Guide-Setup EC2 server on Amazon Web Services

Web Application Development COP3834

Professor Navarro

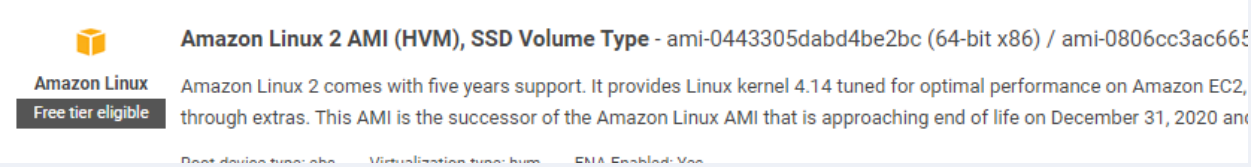
Watch tutorial on setting up EC2 Virtual Machine

Step 1: Launch Management Console

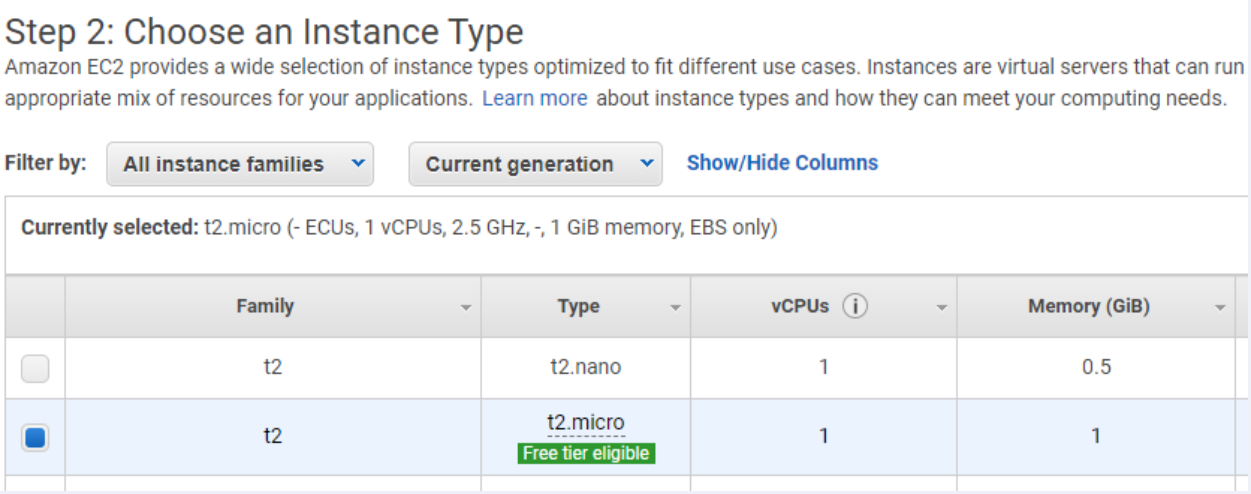
From the AWS Management Console, Launch a virtual machine

https://us-east-2.console.aws.amazon.com/ec2/v2/home?#LaunchInstanceWizard:

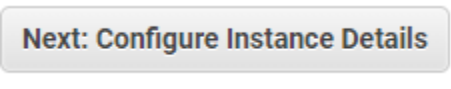
Select Amazon Linux 2 AMI (Free tier eligible)



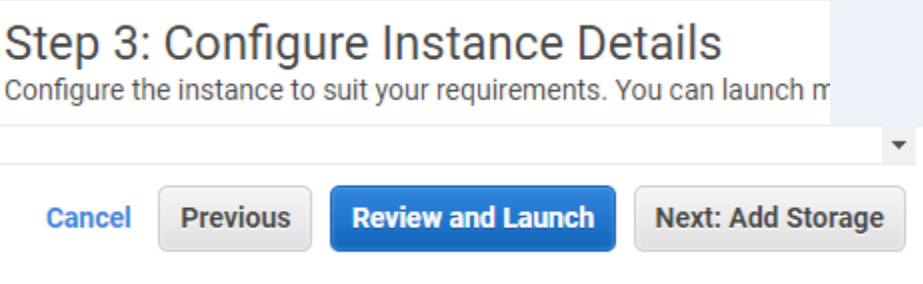
Select Instance Type t2.micro, 1vCPU, 1GiB, EBS only



