ENPM665 Homework #1 – AWS Account setup

Version 2.2 – August 30th 2022

Estimated time to complete this assignment: 1 hour.

NOTE: OSX users may want to follow this guide on setting up a "sane" Python environment for OSX: https://www.digitalocean.com/community/tutorials/how-to-install-python-3-and-set-up-a-local-programming-environment-on-macos

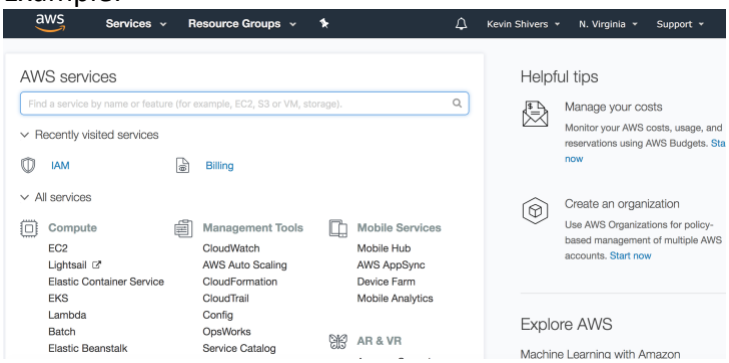
NOTE: Windows user may want to follow this guide on setting up a "sane" Python environment for Windows: http://docs.python-guide.org/en/latest/starting/install3/win/#install3-windows

NOTE: Linux users – as you were. ☺

1. Create an AWS Account

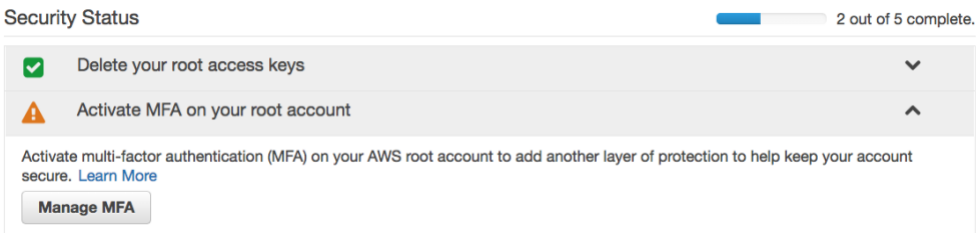
1. Open a web browser and go to https://aws.amazon.com/ and click the "**Create an AWS account**" button at the top right.
2. Follow the steps to create your account.
3. Take a screenshot of the main screen of your AWS Console showing your name at the top right, you'll use this as part of the deliverable for the homework

   Example:



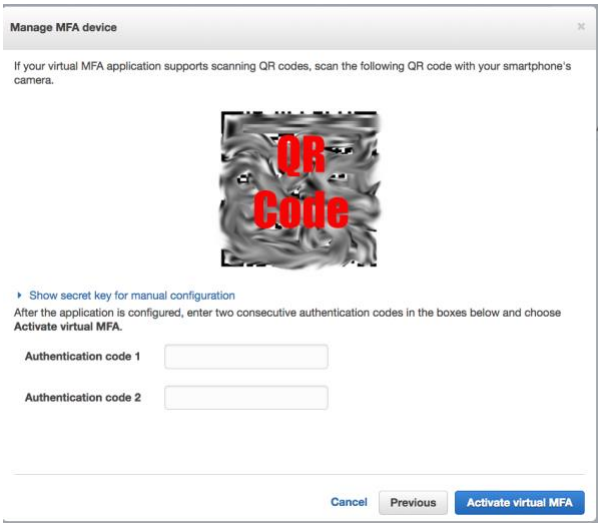
1a. Optional (but highly recommended) – Enable MFA on your AWS root account.

1. In IAM under "**Security Status**" click "**Activate MFA on your root account**" and then the "**Manage MFA**" button

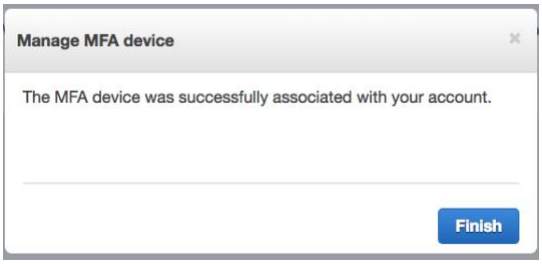


2. Select the option. If you want to use the Duo app like you use for UMD's MFA select "virtual MFA device" and then "Next Step"

3. Review the message on the next screen and then click "**Next Step**"
4. Scan the QR code in the screen with Duo (or another app that supports TOTP) and then enter the Authentication codes and finally click "**Activate virtual MFA**"



5. If you did everything correctly you'll get a message with a "**Finish**" button at the end. Congrats!

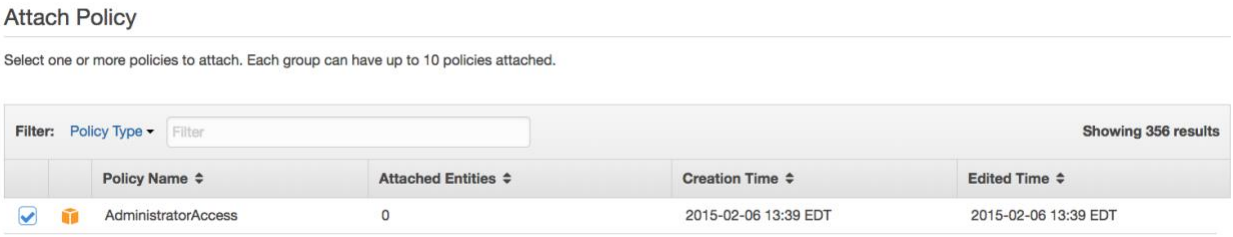


NOTE: If you lose/forget your MFA device you'll need to contact AWS Support to have MFA turned off. Don't lose/forget your device!

