

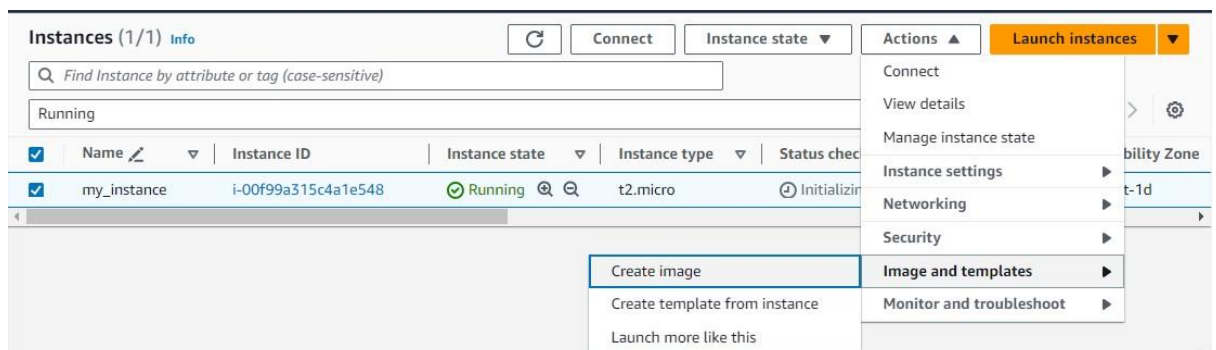
## Creating Ami

(Note: we create new Ami with the help of existing instance.)

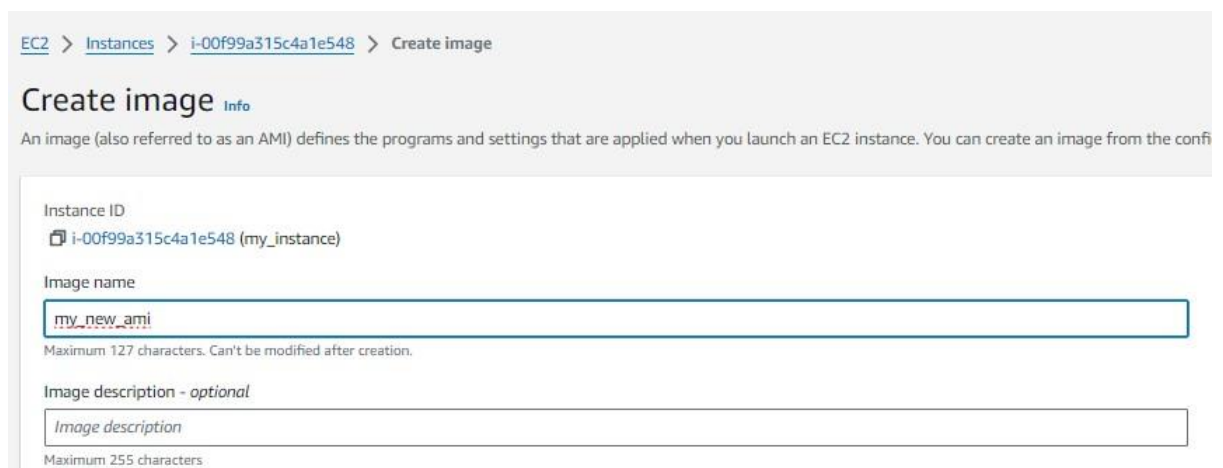
In Amazon Web Services (AWS), an AMI stands for Amazon Machine Image. It is a pre-configured virtual machine image that contains the necessary information to launch an instance, which is a virtual server in the cloud. An AMI includes an operating system, application server, and applications, along with any additional configurations required to run the desired software.

In simple word Ami means backup of existing Instance which will also help to create the new instance next time.

1. **Select the instance** which you want to create the Ami. Click on **Action** and click on **create image** option.



2. Give name and description as per your choice



3. Scroll down and click on create image...

4. New Ami is successfully created

(Ami stores the configuration or information about the instance)

Amazon Machine Images (AMIs) (1/1) Info					
	Recycle Bin	EC2 Image Builder	Actions ▾	Launch instance from AMI	
Owned by me ▾	<input type="text" value="Find AMI by attribute or tag"/>				< 1 > ⚙
<input checked="" type="checkbox"/>	Name	AMI name	AMI ID	Source	Owner
<input checked="" type="checkbox"/>		my_new_ami	ami-007dd355e04e80f5b	412832919872/my_new_ami	41283291

5. Snapshot of the image is also created

(Snapshot is an actual backup of the volume or storage)

