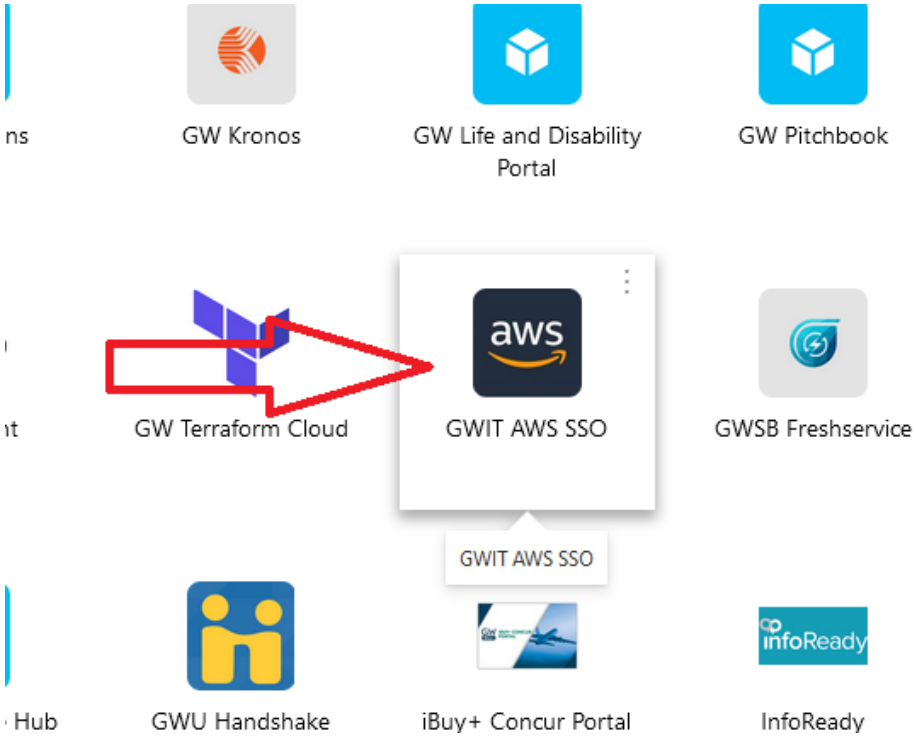
AWS End-User Documentation

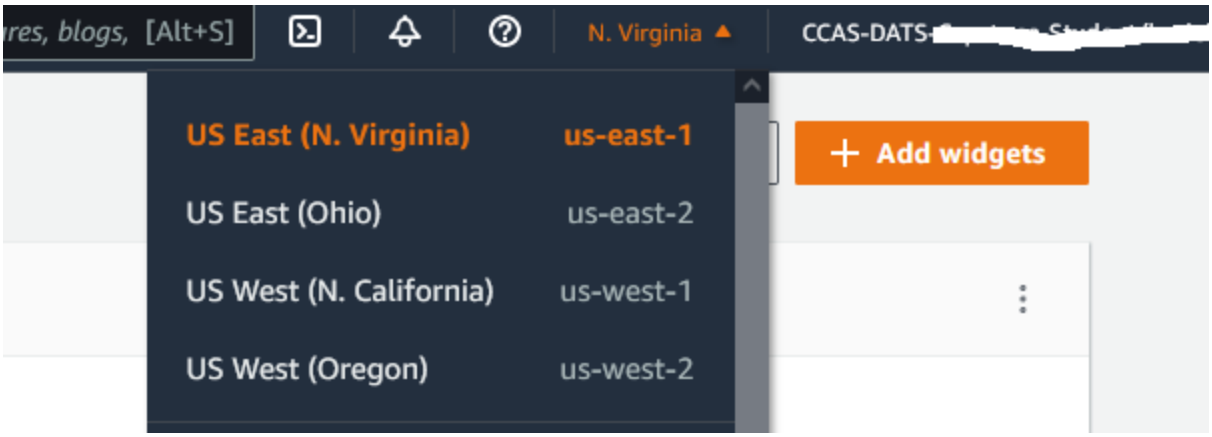
Getting Started and Launching an Instance

Logging in

1. Navigate to https://myapps.gwu.edu
2. Login with your GW user name and password.
3. Search for "**GWIT AWS SSO**" and click on it.