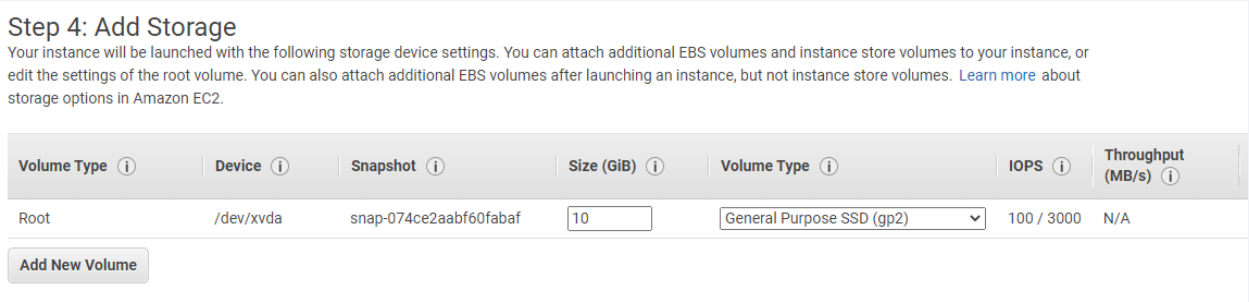
Press Next: Configure Instance Details



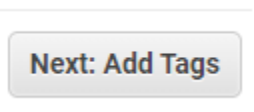
Press **Next: Add Storage** at Step 3



On Step 4, change Size to 10 GiB



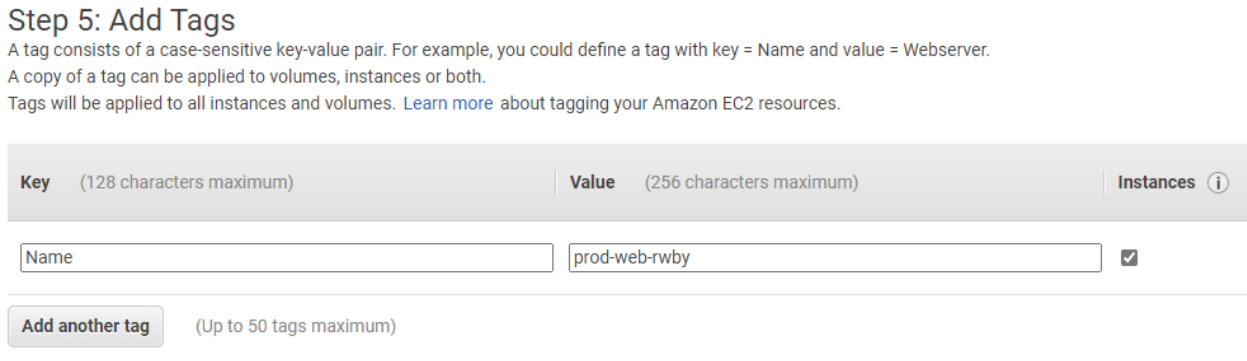
Then press Next:Add Tags



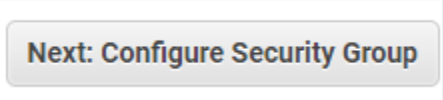
On Step 5, click Add Tag button to create meta data tag for your server instance.

Key will be Name

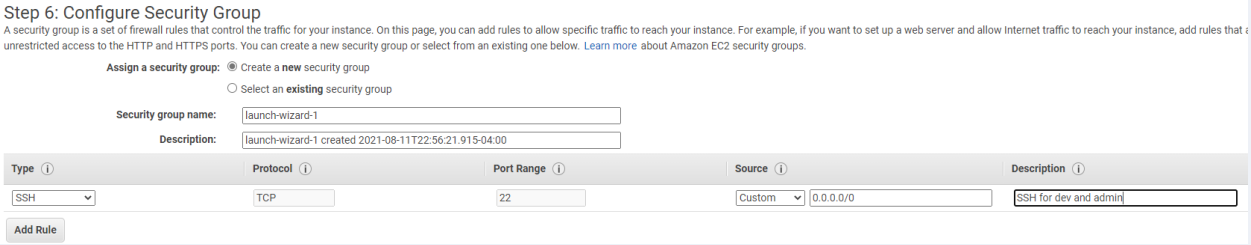
Value will be: prod-web-abcd {the last 4 letters will be the first letter of the first name of each group member.} In the example below, the Production Web server is part of the group that belongs to Robert, Watkins, Bell, and Yasmine.



