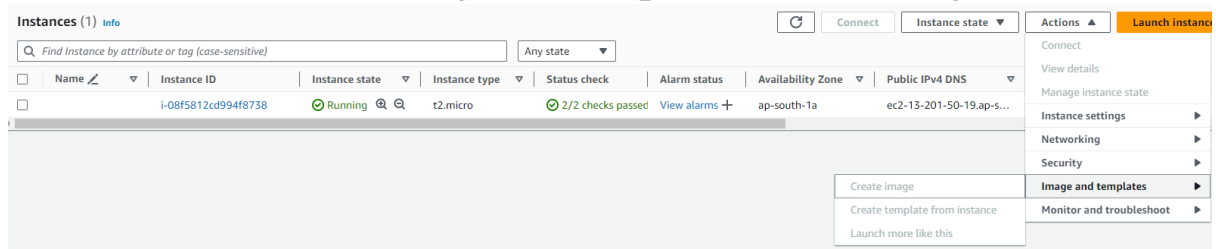


7. Program Perform an experiment to create a custom AMI from AWS EC2

Steps to create an AMI

Step1 ->Open the Amazon EC2 console

1. at <https://console.aws.amazon.com/ec2/>.
2. In the navigation pane, choose Instances.
3. Select the instance from which to create the AMI, and then choose Actions, Image and templates, Create image.



Step 2->

1. On the Create image page, specify the following information:
2. For Image name, enter a unique name for the image, up to 127 characters.
3. For Image description, enter an optional description of the image, up to 255 characters.

Instance ID
i-08f5812cd994f8738

Image name
myImage1
Maximum 127 characters. Can't be modified after creation.

Image description - *optional*
Image is from linux ami, for a free tier
Maximum 255 characters

No reboot
☐ Enable

Instance volumes

Storage type	Device	Snapshot	Size	Volume type	IOPS	Throughput	Delete on termination	Encrypted
EBS	/dev/...	Create new snapshot fr...	8	EBS General Purpose S...	3000		<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable

[Add volume](#)

During the image creation process, Amazon EC2 creates a snapshot of each of the above volumes.

Step 3->For No reboot

1. either keep the Enable check box cleared (the default), or select it.

Warning

If you choose to enable No reboot, we can't guarantee the file system integrity of the created image.

Step 4-> Instance volumes

1. You can modify the root volume, and add additional Amazon EBS and instance store volumes, as follows:
The root volume is defined in the first row. To change the size of the root volume, for Size, enter the required value.
(leave to default 8)

Step5 -> Delete on Termination

1. select Delete on termination, when you terminate the instance created from this AMI, the EBS volume is deleted.

Warning

If you clear Delete on termination, when you terminate the instance, the EBS volume is not deleted.

Step 6 (optional)

Storage type	Device	Snapshot	Size	Volume type	IOPS	Throughput	Delete on termination	Encrypted
EBS	/dev/...	Create new snapshot fr...	8	EBS General Purpose S...	3000		<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable
Insta...	/dev/...	Create new snapshot fr...	80		2000		<input type="checkbox"/> Enable	<input type="checkbox"/> Enable

1. To add an EBS volume, choose **Add volume** (which adds a new row). For Storage type, choose instance store, and you can't fill in the fields in the row. (When you launch an instance from your new AMI, additional volumes are automatically attached to the instance. Empty volumes must be formatted and mounted. Volumes based on a snapshot must be mounted.)
2. To avoid costs **Press X**

Step 7 (optional) -> Tags –

You can tag the AMI and the snapshots with the same tags, or you can tag them with different tags.

To add a tag, choose Add tag, and enter the key and value for the tag. Repeat for each tag.

Tags - optional
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

☒ Tag image and snapshots together
Tag the image and the snapshots with the same tag.

☐ Tag image and snapshots separately
Tag the image and the snapshots with different tags.

No tags associated with the resource.

You can add up to 50 more tags.

Step 8 ->

When you're ready to create your AMI, choose **Create image**.

Storage type Device Snapshot Size Volume type IOPS Throughput Delete on termination Encrypted

EBS /dev/... Create new snapshot fr... 8 EBS General Purpose S... 3000 ☒ Enable ☐ Enable

Add volume

During the image creation process, Amazon EC2 creates a snapshot of each of the above volumes.

Tags - optional
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

☒ Tag image and snapshots together
Tag the image and the snapshots with the same tag.

☐ Tag image and snapshots separately
Tag the image and the snapshots with different tags.

Key Value - optional

LUX_KEY3 3 Remove

Add new tag

You can add up to 49 more tags.

Cancel Create image

To view the status of your AMI while it is being created:

Step 9 ->

In the navigation pane, choose AMIs.

Set the filter to Owned by me, and find your AMI in the list.

Initially, the status is pending but should change to available after a few minutes.

Note down the AMI ID

Amazon Machine Images (AMIs) (1/2) Info

Owned by me Find AMI by attribute or tag

Recycle Bin EC2 Image Builder Actions Launch instance from AMI

	Name	AMI name	AMI ID	Source	Owner	Visibility	Status	Creation date
<input checked="" type="checkbox"/>	Image1		ami-092e9882ba5f6985a	058264137537/Image1	058264137537	Private	Available	2024/03/10 15:...
<input type="checkbox"/>	myImage1		ami-00e14f738539a15d	058264137537/myImage1	058264137537	Private	Available	2024/03/10 16:...

Step 10->

To view the snapshot that was created for the new AMI:

Note the ID of your AMI that you located in the previous step.

In the navigation pane, choose Snapshots.

Set the filter to Owned by me, and then find the snapshot with the new AMI ID in the Description column.



Snapshots (2/2) Info						
Owned by me		Search				
	Name	Snapshot ID	Volume size	Description	Storage tier	Snapshot status
<input checked="" type="checkbox"/>	-	snap-0f5813d1737b9617e	8 GiB	Created by CreateImage(i-08f5812cd994f8738) for ami-00e1a4f738539a15d	Standard	Completed
<input checked="" type="checkbox"/>	-	snap-0e90e99b7fb75976e	8 GiB	Created by CreateImage(i-08f5812cd994f8738) for ami-092e9892ba5f6985a	Standard	Completed

Step 11-> **Mandatory** -> **Cleanup/Terminate/delete the Instances & AMI** to avoid free **tier limits/costs** for your AWS account!

Before clean up, take a screenshot of the time of creating the AMI and show it to the lab instructor. You will also use this screen shot and steps above to create your own record note steps ahead in time

Additional task->

When you launch an instance from this AMI, Amazon EC2 uses this snapshot to create its root device volume.

Create a Linux AMI from a snapshot

If you have a snapshot of the root device volume of an instance, you can create an AMI from this snapshot using the AWS

More interested diy:

- [Create a custom Windows AMI](#)
- [Create an AMI \(Linux\)](#)