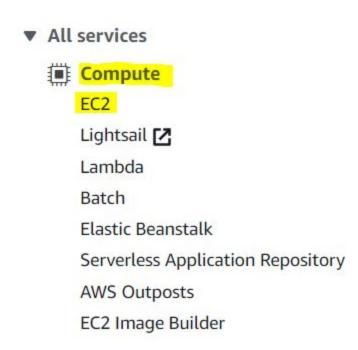




Launching an EC2 Instance in a VPC

This document will provide you with step by step guide on how to launch an EC2 instance.

1. On the AWS Management Console, click on the **EC2** service under the **Compute** section as shown below.

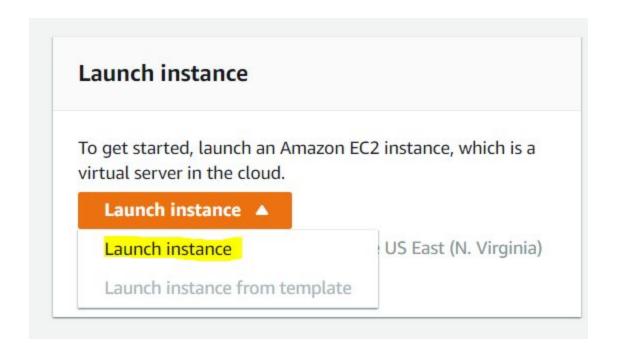


2. Once, you do so, you will be redirected to the EC2 dashboard. On this page, you need to click on the dropdown next to the **Launch instance** button and click on **Launch instance** as shown below.





EC2 Dashboard New	Elastic IPs 0	
Events	Key pairs 4	
Tags	Placement groups 0	
Limits	Tracement groups	
▼ Instances	Snapshots 0	
Instances New		
Instance Types	Launch instance	
Launch Templates	Launch instance	
Spot Requests	To get started, launch an Amazon EC2 instance, which is a	
Savings Plans	virtual server in the cloud.	
Reserved Instances	Launch instance ▼	
Dedicated Hosts New	Note: Your instances will launch in the US East (N. Virginia)	
Scheduled Instances	Region	
Capacity Reservations		

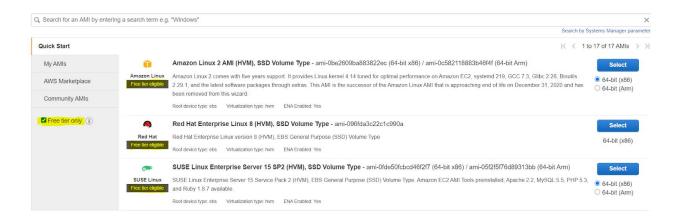


3. Now, you will be redirected to a new page. On this page, you will need to select the **Amazon Machine Image** (AMI) for your EC2 instance. For the purpose of this demonstration, you need to select the machine image that is eligible for the





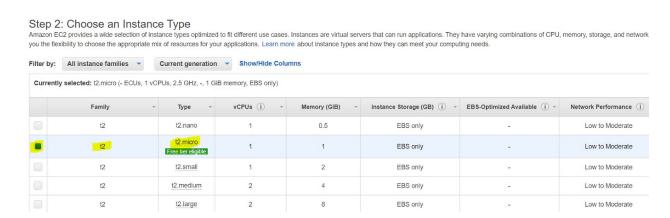
free tier. For this select the check-box next to the Free tier only as shown below. This will show you all the machines images that are eligible for the free tier.



4. Next, you need to select the machine image. Select the Amazon Linux 2 AMI. Click on the **Select** button next to this AMI as shown below.



5. Now, you will be redirected to a new page. On this page, you need to select the **Instance Type**. Select the **t2.micro** instance type as it is eligible for the free tier. This is the instance type that is selected by default.



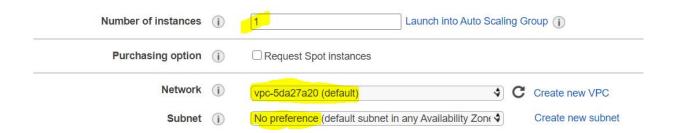




6. Next, click on the button which says **Next: Configure Instance Details** in the bottom right corner of the screen as shown below.