After adding Key pair, press Next: Configure Security Group button

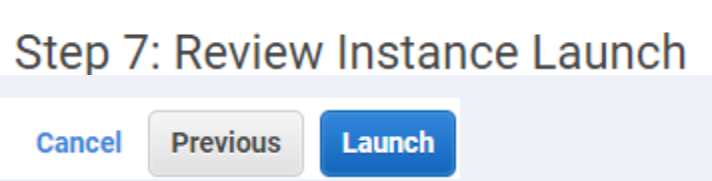


Step 6: Update description to SSH for dev and admin



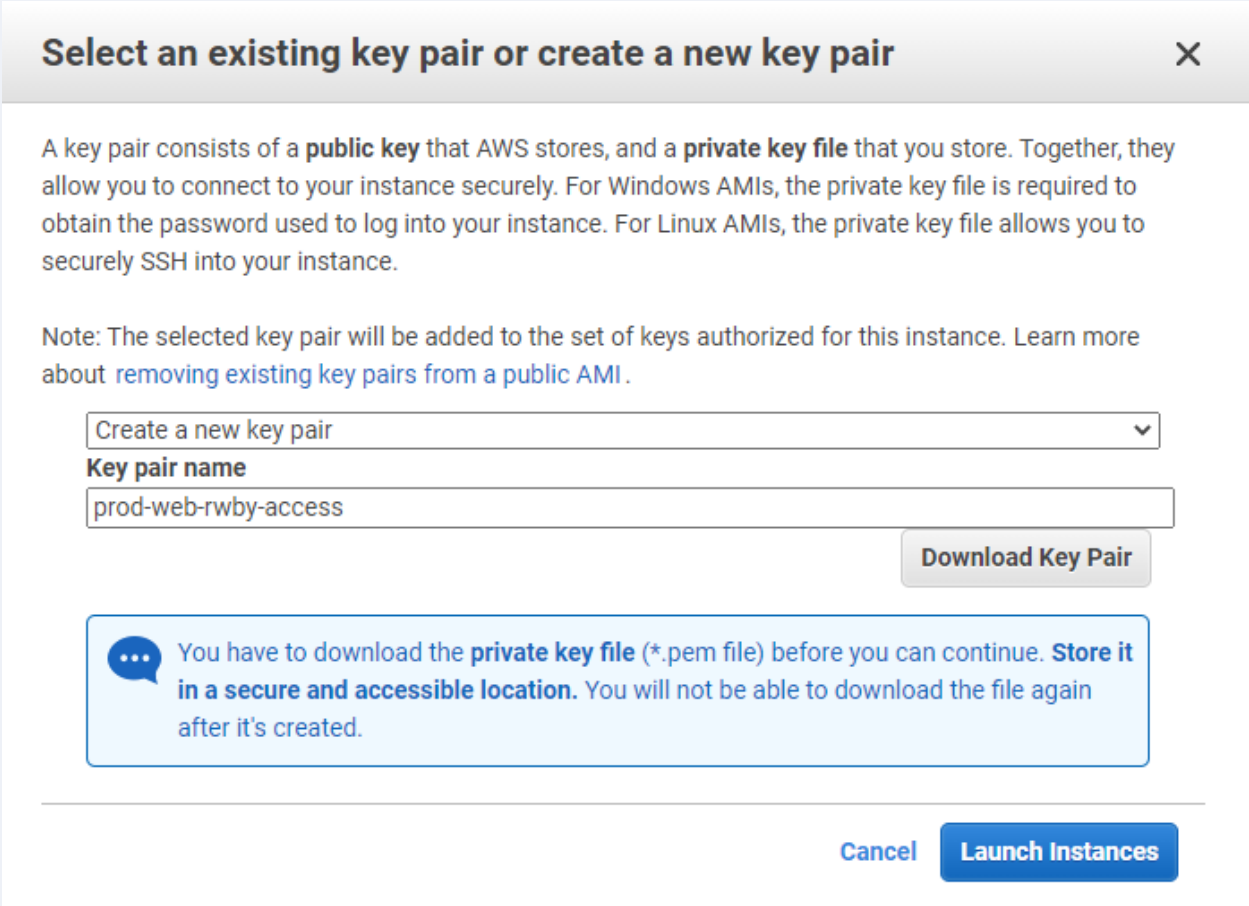
Press Review and Launch button

Review y our settings in Step 7 then press Launch button

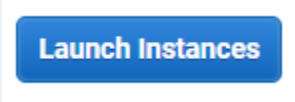


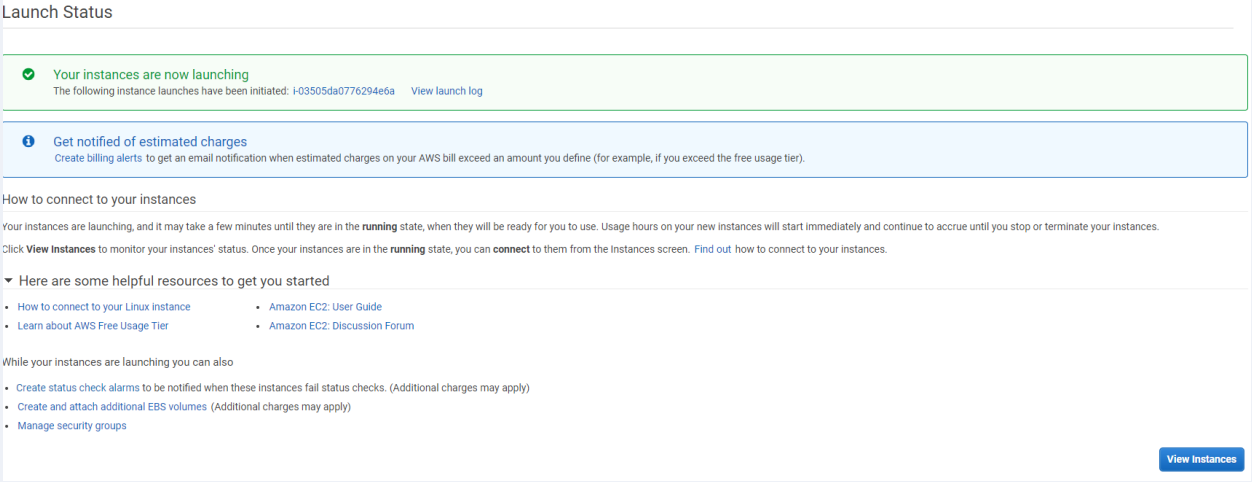
