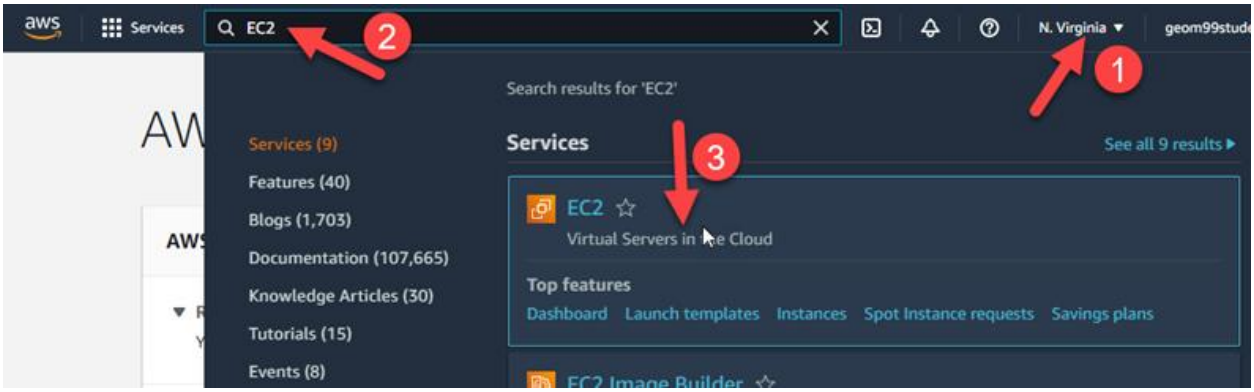
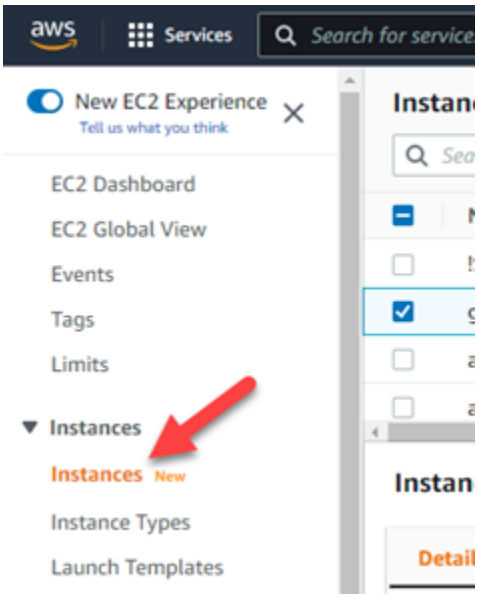
Starting an EC2 Virtual Machine

1. Log into the AWS console for this course using the URL https://fleminggeom99.signin.aws.amazon.com/console. Your username is the same at fleming, and the password you reset a few weeks ago (Don't remember? You can ask for it to be reset but it will cost you 1% on the next practical lab).
2. After logging into AWS console, verify you are in the right region (N. Virgina), search for EC2 then select the EC2 (short for *Elastic Computing Cloud*) console page:



3. With the console open, be sure you are on the Instances option in the left list.

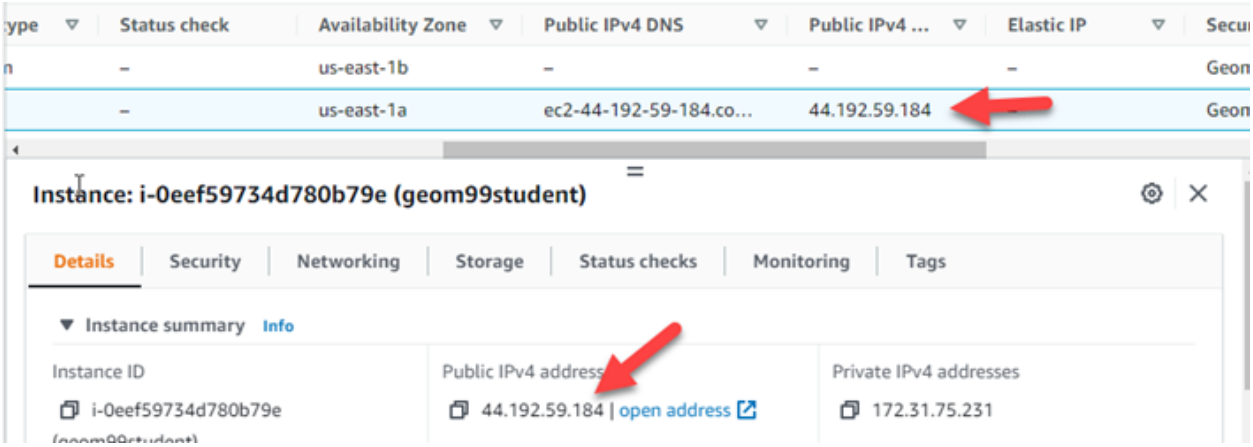


4. highlight your virtual machine (identified by your username which can be found by typing your username into the search) and put checkbox in the left-hand column to select it. Then click the Instance State Menu, then click on the Start instance option.

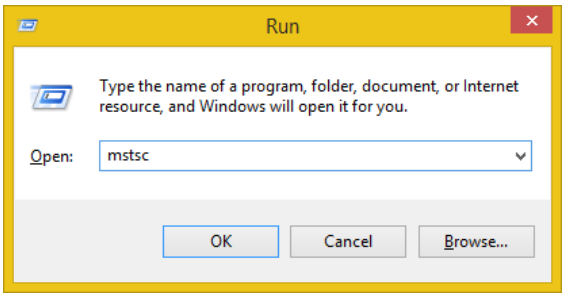
5. This will start the highlighted instance. It will take some time to boot, so be patient (no more than 4 minutes). You will see the success message at the top with a "Pending" under the instance state. Once started you will see a green "Running" in the state and this means Windows Server is booting (give it about a minute to be ready to connect).

Connecting to your Virtual Machine

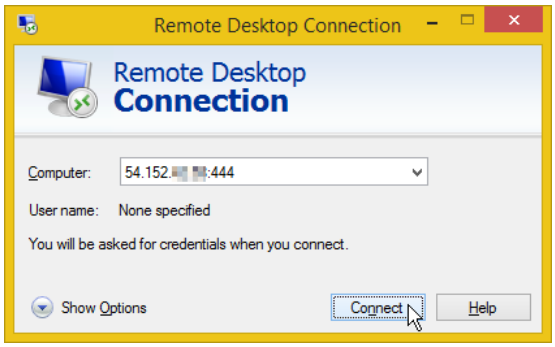
1. Once it is running, you can scroll the AWS window to the right OR use the details tab with it selected for the IPv4 address of this boot (it changes every start up). This number is how you will access this server on the internet. Write this number down, as it is valid for as long as the server is running. Next time you start the server it will get a different number, so you will need to revisit this dialog and find that number again.



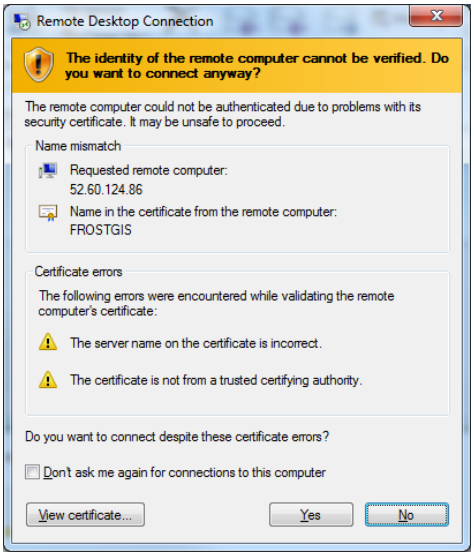
2. With the Instance State running for about 1 minute, you can then attempt to connect to your virtual machine's desktop. Press the Windows Key and hold it in, and press the letter R on the keyboard. This will make the Run dialog appear. Type `MSTSC` then press the `ENTER` key to run the Remote Desktop software on the local computer.