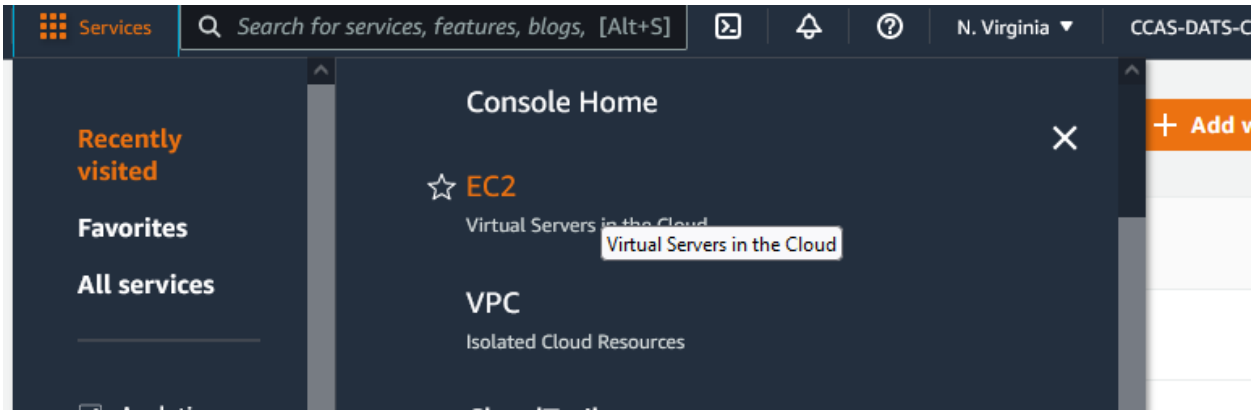


4. Once you are redirected to AWS login page, click "**AWS Account**" and you will see your Course related AWS account, click "**Management Console**". You will be redirected to AWS Console landing page.
5. Before proceeding to launch and use AWS resources, you must make sure your **active region** is **Northern Virginia.** To do so, click on the **Region Picker** and select **US East (N. Virginia)**:

