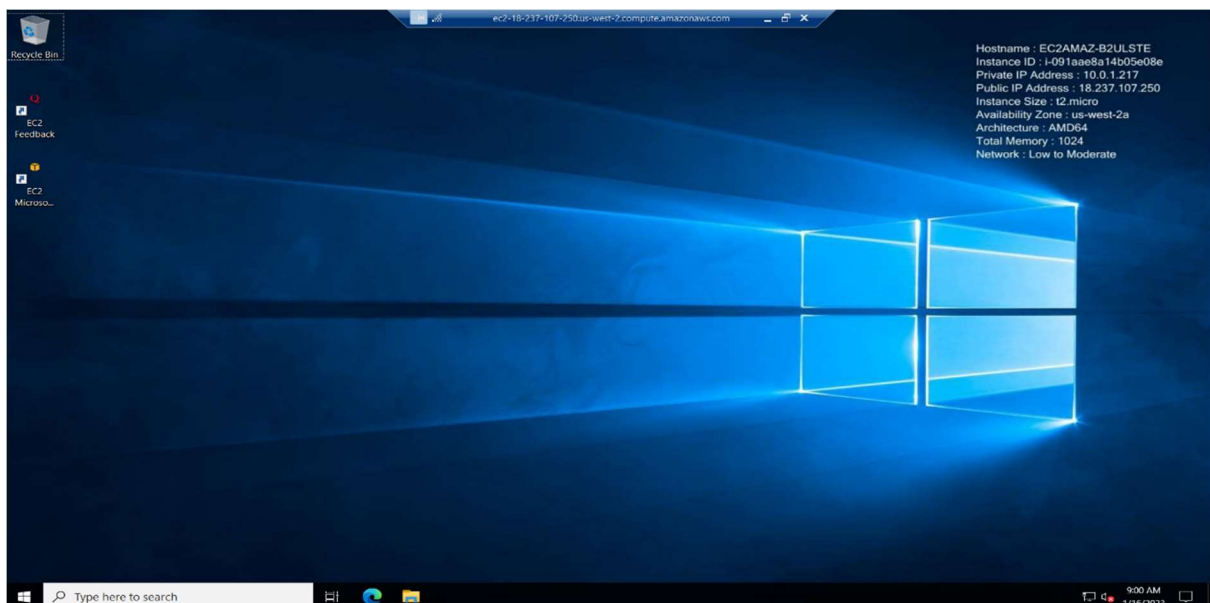
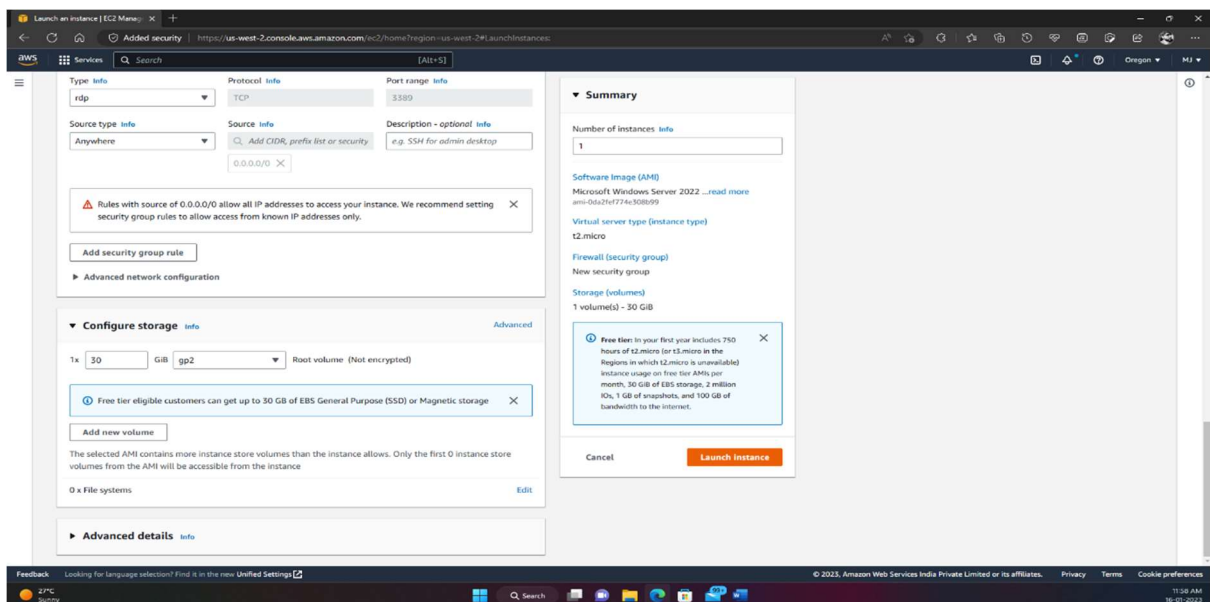
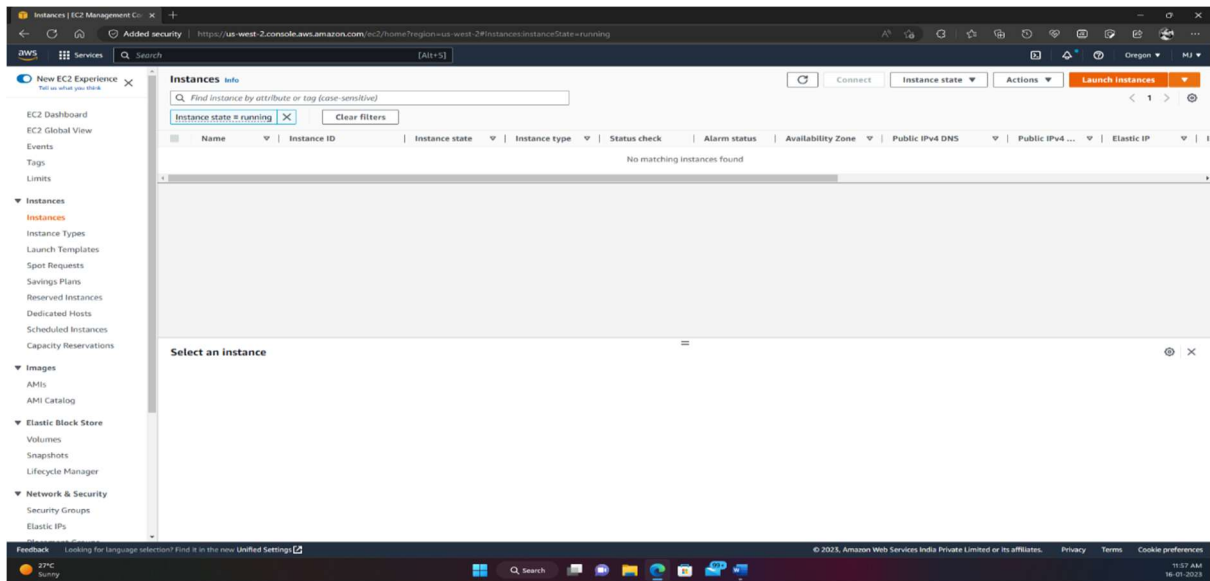


