AMAZON EC2

Server: Understanding the Basics of Servers
A server is a computer that provides essential services to other computers, such as running applications, storing and managing data, and web hosting. Servers play a vital role in many industries.

Types of servers:

1. Application servers - Apache Tomcat, IBM WebSphere etc..
2. Web servers - Apache, Ngnix, Google Web Server(GWS)
3. Database server
4. Email server
5. File server
6. proxy server
7. streaming server
8. IRC server
9. Fax server

Virtual Machine:
A Virtual Machine (VM) is a computer program that operates like a separate entity within a host computer system. Each VM acts as an independent computer, complete with its own operating system, network, and storage capabilities.

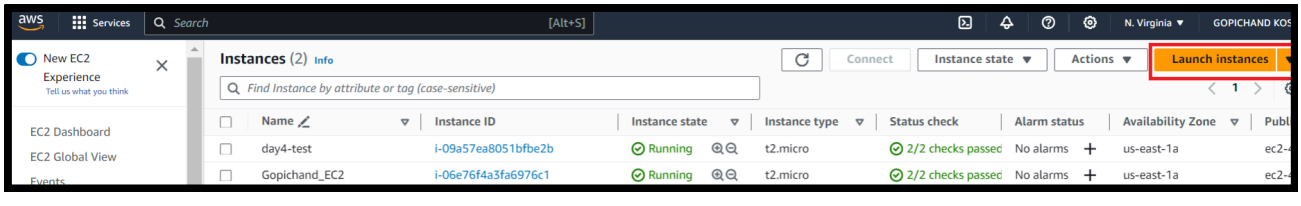
Types of VM:

1. System VM
2. Process VM

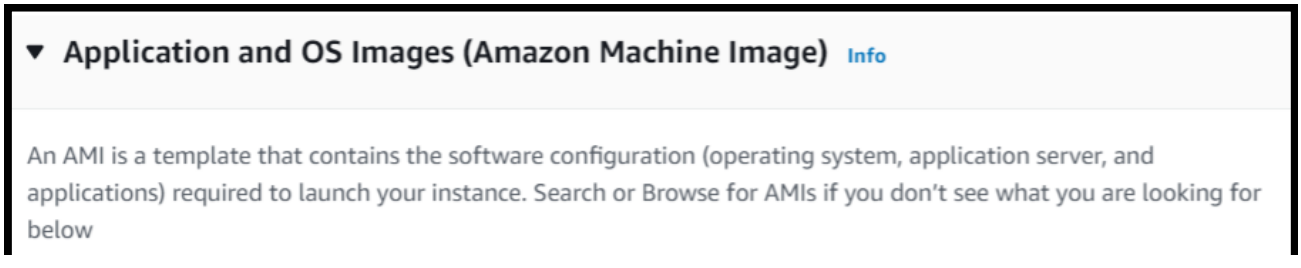
Amazon EC2 (Elastic Cloud Compute):
Amazon EC2 is a web service offered by AWS, providing secure, resizable capacity in the cloud. Its primary goal is to simplify web-scale cloud computing for developers. One of the key benefits of Amazon EC2 is its user-friendly web service interface, which enables you to easily access and configure capacity with minimal friction.