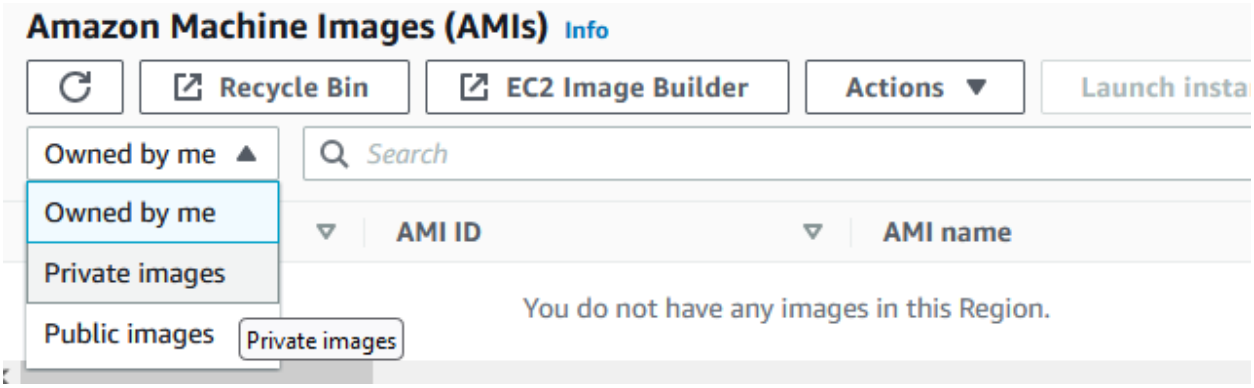


Launching Instances

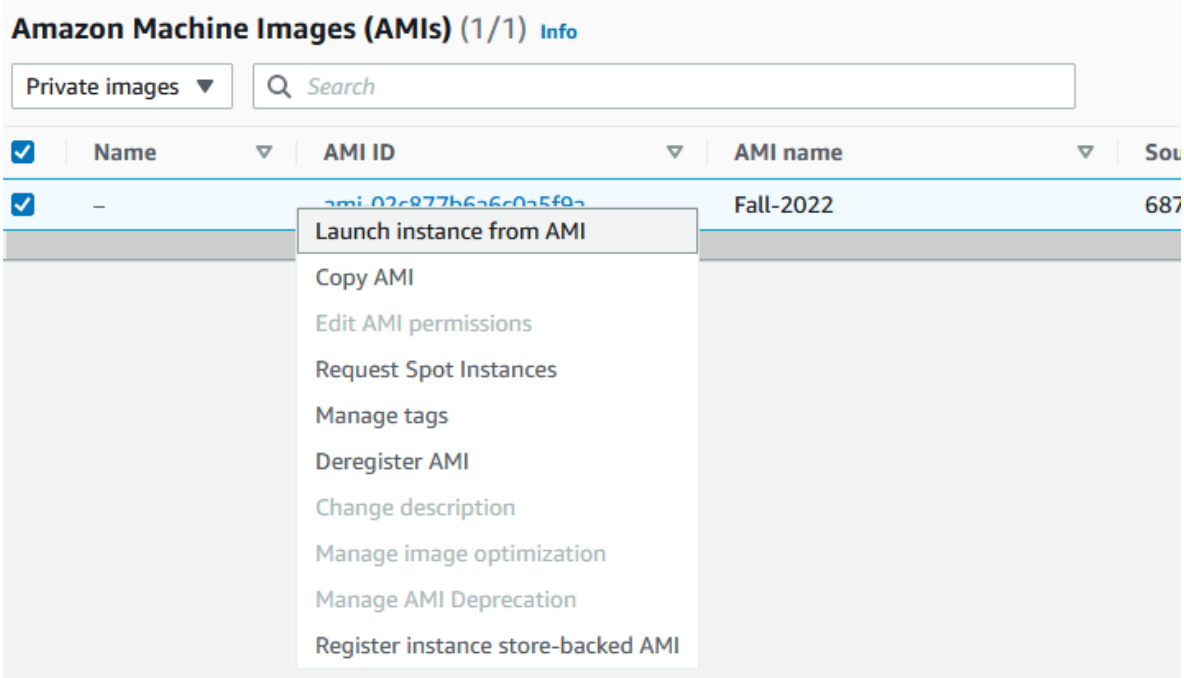
6. Open the EC2 console by clicking on **Services** in the top menu bar and selecting **EC2**:



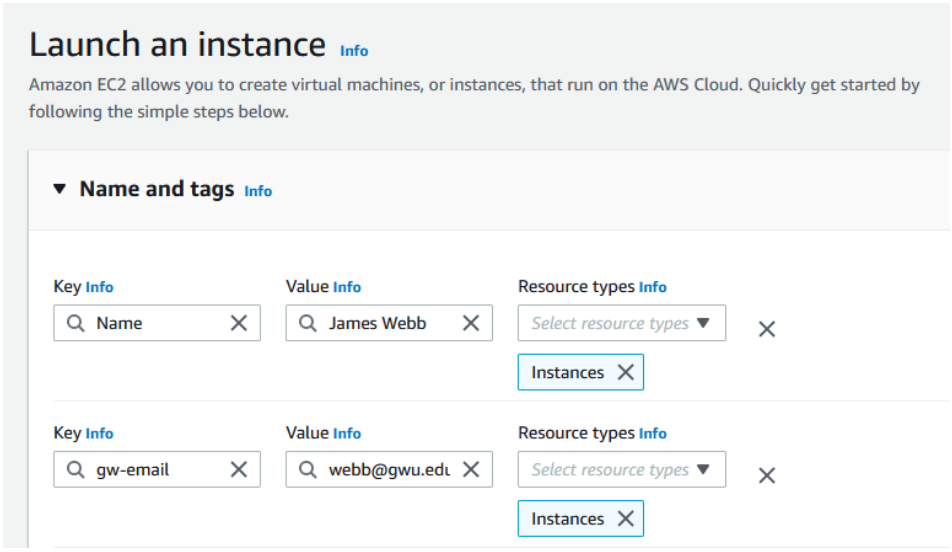
7. To launch an instance from an AMI, click on **AMIs** under **Images** in the left-hand navigation menu.
8. Click on drop down to change the filter from "**Owned by me**" to "**Private images**", and search the AMI list by the criteria provided by the instructor