- 7. Now, you will be redirected to a new page. On this page, you will be selecting the **VPC** and the **subnet** for the EC2 instance.
- 8. For the field **Network** and **Subnet** leave the settings as default. This will launch your EC2 instance in the default VPC that comes with your AWS account. Also, make sure that the number of instances is 1.



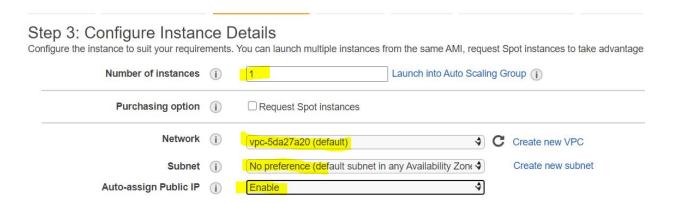
9. In the **Auto-assign Public IP** click on the dropdown and select **Enable**.



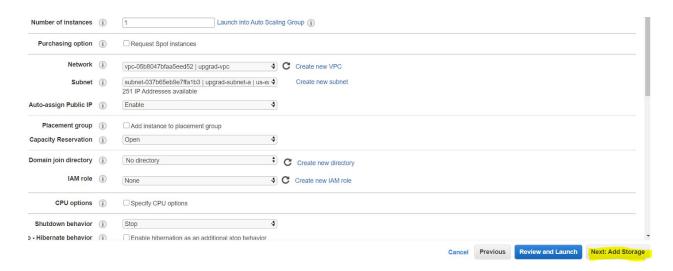
10. Till now, your page should appear as shown below.







11. Leave the rest of the settings as default. Next, click on the button **Next: Add Storage**.



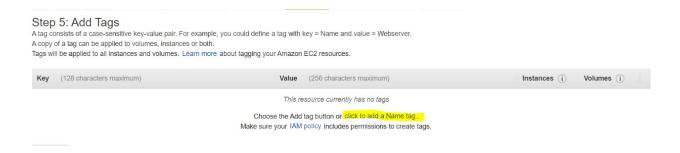
12. Leave the setting as default on this page and click on the **Next: Add Tags** button.



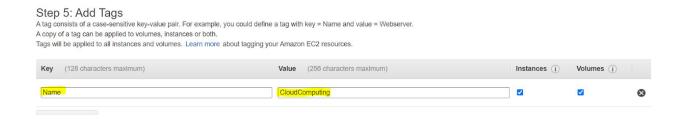




13. On this page, you can add a name tag to your EC2 instance. Click on the text which reads **click to add a Name tag** as shown in the image below.

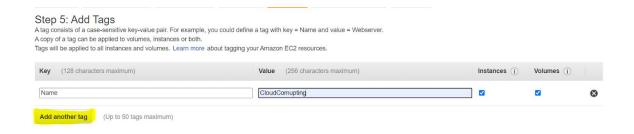


14. In the value field, you can enter any name of your choice.



It is suggested that if your AWS account has multiple EC2 instances then you should add a name tag to differentiate your instance from each other.

15. You can add more tags to your EC2 instance. Click on the **Add another tag** button as shown below.



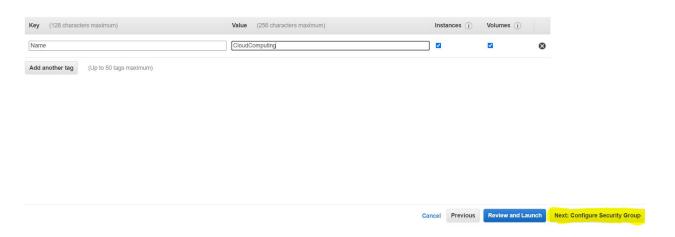
16. You can add a key-value pair as shown below.







17. Now click on the button **Next: Configure Security Group** as shown below.



18. On this page, you need to specify the security group for the instance that you are creating. By default **Create a new security group** is selected as shown below.