## Assignment 1:

How to take a backup of your instance and launch new instance from the Backup.

**Synopsis:** Demonstrate how to take a backup of your instance and Launch Brand New instance from your backup with the same configuration.

1. After going to EC2 Dashboard, we create/launch a EC2 instance in 'Instances'.
2. Select the instance and create on 'Actions' dropdown menu. In the menu select 'Image and templates'. In the sub-menu select 'Create Image' the backup will be created.
3. To get the same configurations do not Alter the settings in the 'Create Image' page.
4. The backup can be found under 'Images'.
5. Now since we have the backup, will be deleting the original instance to launch the backup AMI.
6. You can launch the backup in 2 ways.
  - In 'Images' select the backup and click on 'Launch instance from AMI'. The instance will be launched.
  - In 'Instances' you can go to 'Launch instance', Under 'Application and OS Image (Amazon Machine Image)' click on 'Browse more AMIs' and then go to 'My AMIs' in the navigation bar and select the backed-up instance and launch from there.



Instances | EC2 Management Console

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
win	i-091a68a14b05e08e	Running	t2.micro	2/2 checks passed	No alarms	us-west-2a	ec2-18-237-107-250.us-west-2.compute.amazonaws.com

Create image  
Create template from instance  
Launch more like this

Instance: i-091a68a14b05e08e (win)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary

Instance ID: i-091a68a14b05e08e (win)  
Public IPv4 address: 18.237.107.250 | open address  
Instance state: Running  
Private IP DNS name (IPv4 only): ip-10-0-1-217.us-west-2.compute.internal  
Instance type: t2.micro

Public IPv4 DNS: ec2-18-237-107-250.us-west-2.compute.amazonaws.com | open address  
Private IPv4 addresses: 10.0.1.217  
Elastic IP addresses: -

Hostnames: ip-10-0-1-217.us-west-2.compute.internal  
Answer private resource DNS name: IPv4 (A)

Create Image | EC2 Management Console

An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.

Instance ID: i-091a68a14b05e08e (win)

Image name: win backup

Image description - optional: backup

No reboot: ☐ Enable

Instance volumes

Volume type	Device	Snapshot	Size	Volume type	IOPS	Throughput	Delete on termination
EBS	/dev/...	Create new snapshot fr...	30	EBS General Purpose S...	100		<input checked="" type="checkbox"/> 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.