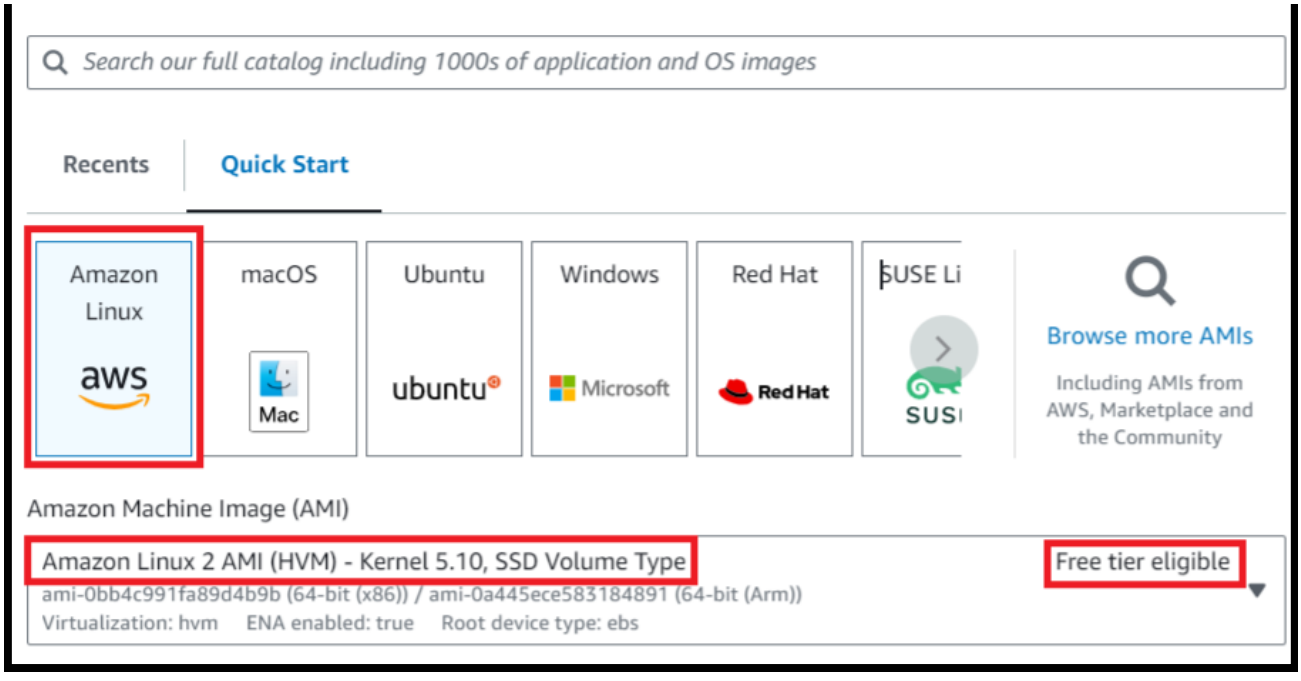
Here are the steps to launch an EC2 instance:

Launching an EC2 Instance in 7 Easy Steps (in no particular order):