At the prompt to “Select an existing key pair or create new key pair”, select Create a new Key pair

Name it prod-web-abc-access (no spaces). Replace abc to match your server name. Press Download Key Pair button and store the file on your hard disk. Share with your team mate.

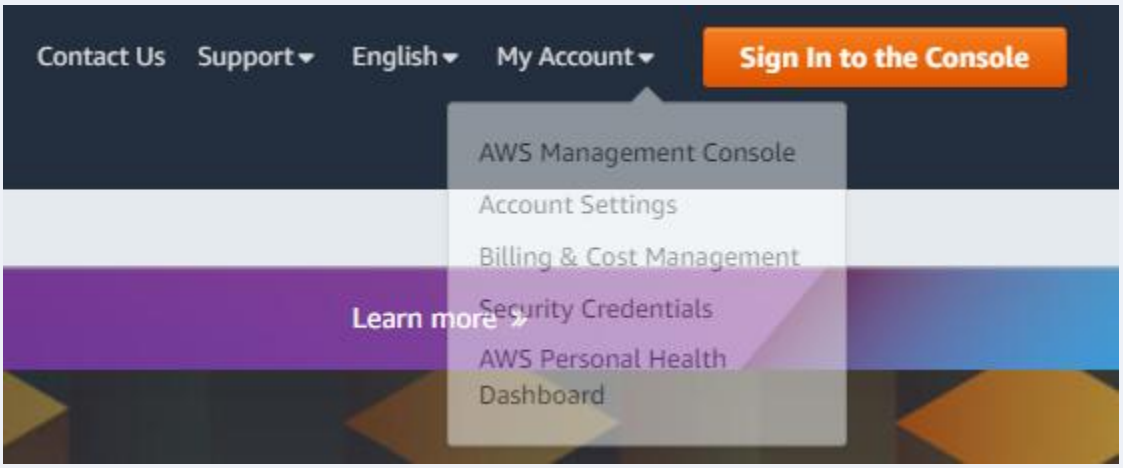


After you save the key pair, press Launch Instances button.