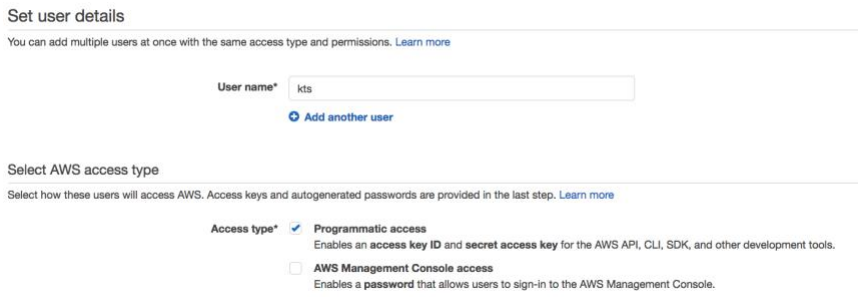
2. Add user to IAM

(If you run into issues AWS's documentation for this is here: https://docs.aws.amazon.com/IAM/latest/UserGuide/getting-started_create-admin-group.html)

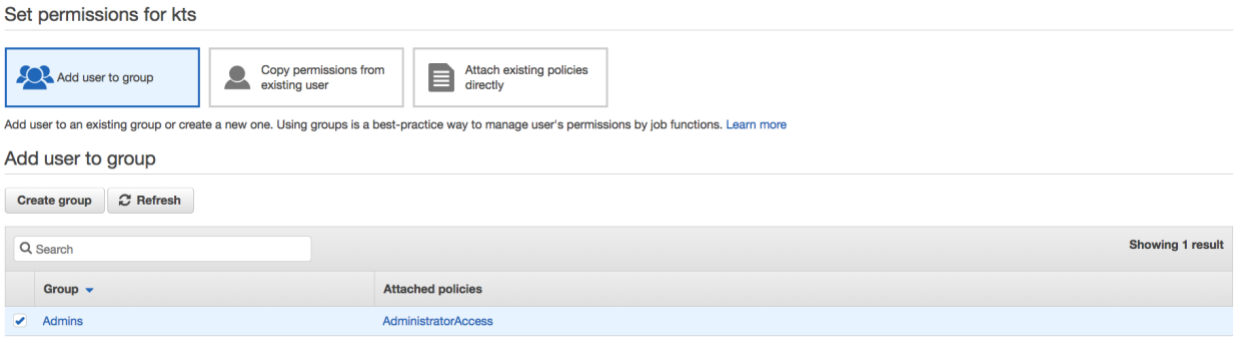
1. In AWS Console click "**IAM**" -> "**Groups**" -> "**Create New Group**"
2. Select a Group Name. I will use "**Admins**" and click "**Next Step**"
3. Attach a Policy. Since this is for our CLI use we'll want Administrator Access so click "**Administrator Access**" and then click "**Next Step**"



4. Review and then click "**Create Group**"
5. In the IAM section of the AWS Console click "**Users**" -> "**Add user**"
6. Give the user a name. I'll use "**kts**"
7. Select the access type. For the CLI we'll use the "**Programmatic access**"



8. Click "**Next: Permissions**"
9. Select the "**Admins**" group to add your user to the Admins group.



10. Click "**Next: Review**"
11. Review and click "**Create user**"
12. You can view the Access key ID and Secret access key. You can also download them as a CSV. We'll want to add the Access key and secret key into the AWS CLI.

    Your credentials will look something like:

    Access key ID: AKIAIOSFODNN7EXAMPLE
    Secret access key: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY

3. Install the AWS CLI (command line interface) tool

1. Follow the steps here to install the CLI tool: https://aws.amazon.com/cli/ Windows, Mac, and Linux are all supported.
2. Configure the AWS CLI tool to access your AWS account. Steps: https://docs.aws.amazon.com/cli/latest/userguide/cli-chap-welcome.html

   Example:

```
[oitsec:Cloud kts$ aws configure
AWS Access Key ID [None]: AKIAINS7TJAJUBUW5UUQ
AWS Secret Access Key [None]: [redacted]
Default region name [None]: us-east-1
Default output format [None]: text
oitsec:Cloud kts$
```

   `aws configure` will save what you enter into **~/.aws/config** and **~/.aws/credentials**

3. To confirm everything is set up correctly run the command **`aws iam list-users`**
4. **Take a screenshot of the results**. You'll submit that as part of the deliverable for this homework.

   Example:

```
[oitsec:Cloud kts$ aws iam list-users
USERS   arn:aws:iam::425398327873:user/kts      2018-06-29T20:47:38Z    /       AIDAICC73Q4SSMW6YGFA2   kts
oitsec:Cloud kts$
```

Deliverable:

Provide screenshots of the following (hopefully you took them during the steps above.)

1. The main screen of your AWS Console showing your name at the top right
2. A screenshot of the output from running **`aws iam list-users`**

Please copy and paste the screenshots into a single document (Word .docx or PDF) and upload the .docx/PDF. Don't forget to check your work after you submit the assignment to verify it was correctly submitted!