How to connect to AWS EC2 Instances

What is Amazon Web Services (AWS) ?

Amazon Web Services(AWS) is a cloud service from Amazon, which provides services in the form of building blocks, these building blocks can be used to create and deploy any type of application in the cloud.

Image Source: medium.com

Logging into AWS EC2

1. Download `course-setup-student-key.pem` (linux/Mac users) or

   `course-setup-student-key.ppk` (Windows users)- key file from your email and store it in our local machine.

2. Receive your aws public IPs DNS - before each Lab session starts, ie

   `ec2-3-86-225-192.compute-1.amazonaws.com`

Image Source: aws.com

Logging into AWS (Linux and Mac users)

3. Open Terminal

4. change permission to pem key

`chmod 400`

`Downloads/course-setup-student-key.pem`

5. SSH (Secure Shell) connect to aws

EC2 instances i.e `ssh -i`

`Downloads/course-setup-student-key.pem`

`ubuntu@ec2-3-86-225-192.compute-1.amazo`

`naws.com`

6. After logged into aws, then activate the working environment

`source ~/.bashrc`

SSH connection & Activate the env


```
(base)    testuser@test-ubuntu:~$ ssh -i Downloads/course-setup-student-key.pem ubuntu@ec2-54-158-41-136.compute-1.amazonaws.com
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-1027-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Mon Apr 24 08:06:43 UTC 2023

  System load:  0.0                Processes:
  Usage of /:   54.9% of 242.29GB  Users logged in
  Memory usage: 0%                 IPv4 address for ens5: 172.31.27.95
  Swap usage:   0%

 * Ubuntu Pro delivers the most comprehensive open source security and
   compliance features.

   https://ubuntu.com/aws/pro

23 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

New release '22.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.


Last login: Mon Apr 24 07:52:58 2023 from 130.229.54.124
ubuntu@ip-172-31-27-95:~$ █
```

PATH to pem key file

username: ubuntu
EC2 DNS name
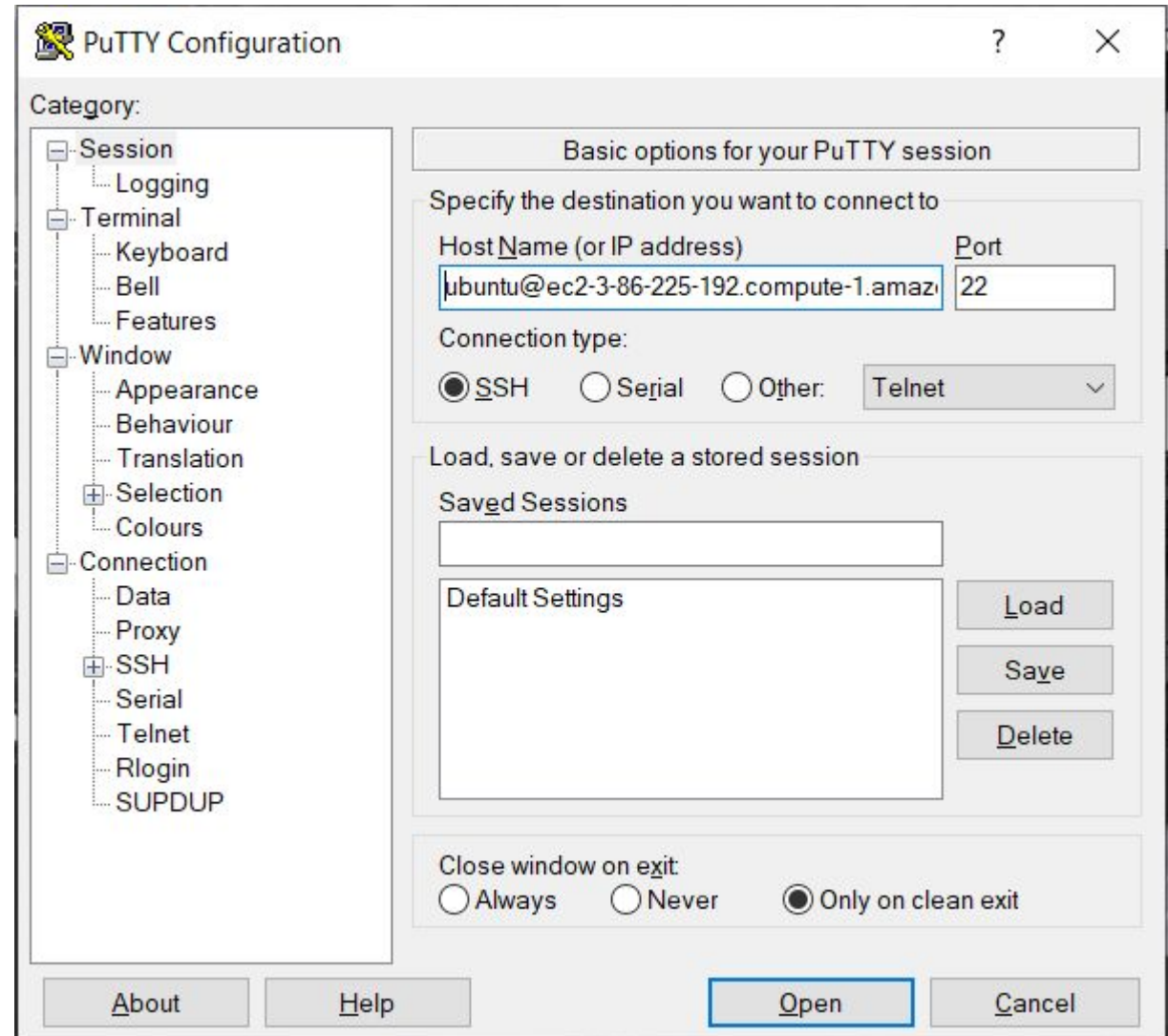
Logging into AWS (Windows users only)