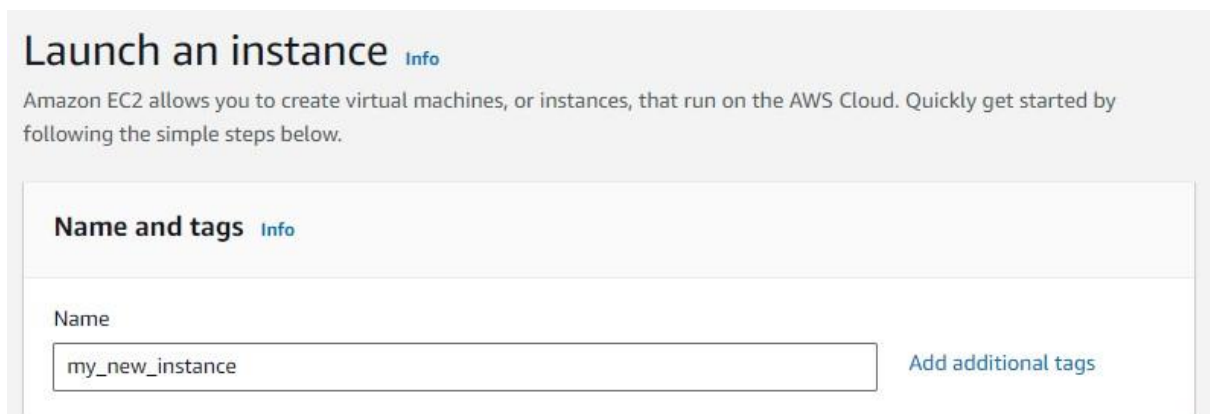
Snapshots (1/1) Info						
	Recycle Bin	Actions ▾	Create snapshot			
Owned by me ▾	<input type="text" value="Search"/>					< 1 > ⚙
<input checked="" type="checkbox"/>	Name	Snapshot ID	Volume size	Description	Storage tier	Snapshot status
<input checked="" type="checkbox"/>	-	snap-0a8fad3d85464bf9f	8 GiB	Created by CreateImage(i-...	Standard	✔ Completed

