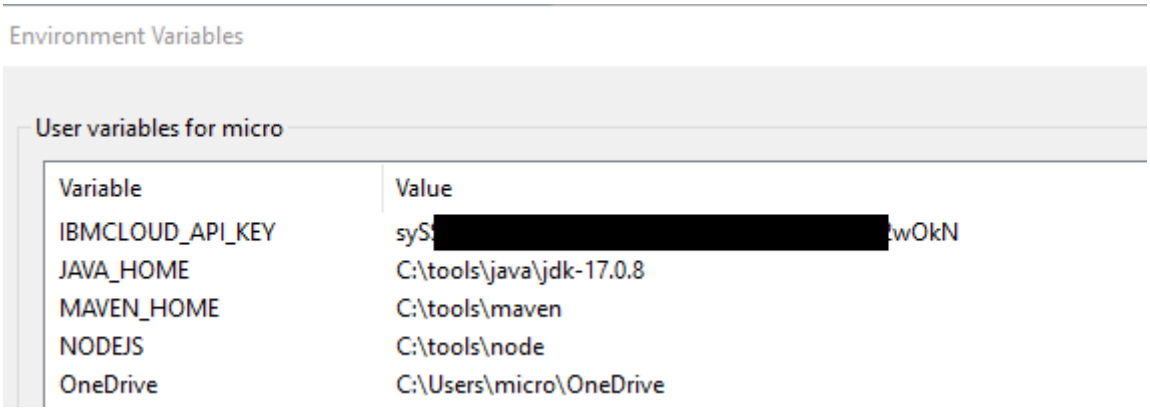
The instructions for creating it and downloading are located here

https://www.ibm.com/docs/en/app-connect/container?topic=servers-creating-cloud-api-key

Installing the API key

To use the key, install it as an environment variable named IBMCLOUD_API_KEY

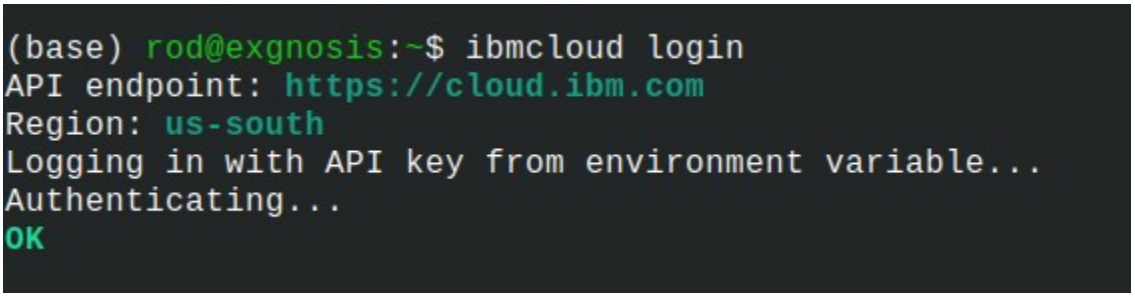
This is a screen shot of my Windows environment variable



And of my Linux .bashrc definition

Since I don't have a MacOS system, I'm not sure how env vars are set there by I assume it is similar to Linux

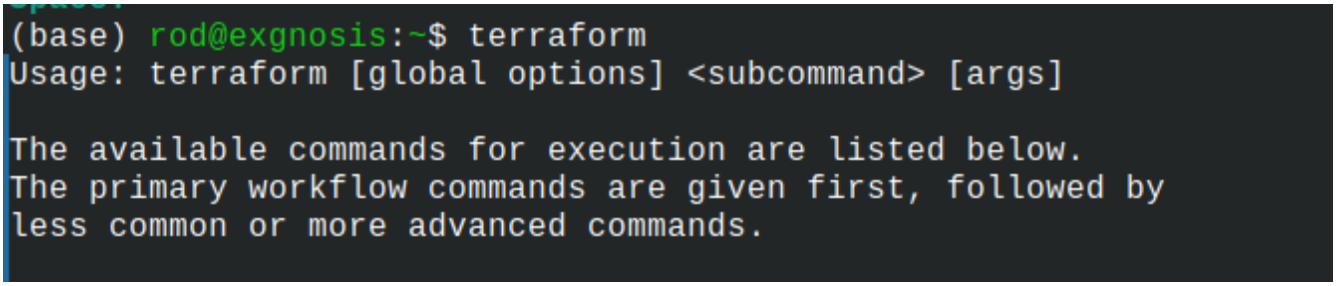
Open a new shell and check to see it is installed by doing a CLI login, you should not be prompted for a password but should see something like this.



Once that is done, download and install the Terraform binary according to the instructions here:

https://developer.hashicorp.com/terraform/install

And then ensure that the executable is your system path by running it and seeing this



In Class

The setup will be reviewed at the start of the class to resolve any issues you may have