9. Once you have identified the proper AMI, right click it and select **Launch instance from AMI**



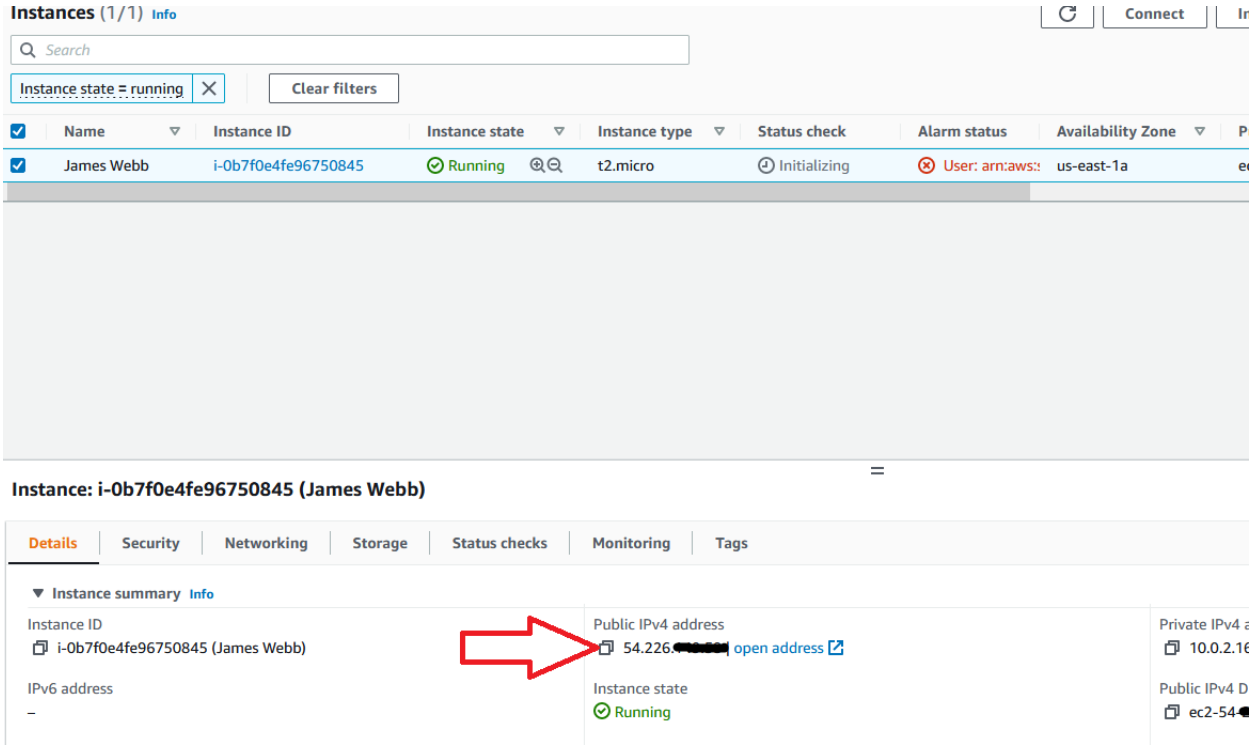
10. This will start Instance Wizard
11. Name the instance with your first and last name. Click **Additional tag**, **Add tag**, in the **Key** field, enter **gw-email** and in the **Value** field, enter your GW email (example@gwu.edu). An example of correct tags is shown below:



12. After entering tags, scroll down and select Instance Type specified by the instructor.
13. In the **Key Pair** section, if you have already uploaded or created a key pair, select it. If not, select **Create a New Key Pair**. Enter a name for your key pair and then click **Create key pair**.