3. Open Putty

4. Configure Putty

- Choose Session, In the Host Name box, type

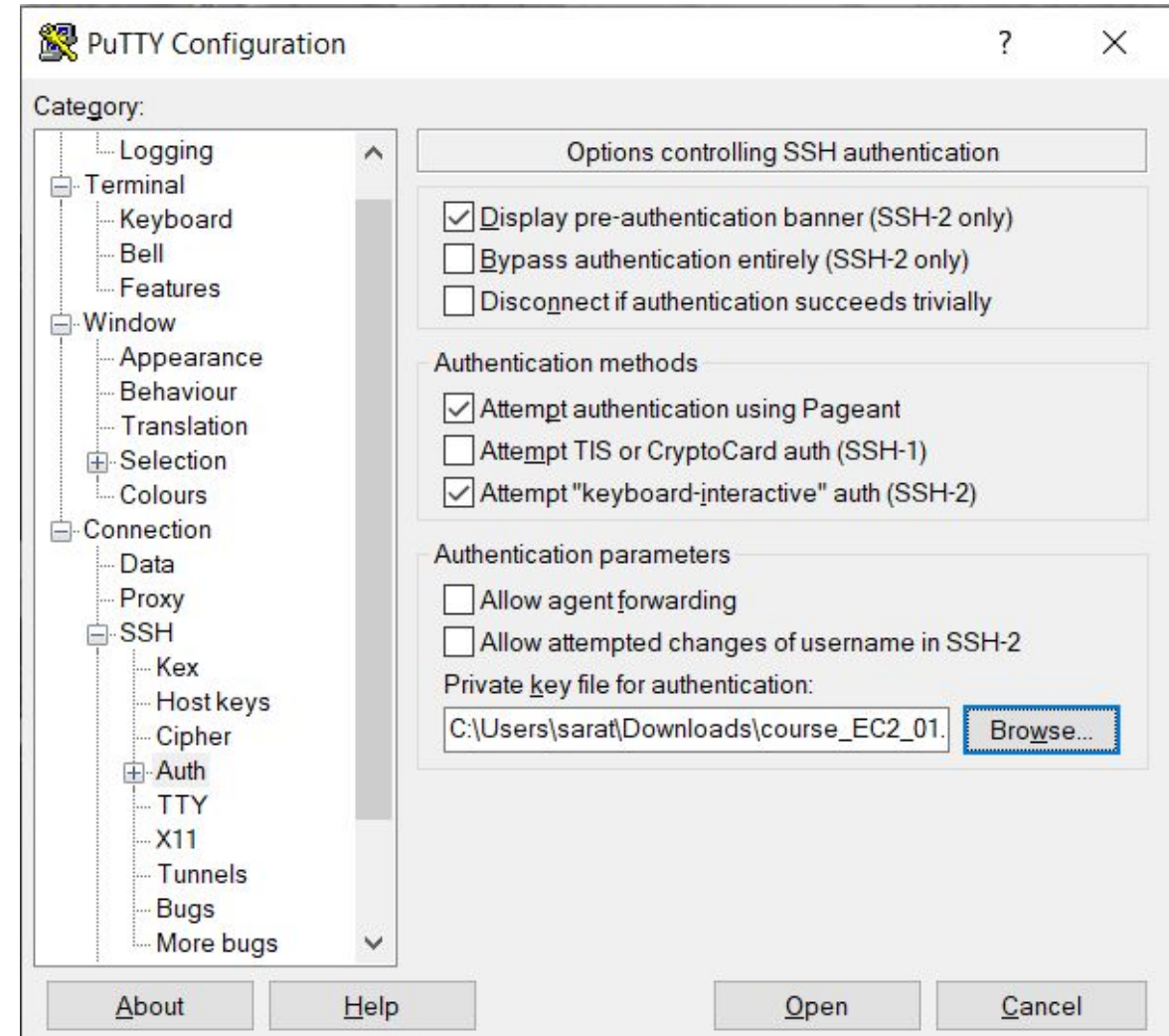   *my-instance-user-name@my-instance-public-dns-name*