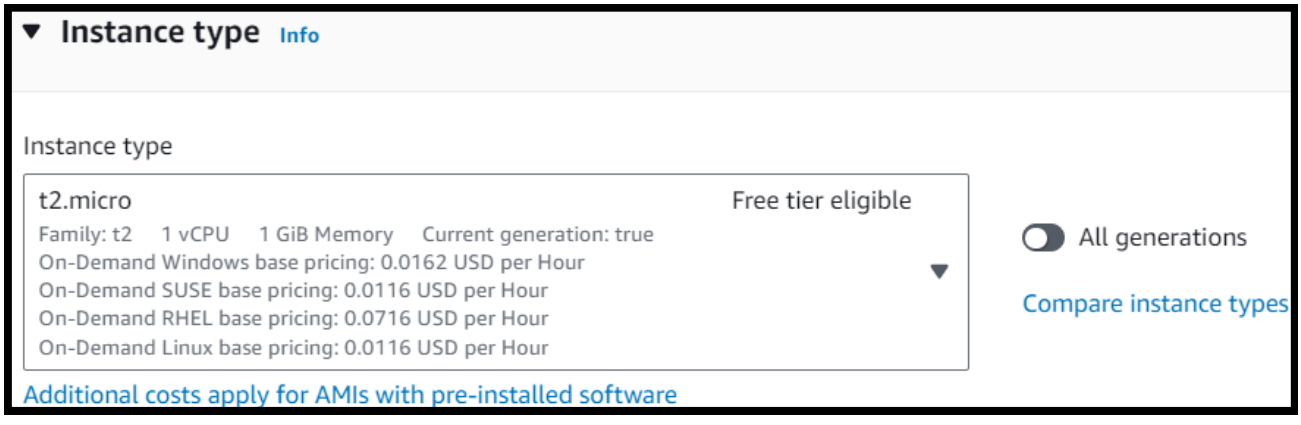


- Step 1: Choose or Create an Amazon Machine Image (AMI) that suits your needs

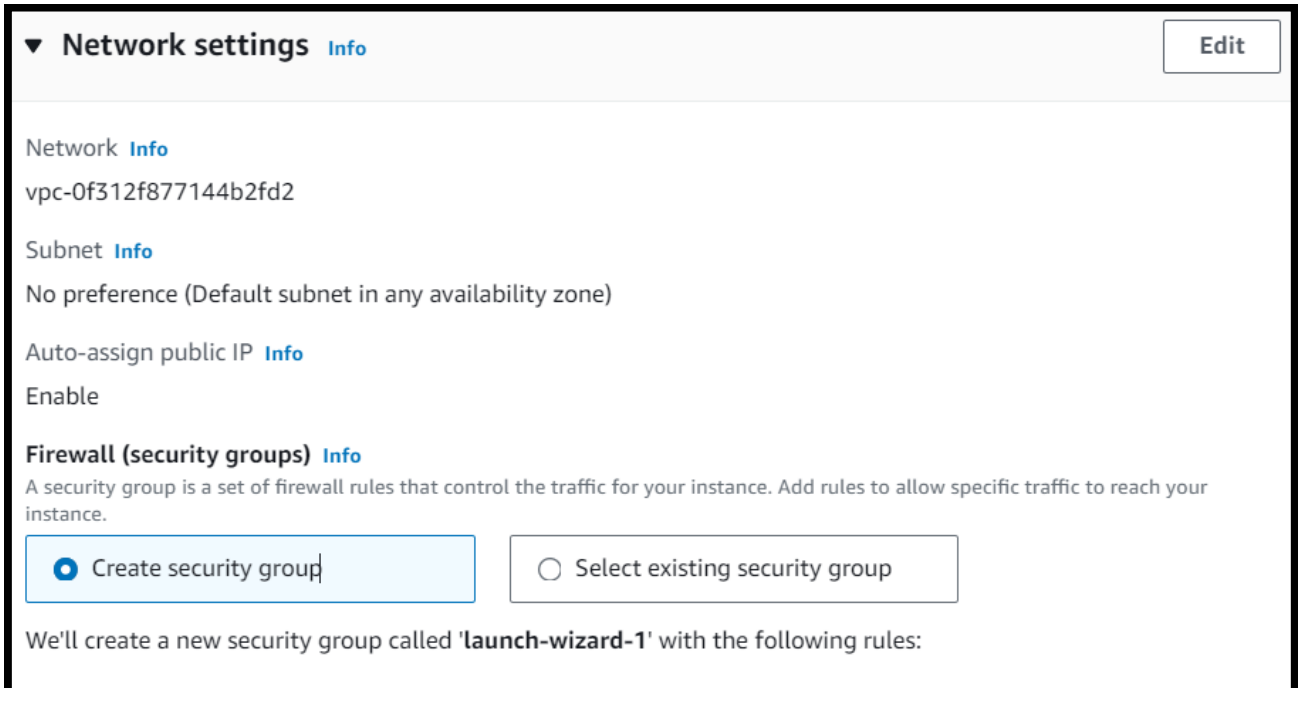


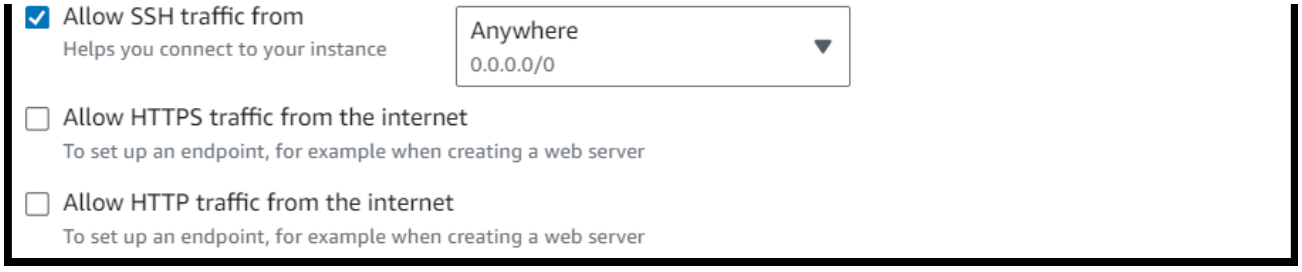


- Step 2: Customize CPU and RAM settings

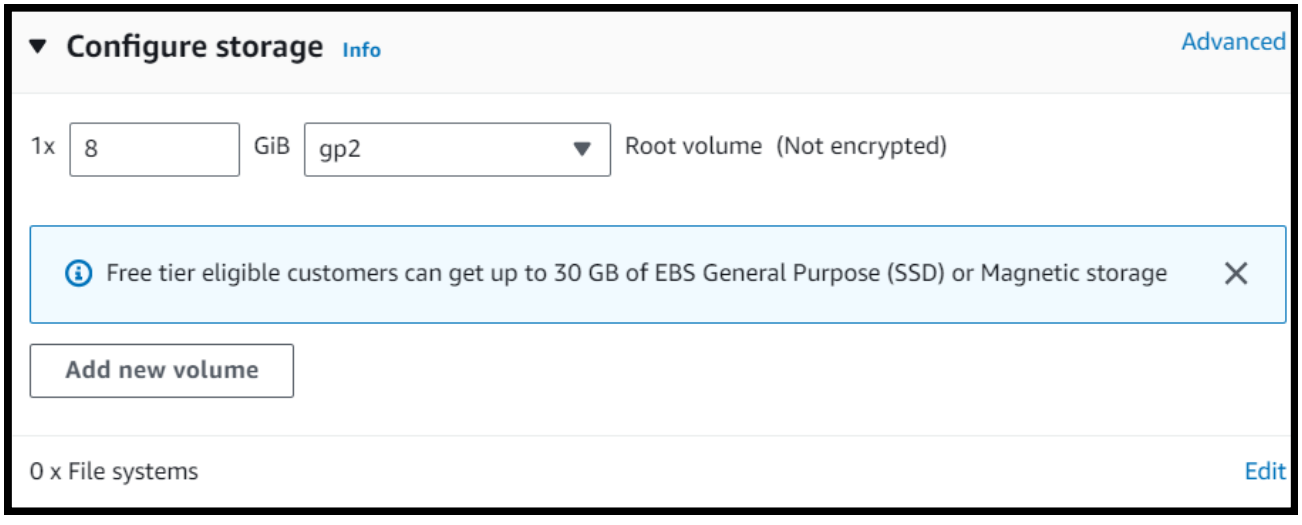


- Step 3: Configure networking settings

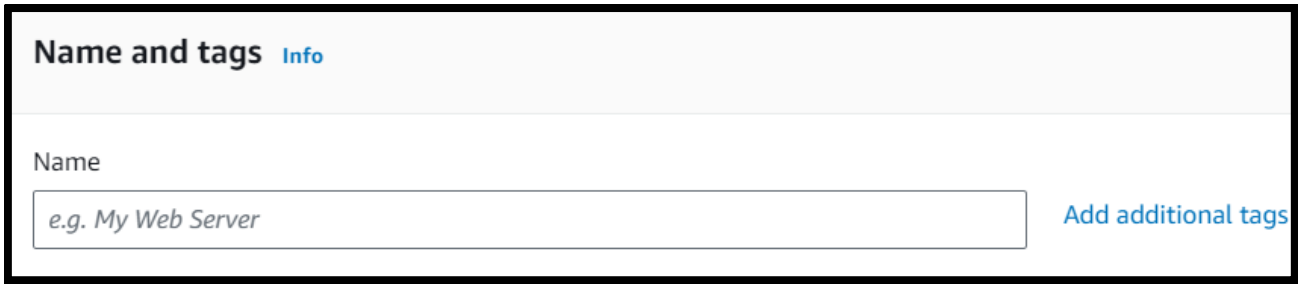