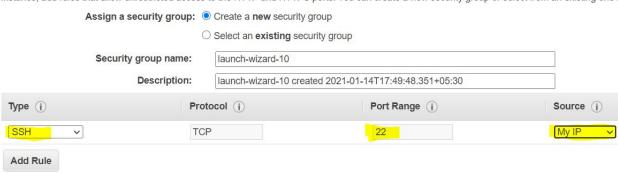
19. One rule which is the SSH or secure shell has already been added to the security group. Under the **Source** field, click on the dropdown and select **My IP** as shown below.



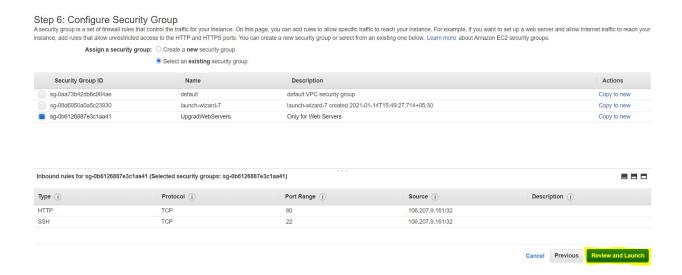


Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your i instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one t



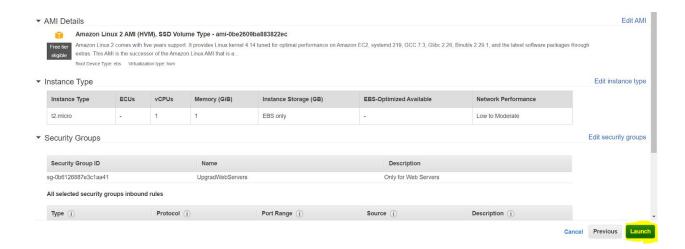
20. Next click on the **Review and Launch** button.



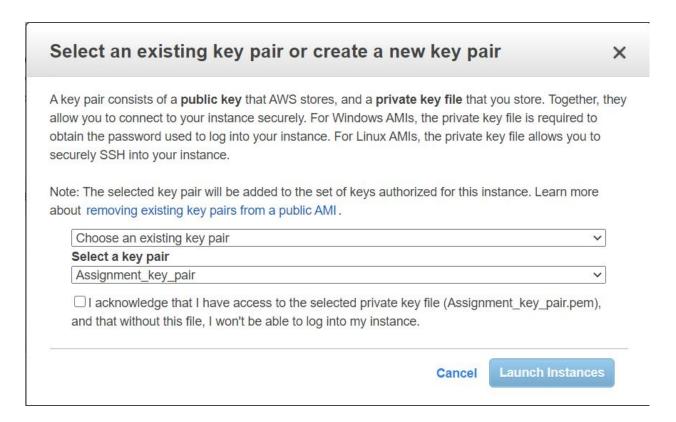
21. On this page, you can review the settings for the EC2 instance that you are about to launch. Now, to launch this instance, you need to click on the **Launch** button as shown below.







22. Once, you click on this button, it will prompt you to select a key pair for this EC2 instance.



23. If this is the first time you are launching an EC2 instance, you need to generate a new key pair. Click on the dropdown and select **Create a new key pair** as shown below.





Select an existing key pair or create a new key pair	×
A key pair consists of a public key that AWS stores, and a private key file that you sto allow you to connect to your instance securely. For Windows AMIs, the private key file is obtain the password used to log into your instance. For Linux AMIs, the private key file securely SSH into your instance.	is required to
Note: The selected key pair will be added to the set of keys authorized for this instance about removing existing key pairs from a public AMI.	e. Learn more
Choose an existing key pair	~
Select a key pair	
Assignment_key_pair	~
☐ I acknowledge that I have access to the selected private key file (Assignment_key) and that without this file, I won't be able to log into my instance.	ey_pair.pem),
Cancel	nch Instances



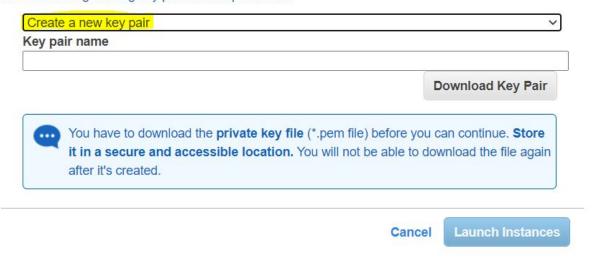


Select an existing key pair or create a new key pair

×

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.