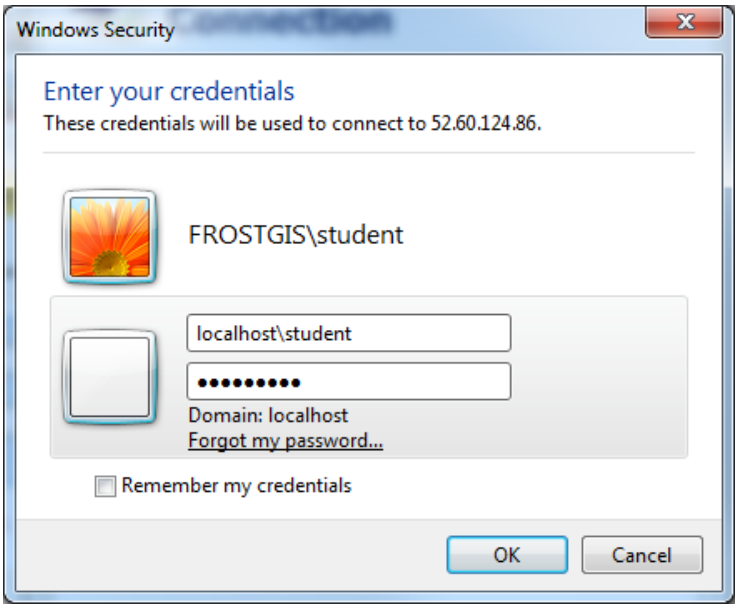
3. Once the Remote Desktop window appears it will ask you for a computer to connect to. Type the IPv4 number for the running machine, found in the dialog above. You MUST add in :444 after the IP number for it to connect. This tells the Remote Desktop program to connect to port 444 instead of the default 3389 because that default is blocked by Fleming (if on campus).



4. If you are able to connect, you will be prompted to enter your login information. You must select Other Credentials if it is prompting you to login using your Fleming account, as that is not valid here.
5. You will be prompted about the identity not being confirmed. This is because the remote desktop name (FROSTGIS, in this case) does not match the IP address, and the Certificate is self-signed. It is OK to expect this error, but review the information to be sure it is correct against your entered values before continuing.



6. Enter the username and password from D2L (everyone uses the same username and password at first, so it is recommended you change your windows password).