## Creating Instance using Ami :-

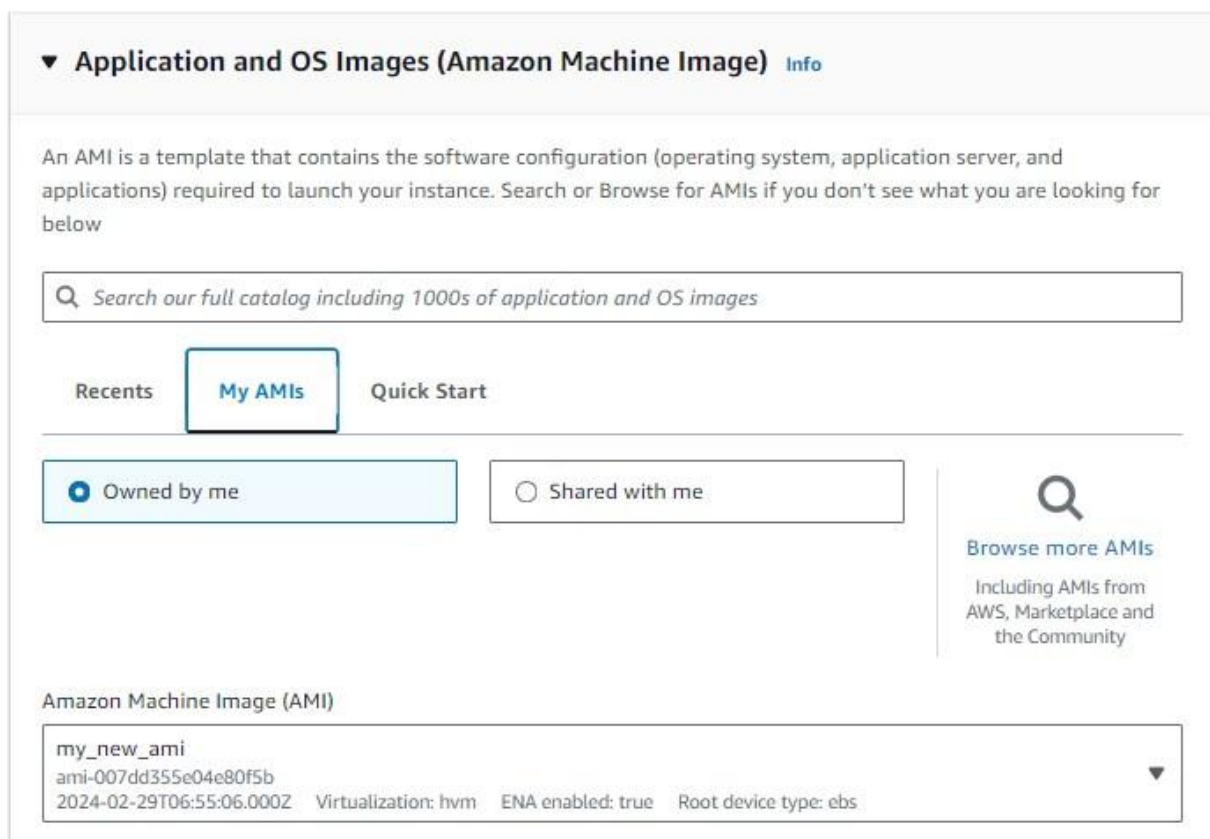
1. Click on launch instance



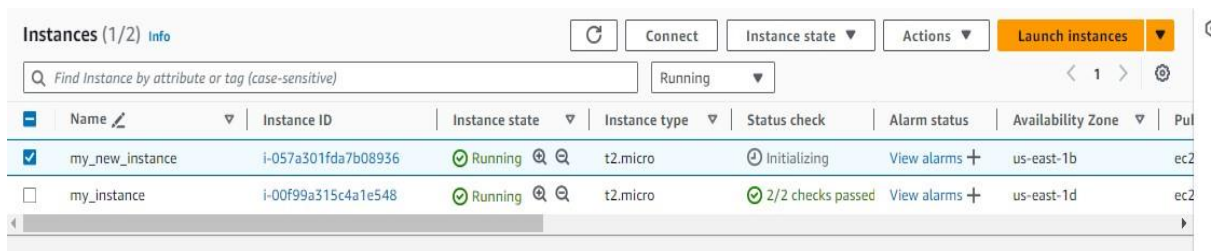
2. Give name as per your choice



3. Select your own Ami



4. Select key value pairs and click on **Create instance**
5. Select newly created instance and click on **connect**



	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
<input checked="" type="checkbox"/>	my_new_instance	i-057a301fda7b08936	Running	t2.micro	Initializing	View alarms +	us-east-1b	ec2-172-31-32-238
<input type="checkbox"/>	my_instance	i-00f99a315c4a1e548	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1d	ec2-172-31-32-238

6. We can see that whatever configuration are done in **first instance** is copied in **newly created instance**.(in this case we created 10 directories)

```
[root@ip-172-31-32-238 ec2-user]# ls
directory1 directory10 directory2 directory3 directory4 directory5 directory6 directory7 directory8 directory9
[root@ip-172-31-32-238 ec2-user]#
```

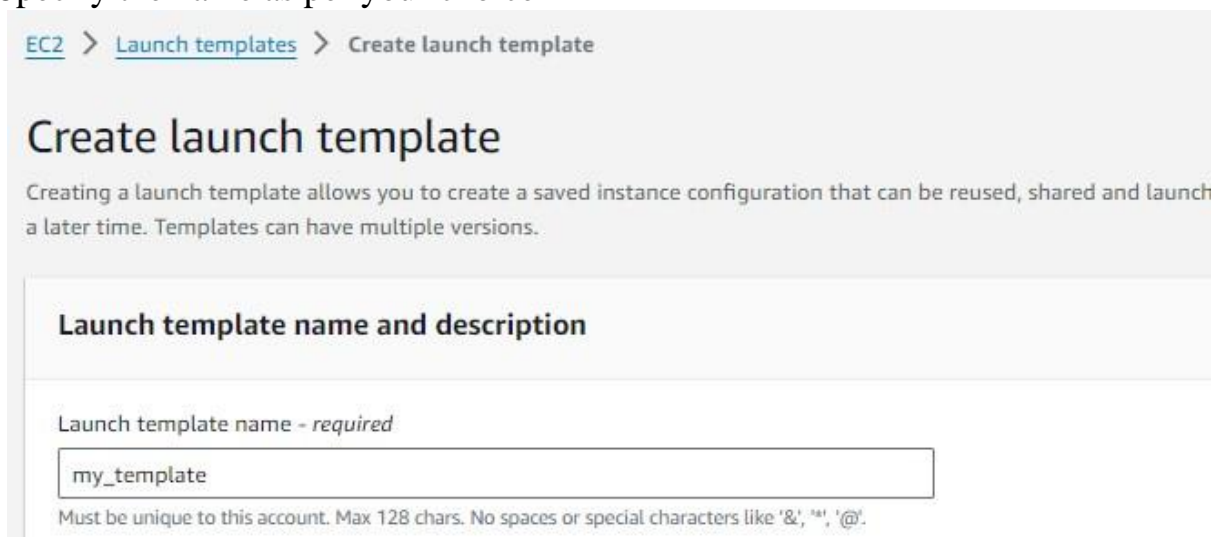
## Creating Launch Templates:-

1. Click on create launch template



Launch Template ID	Launch Template Name	Default Version	Latest Version	Create Time	Created By
--------------------	----------------------	-----------------	----------------	-------------	------------

2. Specify the name as per your choice



### Create launch template

Creating a launch template allows you to create a saved instance configuration that can be reused, shared and launched at a later time. Templates can have multiple versions.