24. You also need to specify a name for the key pair. You can name it anything as per your convenience. After you have named it, click on the **Download Key Pair** button as shown below.



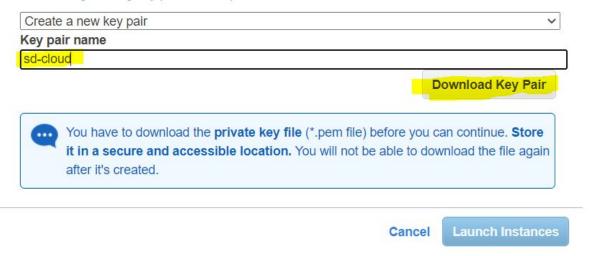


Select an existing key pair or create a new key pair



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A .pem file will be downloaded. If you are using a Linux or Mac operating system, you will need this .pem file to login to your EC2 instance. If you are a Windows user, you will need to convert this file to a .ppk to login to your EC2 instance.

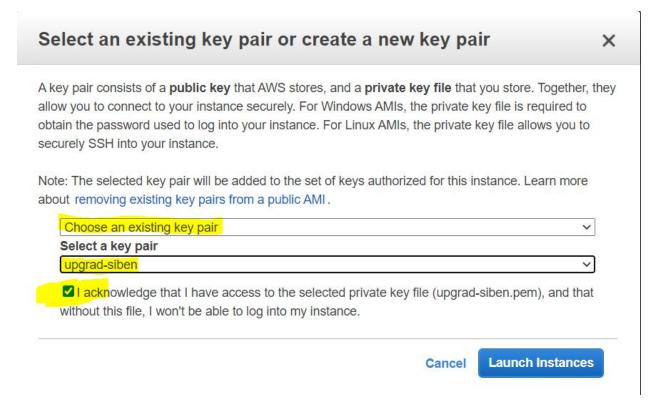
Irrespective of the operating system, it is very important to keep this .pem file safe. Under no circumstances, you should lose this file.

25. If you already have one key pair, you can use the same file to login to this EC2 instance. Select the option that says **Choose an existing key pair** and from the next dropdown select the existing key pair. You would also need to check the box as shown below.

Follow this step if and only if you have downloaded a key pair previously for this AWS account.







26. Once you have either downloaded the key pair or selected the option to use an existing pair, then you can launch the EC2 instance. To launch the EC2 instance, click on the **Launch Instances** button as shown below.



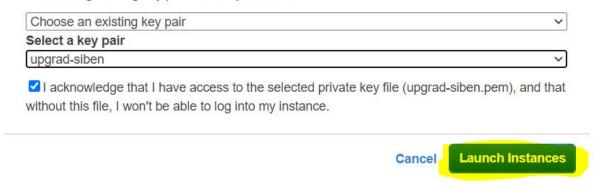


Select an existing key pair or create a new key pair

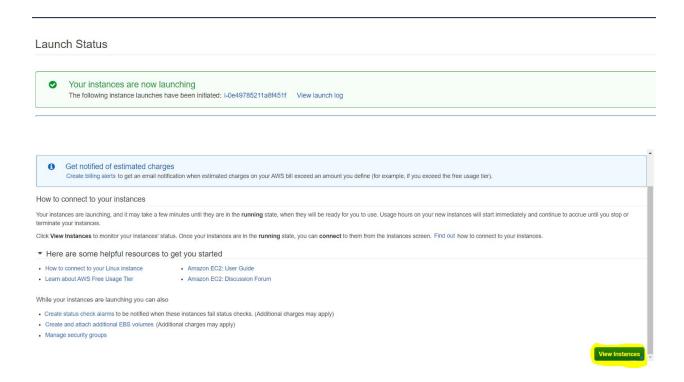


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Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.



27. A new page will appear which says **Your instances are now launching**. Scroll down to the bottom and click on the **View Instances** button as shown below.







28. On this page, you can see the instance that you have just launched.



You can see that the name is CloudComputing and the instance type is t2.micro.

With this, you have successfully launched a new EC2 instance within a VPC that you had created earlier.