

AMI (AMAZON MACHINE IMAGE):

An **Amazon Machine Image (AMI)** is a master image that contains the information required to launch an EC2 instance. It includes the operating system, application server, and applications. By creating your own AMI, you can launch multiple EC2 instances with the same configuration.

Objective:

- To understand the concept of Amazon Machine Image (AMI) and its role in launching EC2 instances.
 - To learn how to create a custom AMI from an existing EC2 instance for consistent and repeatable deployments.
 - To explore the steps involved in configuring and managing AMIs in AWS.
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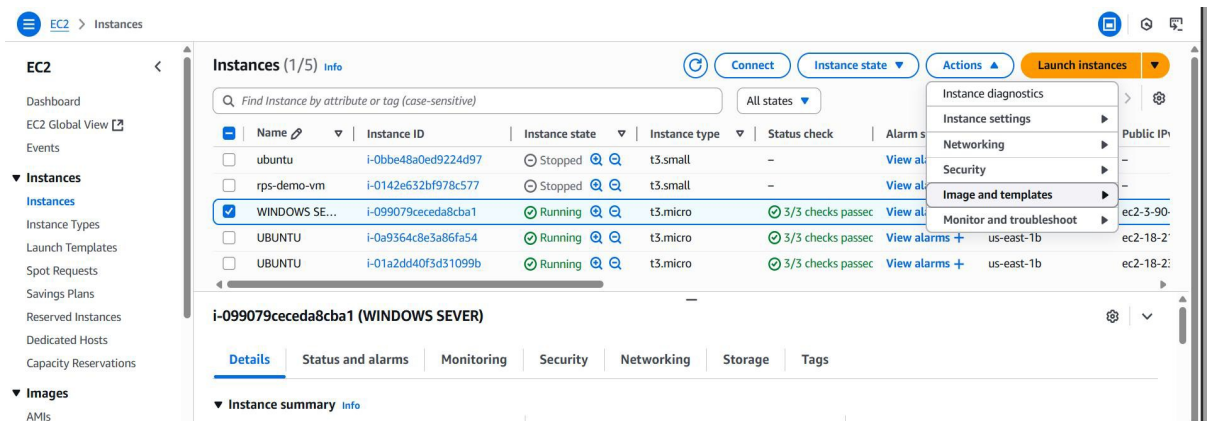
Pre-requisite:

- Basic knowledge of AWS services, especially EC2.
 - An active AWS account with permissions to create instances and images.
 - Familiarity with operating systems (Linux/Windows) and application deployment.
 - At least one running EC2 instance to create an AMI.
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Procedure:

Steps to Create an AMI in AWS

In the **EC2 Dashboard**, click **Instances** from the left panel. Select the instance you



want to create an AMI from.

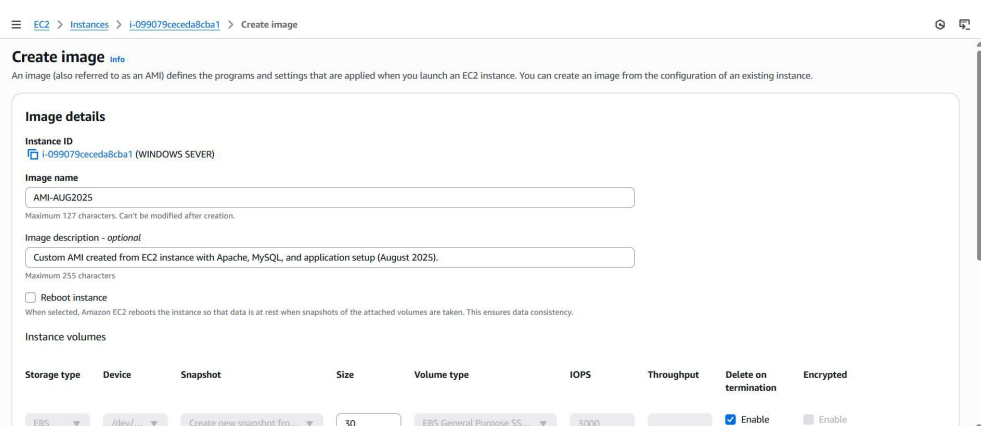
With the instance selected, click on the

Actions dropdown. Go to **Image and**

templates → **Create image**

Enter a **unique name** and **description** for the AMI.

Choose whether to include the instance's volumes (root volume and additional EBS volumes). (Optional) Decide if you want to enable **No Reboot** (not recommended for production).



Click **Create Image**.

AWS will start creating the AMI in the background. Go to the **AMIs** section in the left menu under **Images**.

You'll see the newly created AMI with the status **pending** → it will change to **available** once ready.

EC2 > Instances

EC2

Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Currently creating AMI ami-023a1d57aff1ca25 from instance i-099079ceceda8cba1. Check that the AMI status is 'Available' before deleting the instance or carrying out other actions related to this AMI.

Instances (1/5) Info

Find Instance by attribute or tag (case-sensitive)

All states

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
<input type="checkbox"/>	ubuntu	i-0bbe48a0ed9224d97	Stopped	t3.small	-	View alarms +	us-east-1b	-
<input type="checkbox"/>	rps-demo-vm	i-0142e632bf978c577	Stopped	t3.small	-	View alarms +	us-east-1b	-
<input checked="" type="checkbox"/>	WINDOWS SE...	i-099079ceceda8cba1	Running	t3.micro	3/3 checks passed	View alarms +	us-east-1b	ec2-3-90-

i-099079ceceda8cba1 (WINDOWS SEVER)

Details Status and alarms Monitoring Security Networking Storage Tags

▼ Instance summary Info

Instance ID

i-099079ceceda8cba1

Public IPv4 address

3.90.59.15 | open address

Private IPv4 addresses

172.31.45.15

Conclusion:

Through this lab, we successfully learned how to create an Amazon Machine Image (AMI) from an existing EC2 instance. AMIs are essential for replicating environments, ensuring consistency across deployments, and reducing configuration time for new instances. By using custom AMIs, organizations can streamline application scaling, improve reliability, and simplify cloud infrastructure management.