**Launch template name and description**

Launch template name - *required*

my\_template

Must be unique to this account. Max 128 chars. No spaces or special characters like '&', '\*', '@'.

### 3. Select the image as per your requirement

**▼ Application and OS Images (Amazon Machine Image)** [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Recents

My AMIs

Quick Start

Don't include in launch template


Amazon Linux  
aws

macOS  
Mac

Ubuntu  
ubuntu®

Windows  
Microsoft

Red Hat  
Rec

  
[Browse more AMIs](#)  
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI  
ami-0440d3b780d96b29d (64-bit (x86), uefi-preferred) / ami-0f93c02efd1974b8b (64-bit (Arm), uefi)  
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Free tier eligible ▼


### 4. Select the key value pair

**▼ Key pair (login)** [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name

ssh\_access ▼

 [Create new key pair](#)

5. Select security group as per your requirement

▼ Network settings Info

Subnet Info

Don't include in launch template ▼

When you specify a subnet, a network interface is automatically added to your template.

Create new subnet

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Select existing security group

☐ Create security group

Security groups Info

Select security groups ▼

launch-wizard-10 sg-0b80e7513620792b6 X  
VPC: vpc-01a4a30d4e2c789b7

Compare security group rules

▶ Advanced network configuration

6. Select EBS volume as per your requirement

▼ Storage (volumes) Info

EBS Volumes

Hide details

▶ Volume 1 (AMI Root) (8 GiB, EBS, General purpose SSD (gp3))

AMI Volumes are not included in the template unless modified

Add new volume

7. Click on advance details and scroll at the end

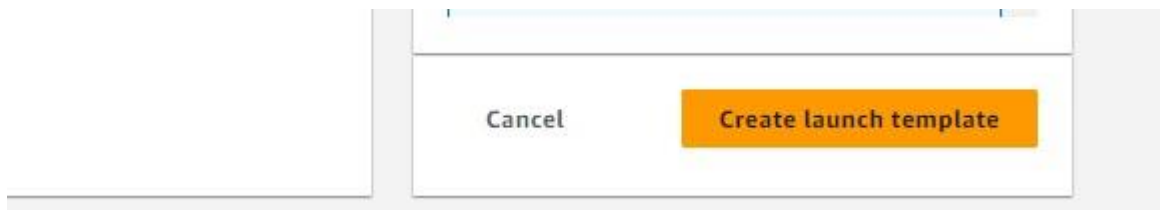
▼ Advanced details Info

8. Add this script in user data

```
#!/bin/bash

sudo -i
yum install httpd -y
systemctl start httpd
systemctl enable httpd
echo "this is my website" >> /var/www/html/index.html
|
```