No tags associated with the resource.

Add new tag

Cancel Create image

Instances | EC2 Management Console | Images | EC2 Management Console | Volumes | EC2 Management Console | Snapshots | EC2 Management Console

Amazon Machine Images (AMIs) (1/1) info

Owned by me | Find AMI by attribute or tag

Name	AMI ID	AMI name	Source	Owner	Visibility	Status	Creation date
-	ami-06f95fafd5b453908	win backup	846780726677/win backup	846780726677	Private	Pending	2023/01/16 14:32 GM

AMI ID: ami-06f95fafd5b453908

Details | Permissions | Storage | Tags

AMI ID: ami-06f95fafd5b453908  
Image type: machine  
Owner account ID: 846780726677  
Architecture: x86\_64  
Source: 846780726677/win backup  
Creation date: Mon Jan 16 2023 14:52:16 GMT+0530 (India Standard Time)  
Product codes: -

AMI name: win backup  
Root device name: /dev/sda1  
Boot mode: -  
Block devices: /dev/sda1=30:true:gp2  
Description: backup

Platform details: Windows  
Usage operation: RunInstances:0002  
Virtualization type: hvm  
Kernel ID: -  
RAM disk ID: -

Instances | EC2 Management Co... | Images | EC2 Management Co... | Snapshots | EC2 Management Co... | Volumes | EC2 Management Co... | +

Added security | https://us-west-2.console.aws.amazon.com/ec2/home?region=us-west-2#Snapshots

Services [Alt+S]

New EC2 Experience

EC2 Dashboard  
EC2 Global View  
Events  
Tags  
Limits

Instances  
Instances  
Instance Types  
Launch Templates  
Spot Requests  
Savings Plans  
Reserved Instances  
Dedicated Hosts  
Scheduled Instances  
Capacity Reservations

Images  
AMIs  
AMI Catalog

Elastic Block Store  
Volumes  
Snapshots  
Lifecycle Manager

Network & Security  
Security Groups  
Elastic IPs

Feedback | Looking for language selection? Find it in the new Unified Settings

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### Snapshots (1/1)

Owned by me

Name	Snapshot ID	Size	Description	Storage...	Snapshot status	Started	Progress	Encryption	KMS key
-	snap-0099177a6ad0744a5	30 GiB	Created by CreateImageI...	Standard	Pending	2023/01/16 14:35 GMT+5...	Unavailable (0%)	Not encrypted	-

#### Snapshot ID: snap-0099177a6ad0744a5

Details | Permissions | Storage tier | Tags

Snapshot ID  
snap-0099177a6ad0744a5

Size  
30 GiB

Volume ID  
vol-0c13ea621edc8fb0e

Progress  
Unavailable

Snapshot status  
Pending

Owner  
846780726677

Started  
Mon Jan 16 2023 14:35:47 GMT+05:30 (India Standard Time)

Product codes  
-

Encryption  
Not encrypted

KMS key ID  
-

KMS key alias  
-

Fast snapshot restore  
-

Description  
Created by CreateImageI-091aae8a14b05e08e for ami-06f95fafd5b453908

Instances | EC2 Management Co... | Images | EC2 Management Co... | Snapshots | EC2 Management Co... | Volumes | EC2 Management Co... | +

Added security | https://us-west-2.console.aws.amazon.com/ec2/home?region=us-west-2#Snapshots

Services [Alt+S]

New EC2 Experience

EC2 Dashboard  
EC2 Global View  
Events  
Tags  
Limits

Instances  
Instances  
Instance Types  
Launch Templates  
Spot Requests  
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Capacity Reservations

Images  
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AMI Catalog

Elastic Block Store  
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Snapshots  
Lifecycle Manager

Network & Security  
Security Groups  
Elastic IPs

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### Snapshots (1/1)

Owned by me

Name	Snapshot ID	Size	Description	Storage...	Snapshot status	Started	Progress	Encryption	KMS key
-	snap-0099177a6ad0744a5	30 GiB	Created by CreateImageI...	Standard	Completed	2023/01/16 14:35 GMT+5...	Available (100%)	Not encrypted	-

#### Snapshot ID: snap-0099177a6ad0744a5

Details | Permissions | Storage tier | Tags

Snapshot ID  
snap-0099177a6ad0744a5

Size  
30 GiB

Volume ID  
vol-0c13ea621edc8fb0e

Progress  
Available (100%)

Snapshot status  
Completed

Owner  
846780726677

Started  
Mon Jan 16 2023 14:35:47 GMT+05:30 (India Standard Time)