14. In **Firewall (security groups)** section, click **select existing security group**, click drop down and choose the security group named to your course.
15. In the **Configure storage** screen, ensure that the size of the disk matches the instructor's specification. Do not adjust any other settings.

16. Click **Launch instance**. If your instances successfully launched, a green box titled Your Instances are Now Launching appears. If you instead see a red box with an Access Denied warning, refer to the troubleshooting steps below.
17. After you launch your instance, click on **Instances** under the **Instances** header in the left-hand navigation menu. A list of all of the instances in the account is displayed.
18. Find your instance in the list by searching for the name you provided in the **Name** tag in step 11.
19. Note the **Instance State** field in the list. If your instance has an **instance state** of anything other than **running** (displayed with a green dot), it is still being launched. If your instance has an **instance state** of **running**, it is ready for you to connect to it.
20. Click on the list entry for your instance to reveal the Details pane:



21. Note the **IPv4 Public IP** of your instance. (example: 111.112.113.114)
22. Connect to your instance's **IPv4 Public IP** using your SSH client of choice. The default username with which you will connect is **ubuntu** unless the instructor tells you otherwise. Remember to use your key pair when connecting.

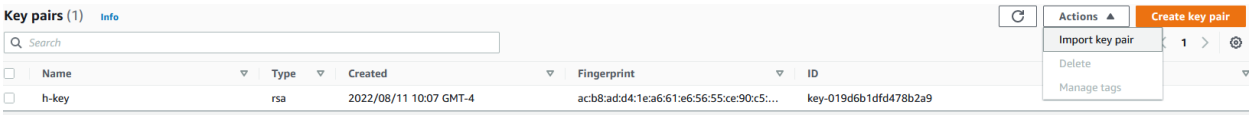
Additional Functionality and Troubleshooting Tips

Uploading an Existing Key Pair

Access to AWS instances is provided by SSH with public-private key pair authentication. You must have the private key which corresponds to the public key you selected when launching your instance. If you wish to use an existing key pair with AWS, you must first upload it to the AWS console.

1. Log into AWS and open the EC2 console by clicking on **Services** in the top menu bar and selecting **EC2**.

2. In the left-hand navigation menu, select **Key Pairs** under the **Network and Security** heading. A list of key pairs is displayed:



3. Click on **Actions** drop down, and click **Import key pair**
4. Enter a name for your key pair which clearly identifies it as yours. Your last name or your GW user name is a good choice. The list of key pairs is global to the account; everyone will see everyone else's public key listed so make sure you remember what you called yours.
5. 5. Paste your public key into the text box or browse for the file in where it is stored. **Important: do not upload or paste in any file containing your private key.**
6. 6. Click **Import**. If the import is successful, you will see your key listed in the list, and it is now available for use when launching an instance.

Access Denied" Error when Launching Instances

If you receive a red **Access Denied** error when launching your instance, remember to check the following common causes of launch failures:

• Make sure that you are in the **US East (N. Virginia)** region. Your account does not have permission to launch instances into other regions.

• Make sure that you selected the correct instance type (size). Your account may be restricted to allow you to launch only specific instance sizes.

• Verify that you selected the correct security group and that you didn't attempt to create a new security group. Your account is not authorized to create new security groups.

• Confirm that you have applied the **Name, gw-email** and **alarm** tags to your instance. Since these tags are important for identifying who owns each instance, you will not be allowed to create instances that do not have them attached.

If you have confirmed all of the items listed above and still receive an error, please email your instructor or TA for assistance.