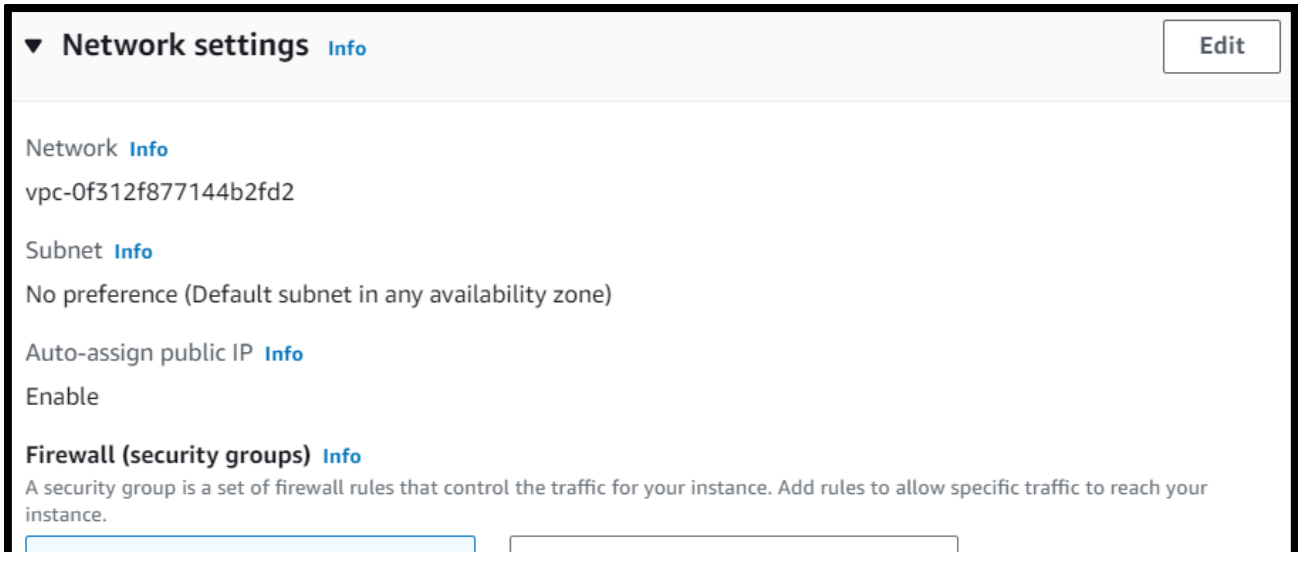
- Step 4: Add storage to the instance

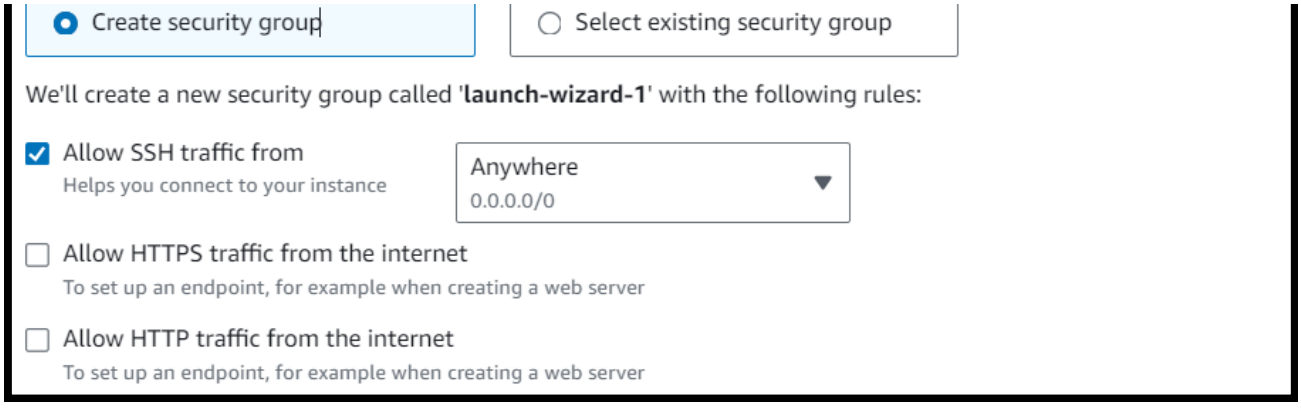


- Step 5: Give the instance a name

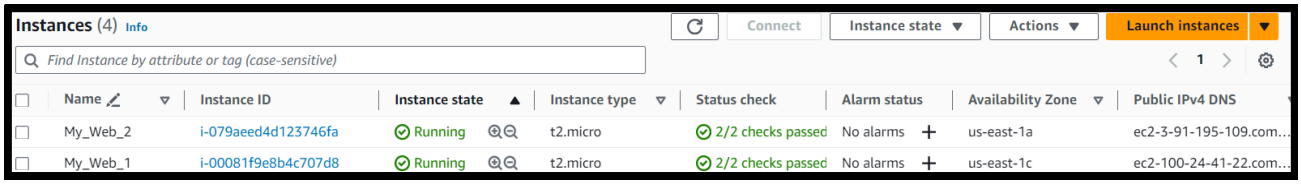


- Step 6: Set up Security Groups to protect the instance

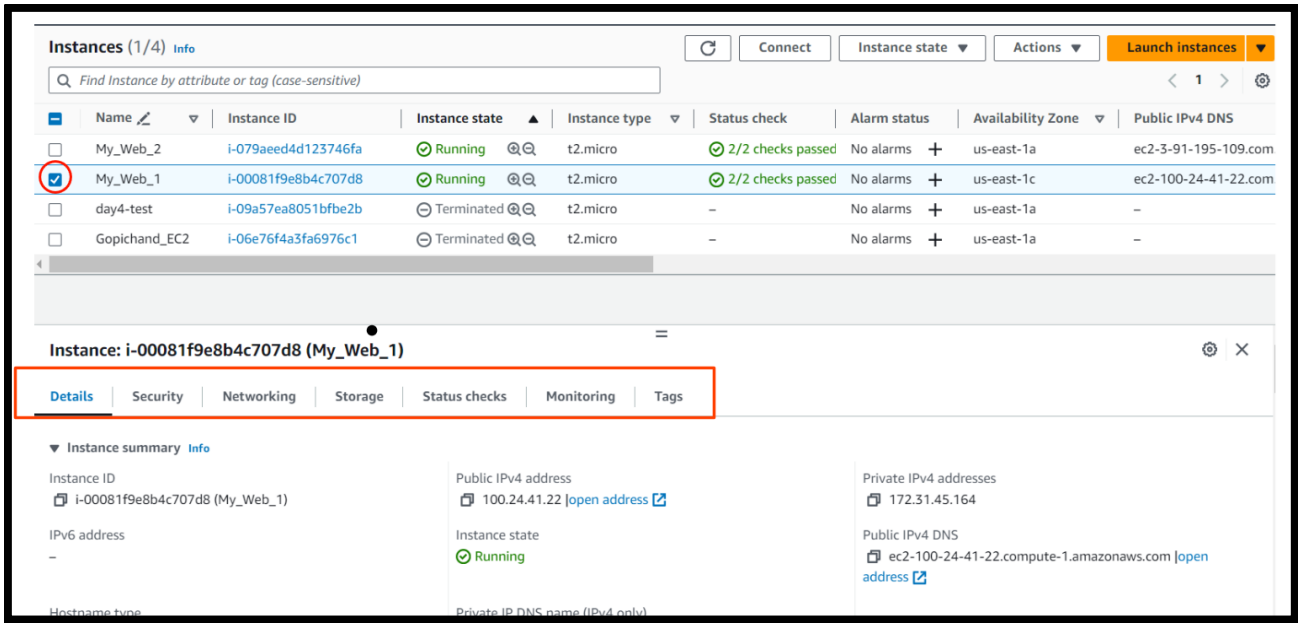




- Step 7: Review your settings and launch the instance



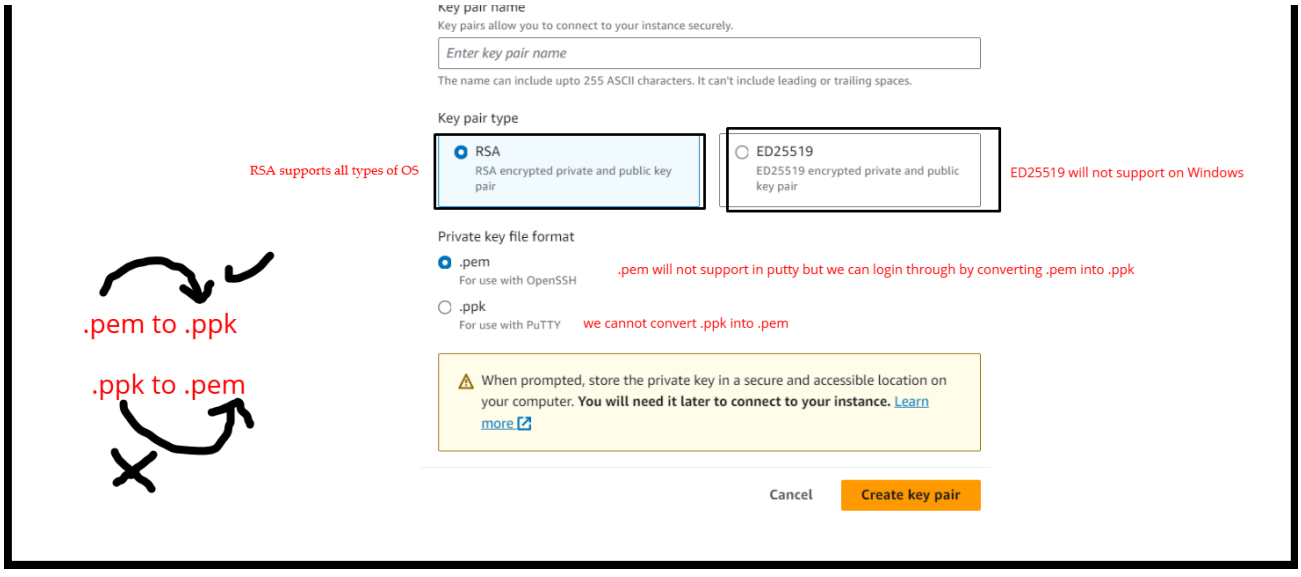
Important Notes: To view all the details of the instance, simply check the box next to it and the details will appear below.



Two Ways to Launch an EC2 Instance
Here are the two methods to launch an EC2 instance:

1. AWS Console: Launch the instance with or without a key pair using the console.
2. Putty or MobaXterm: Launch with a key pair. There are two types of keys available, namely (.ppk) and (.pem).

- PPK - Putty Private Key
- PEM - Privacy Enhanced Mail


Key pair name
Key pairs allow you to connect to your instance securely.
Enter key pair name
The name can include upto 255 ASCII characters. It can't include leading or trailing spaces.
Key pair type
RSA
RSA encrypted private and public key pair
ED25519
ED25519 encrypted private and public key pair
RSA supports all types of OS
ED25519 will not support on Windows
Private key file format
.pem
For use with OpenSSH
.pem will not support in putty but we can login through by converting .pem into .ppk
.ppk
For use with PuTTY
we cannot convert .ppk into .pem
.pem to .ppk
.ppk to .pem
When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. Learn more
Cancel
Create key pair