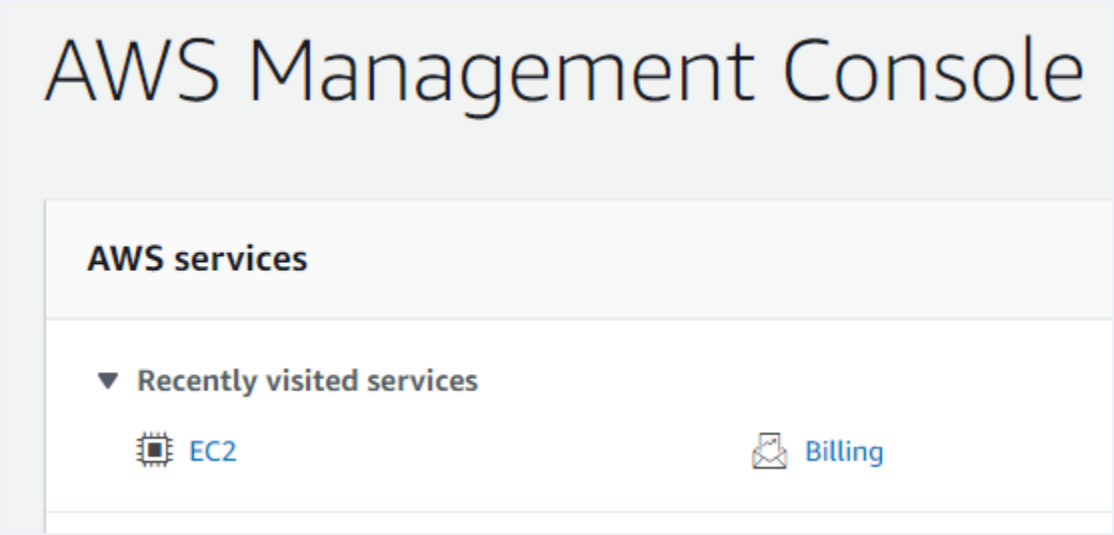




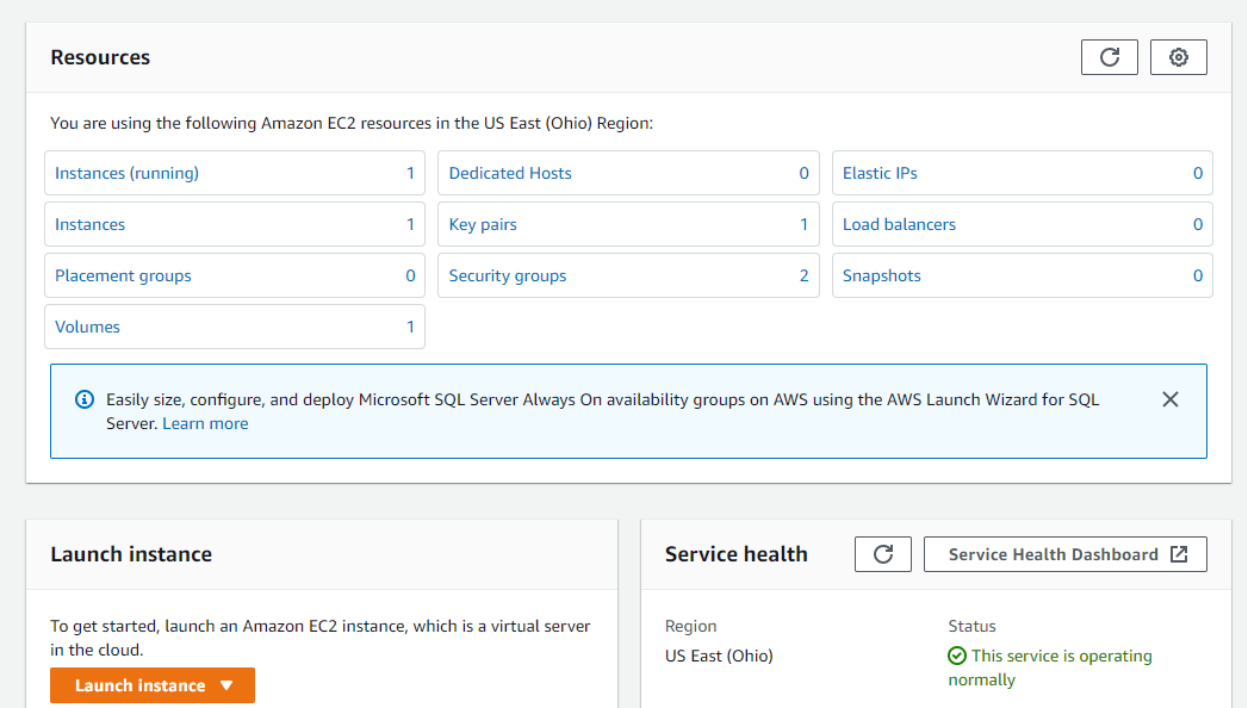
From aws.amazon.com, select My Account/AWS management Console