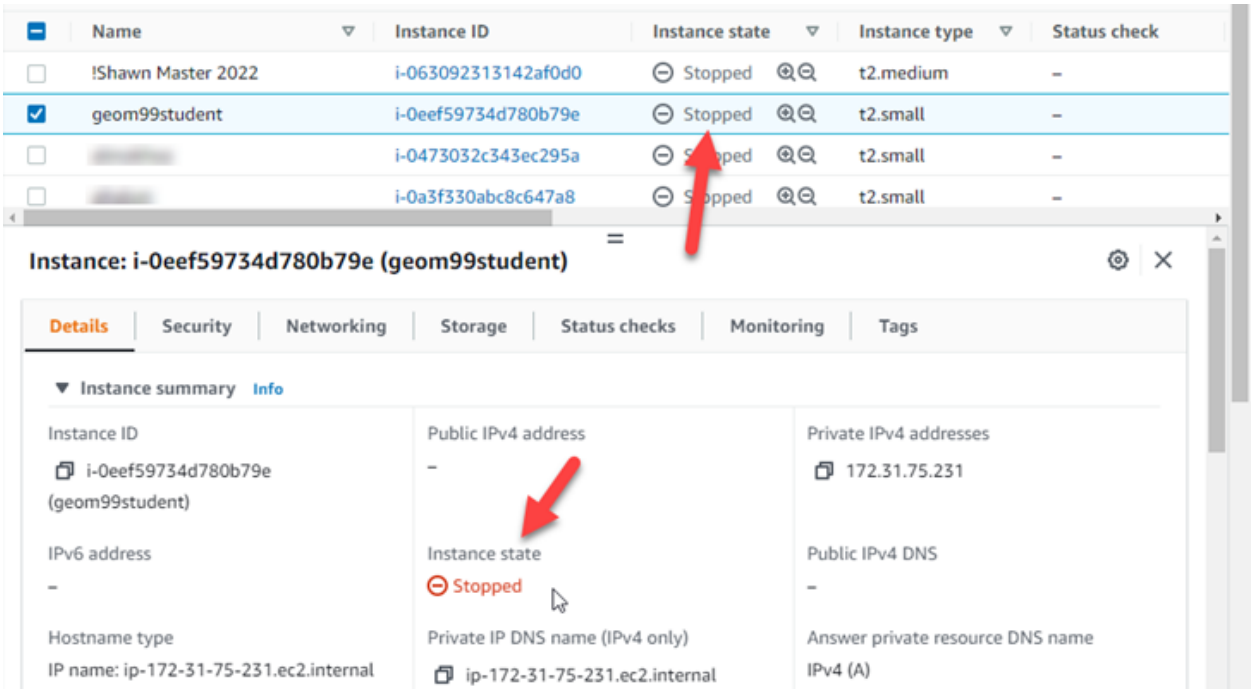
Now you are connected to your EC2 remote desktop and can use the machine as you wish. Remember you can COPY and PASTE files from your desktop to that remote desktop if needed. Drag-drop does not work.

Stopping an EC2 machine (and stopping usage charges)

1. In Windows, click on the Windows Start icon (Lower/Left) and the task menu will appear. Open the Power Icon and choose Shutdown. Be careful, logging off will mean your server is still running, and still charging your account for each minute it is active. So be SURE to shutdown and not just log off.
   Further Note, clicking the X on the terminal services window only stops listening and does not log off your computer. Therefore you will continue to be charged for its use.

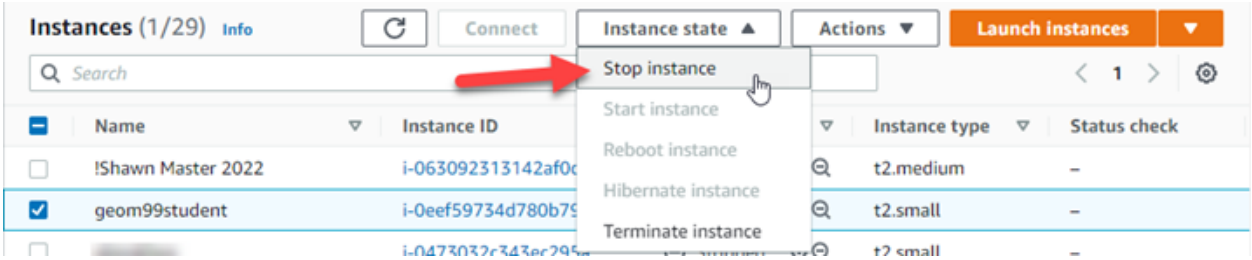
2. Almost immediately you will be disconnected. After a few minutes, your server will be turned off. You can confirm this by visiting the EC2 console window and seeing the Instance State

column to Stopped. If it is still running you will need to reconnect (as indicated above) and then try shutting down again.



Shutdown from the AWS Console

1. Shutting down your virtual machine is also possible by "stopping" using the console without logging in. Select the virtual machine that is running. Select the Instance State menu, and then click on Stop instance. This will shut down windows without logging in to the remote desktop.



2. You will be asked to confirm you really wish to STOP this instance.