9. Click on **create launch template**

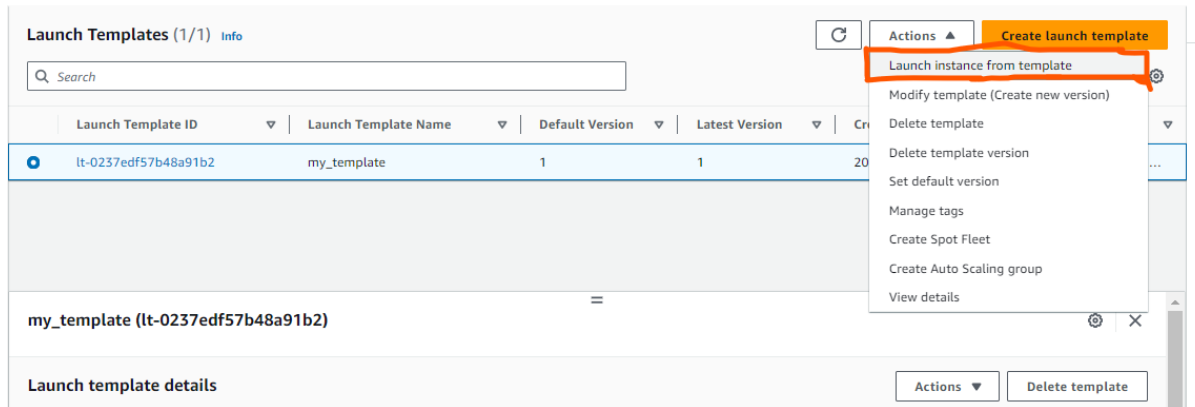


10. Template created successfully

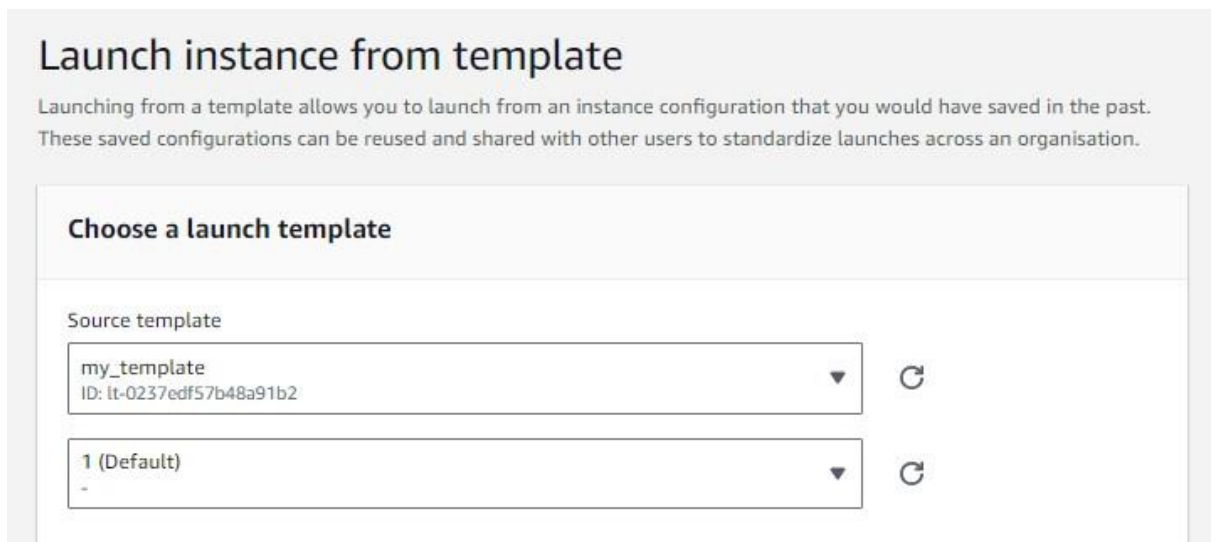
Launch Templates (1) <a href="#">info</a>							<a href="#">Refresh</a>	<a href="#">Actions</a>	<a href="#">Create launch template</a>
<input type="text" value="Search"/>							<a href="#">&lt;</a> <a href="#">1</a> <a href="#">&gt;</a> <a href="#">ⓘ</a>		
	Launch Template ID	Launch Template Name	Default Version	Latest Version	Create Time	Created By			
<input type="radio"/>	lt-0237edf57b48a91b2	my_template	1	1	2024-02-29T09:06:15.000Z	arn:aws:iam::41...			

## Launching Instance using template:-

1. Select the template and click on **actions** and select **launch instance from template** option.



2. Choose the template





### 3. Do modification as per your requirement and click on **Launch Instance**

**▼ Resource tags** [Info](#)

Currently no tags are specified and therefore the instance will launch with the default tag settings. Edit your tags if you would like to override the default settings.

[Add new tag](#)

You can add up to 50 more tags.

**► Advanced details** [Info](#)

**Firewall (security group)**  
launch-wizard-10

**Storage (volumes)**  
1 volume(s) - 8 GiB

**Free tier:** In your first year includes 750 hours of t2.micro

[Cancel](#) [Launch instance](#) [Review commands](#)

### 4. Instance created successfully in 2 steps

[EC2](#) > [Launch templates](#) > Launch instance from template

**Success**  
Successfully initiated launch of instance (i-0ea71ab0ee203f077)

► Launch log

**Next steps**

**Get notified of estimated charges**  
[Create billing alerts](#) to get an email notification when estimated charges on your AWS bill exceed an amount you define.  
For example, you can create a billing alert for when you exceed the free usage tier.

**Connect to your instance**  
Your instance is launching. It might take a few minutes for it to reach the running state and to become ready for use. To monitor the instance's state, choose **View all instances**. When the instances reach the running state, you can [connect to them](#) from the Instances screen.

[View launch templates](#)

[Shell](#) [Feedback](#) © 2024 Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)