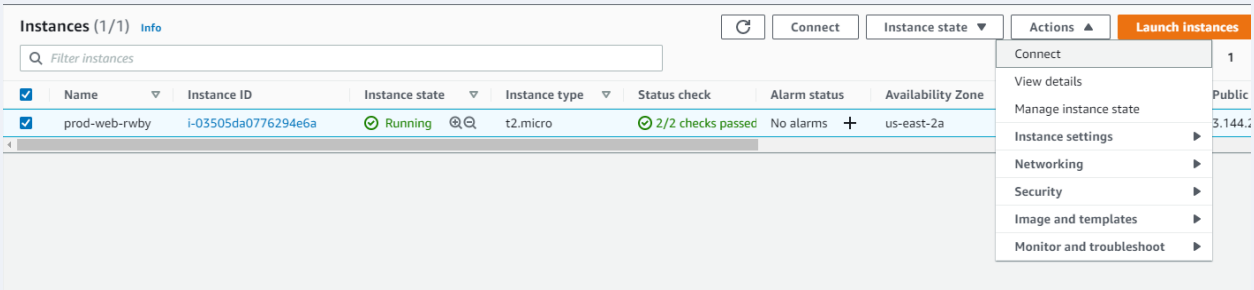
Select EC2 under Recently visited Services or under All services button



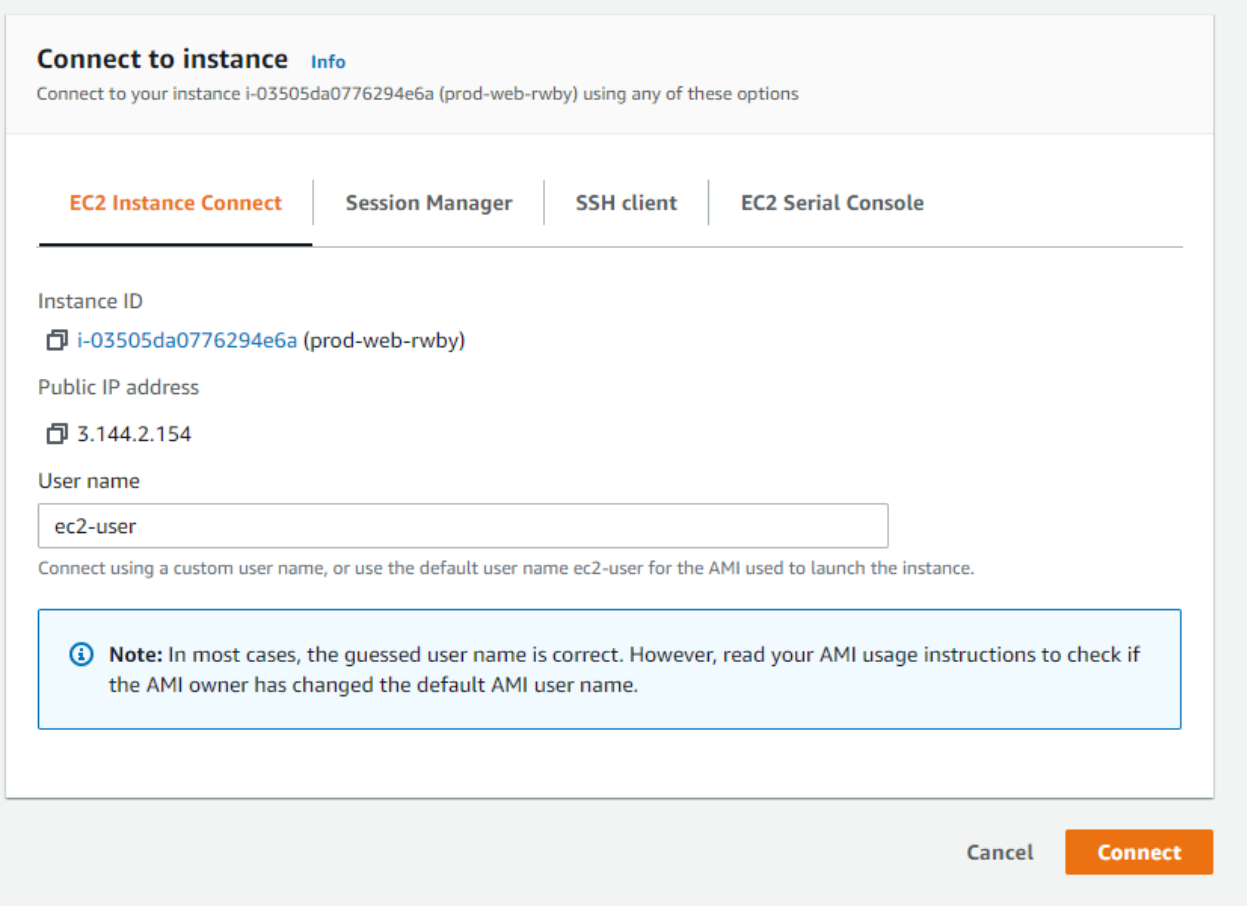
This page shows all of your EC2 resources that are running:



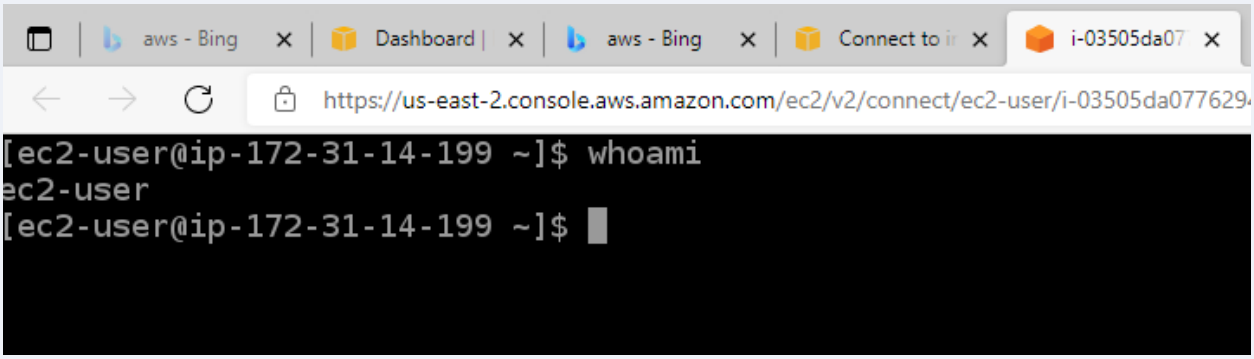
Select Instances, then press the Actions button and Connect. As an alternative, you can navigate to https://console.aws.amazon.com/ec2/



This page will have instructions on using an SSH client as well. Select Connect button at bottom.