    i.e
    ubuntu@ec2-3-86-225-192.compute-1.amazonaws.com

- Ensure that the Port value is 22.
- Under Connection type, select SSH.

Logging into AWS (Windows users only)

- Expand SSH and Select Auth

- Browse the ppk file

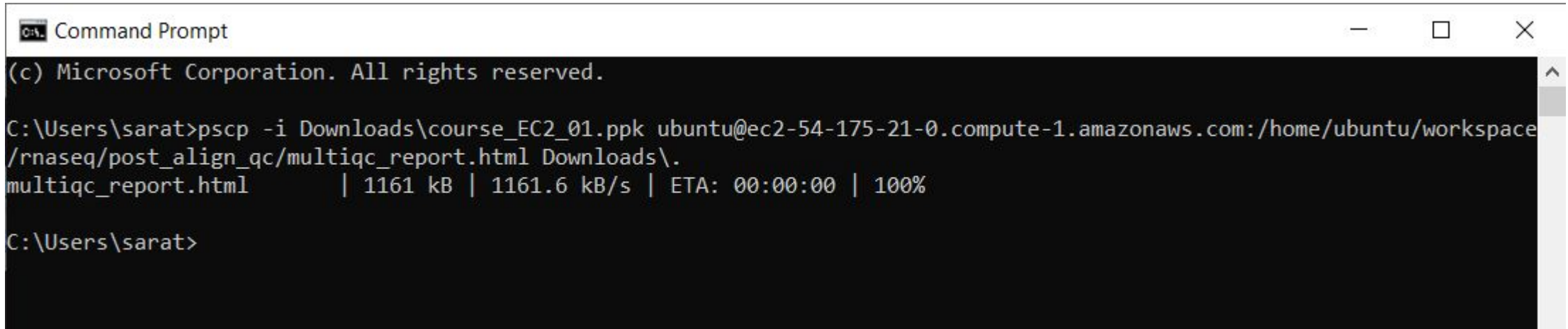 *course-setup-student-key.ppk*

- Click open

- There will be a pop-up, click Accept

Logging into AWS (Windows users only)

Transfer files from AWS server to your local machine

Use pscp, for windows users.