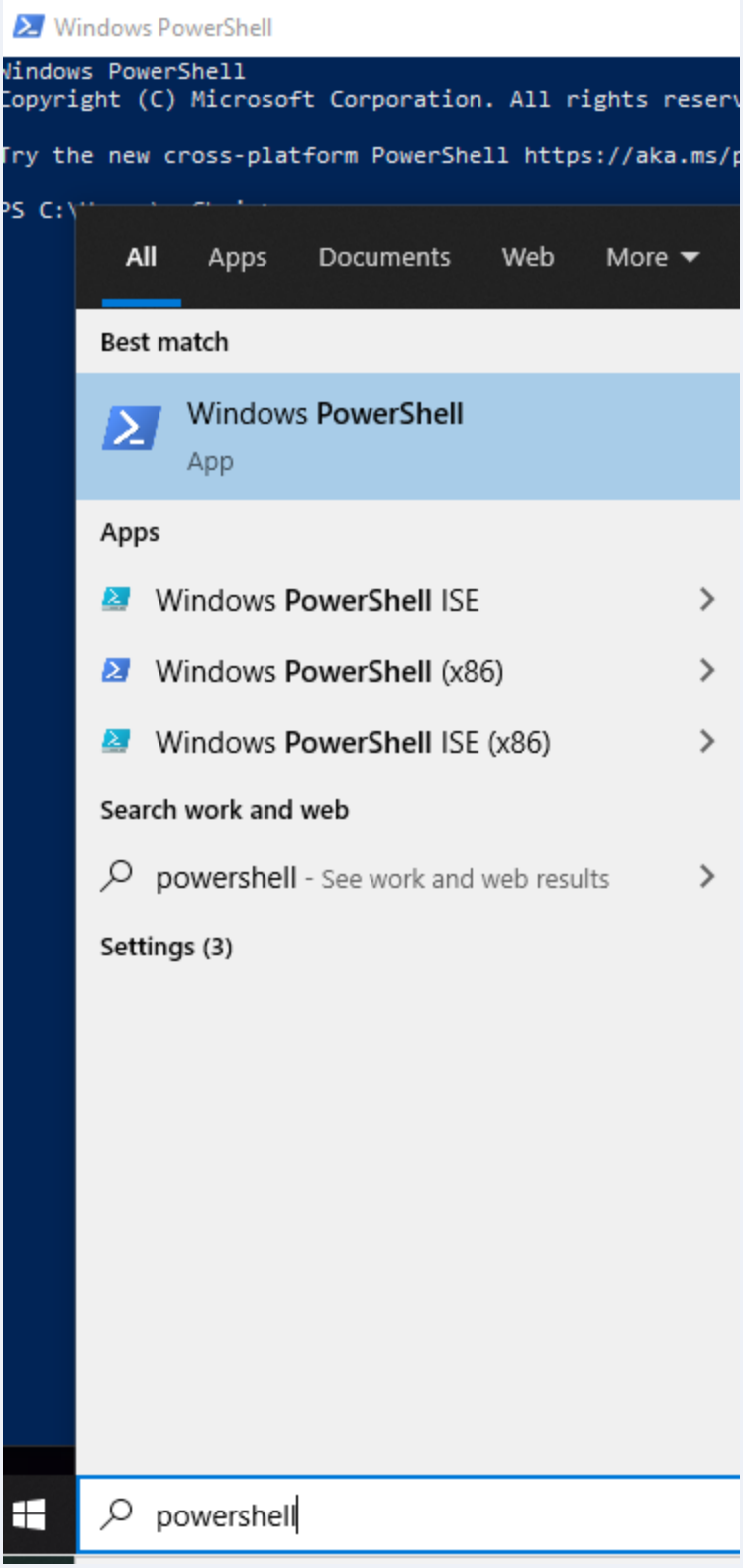


You are now logged in with a browser connection.



Using ssh connection is preferred. If on Windows, I recommend using putty client at https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html

Open powershell in windows



Navigate to the path of your pm file and change the permissions to read only for user on Windows and type the commands below

```
Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\vmChris> cd c:\
PS C:\> ls


    Directory: C:\


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----          12/7/2019   4:14 AM                PerfLogs
d-r---          8/12/2021  12:47 PM                Program Files
d-r---           8/8/2021   1:56 PM                Program Files (x86)
d-----           8/8/2021   1:50 PM                Python39
d-r---          7/27/2021  10:37 PM                Users
d-----           8/8/2021   1:50 PM                Windows
d-----          7/27/2021  10:43 PM                Windows.old
-ar---          8/11/2021  11:04 PM           1704 prod-web-rwby-access - Copy.pem
-ar---          8/11/2021  11:04 PM           1704 prod-web-rwby-access.pem
```

```
PS C:\> icacls.exe prod-web-rwby-access.pem /reset
processed file: prod-web-rwby-access.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\> icacls.exe prod-web-rwby-access.pem /grant:r "$($env:username):(r)"
processed file: prod-web-rwby-access.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\> icacls.exe prod-web-rwby-access.pem /inheritance:r
processed file: prod-web-rwby-access.pem
Successfully processed 1 files; Failed processing 0 files
PS C:\>
```

If you are in Linux or mac, simply type `chmod 400 nameOfPemFile`

From windows 10 cmd prompt type the following. Be sure to change your instance name based on your ssh instructions in aws.

```
C:\Users\vmChris>ssh -i "c:\prod-web-rwby-access.pem" ec2-user@ec2-3-144-2-154.us-east-2.compute.amazonaws.com
Last login: Thu Aug 12 16:39:18 2021 from ec2-3-16-146-2.us-east-2.compute.amazonaws.com

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https://aws.amazon.com/amazon-linux-2/
4 package(s) needed for security, out of 16 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-14-199 ~]$
```

Note: Instructions were taken and modified from Amazon aws documentation (2021)