Product codes  
-

Encryption  
Not encrypted

KMS key ID  
-

KMS key alias  
-

Fast snapshot restore  
-

Description  
Created by CreateImageI-091aae8a14b05e08e for ami-06f95fafd5b453908

Instances | EC2 Management Co... | Images | EC2 Management Co... | Snapshots | EC2 Management Co... | Volumes | EC2 Management Co... | +

Added security | https://us-west-2.console.aws.amazon.com/ec2/home?region=us-west-2#Imagesvisibility-owned-by-me

Services [Alt+S]

New EC2 Experience

EC2 Dashboard  
EC2 Global View  
Events  
Tags  
Limits

Instances  
Instances  
Instance Types  
Launch Templates  
Spot Requests  
Savings Plans  
Reserved Instances  
Dedicated Hosts  
Scheduled Instances  
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Security Groups  
Elastic IPs

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### Amazon Machine Images (AMIs) (1/1)

Owned by me

Name	AMI ID	AMI name	Source	Owner	Visibility	Status	Creation date
-	ami-06f95fafd5b453908	win backup	846780726677/win backup	846780726677	Private	Available	2023/01/16 14:32 GMT

#### AMI ID: ami-06f95fafd5b453908

Details | Permissions | Storage | Tags

AMI ID  
ami-06f95fafd5b453908

Image type  
machine

Platform details  
Windows

AMI name  
win backup

Owner account ID  
846780726677

Architecture  
x86\_64

Root device name  
/dev/sda1

Status  
Available

Source  
846780726677/win backup

Usage operation  
RunInstances:0002

Boot mode  
-

State reason  
-

Creation date  
Mon Jan 16 2023 14:32:16 GMT+05:30 (India Standard Time)

Virtualization type  
hvm

Block devices  
/dev/sda1=snap-0099177a6ad0744a5:30:true:gp2

Description  
backup

Product codes  
-

Root device type  
EBS

Kernel ID  
-

RAM disk ID  
-

Currently creating AMI ami-06f95fafd5b453908 from instance i-091aae8a14b05e08e. Check that the AMI status is 'Available' before deleting the instance or carrying out other actions related to this AMI.

**Instances (1/1) Info**

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
win	i-091aae8a14b05e08e	Running	t2.micro	2/2 checks passed	No alarms	us-west-2a

**Instance: i-091aae8a14b05e08e (win)**

**Details** | Security | Networking | Storage | Status checks | Monitoring | Tags

**Instance summary Info**

Instance ID	i-091aae8a14b05e08e (win)
Public IPv4 address	18.237.107.250   <a href="#">open address</a>
Private IPv4 addresses	10.0.1.217
Instance state	Running
Public IPv4 DNS	ec2-18-237-107-250.us-west-2.compute.amazonaws.com   <a href="#">open address</a>
Private IP DNS name (IPv4 only)	ip-10-0-1-217.us-west-2.compute.internal
Instance type	t2.micro
Hostname type	
IP name	ip-10-0-1-217.us-west-2.compute.internal
Answer private resource DNS name	
IPv4 (A)	

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

Owned by me | Find AMI by attribute or tag

Name	AMI ID	AMI name	Source	Owner	Visibility	Status	Creation date
-	ami-06f95fafd5b453908	win backup	846780726677/win backup	846780726677	Private	Available	2023/01/16 14:32 GMT

**AMI ID: ami-06f95fafd5b453908**

**Details** | Permissions | Storage | Tags

AMI ID	ami-06f95fafd5b453908
AMI name	win backup
Root device name	/dev/sda1
Root mode	-
Block devices	/dev/sda1 snap-0099177af6a80744e5:30:true:gp2
Description	backup
Image type	machine
Owner account ID	846780726677
Status	Available
State reason	-
Platform details	Windows
Architecture	x86_64
Source	846780726677/win backup
Creation date	Mon Jan 16 2023 14:32:16 GMT+05:30 (India Standard Time)
Product codes	-
Root device type	EBS
Usage operation	RunInstances:0002
Virtualization type	hvm
Kernel ID	-
RAM disk ID	-

**Instances (1) Info**

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
win	i-091aae8a14b05e08e	Terminated	t2.micro	-	No alarms	us-west-2a	-	-	-

**Select an instance**

Instances (2) Info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
win	i-091aa8a14b65e08e	Terminated	t2.micro	-	No alarms	us-west-2a	-	-	-
win backup	i-0ef9cf7f55609d783	Pending	t2.micro	-	No alarms	us-west-2a	ec2-34-217-176-81.us-...	34.217.176.81	-

Select an instance

Instances (1/2) Info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
win	i-091aa8a14b65e08e	Terminated	t2.micro	-	No alarms	us-west-2a	-	-	-
win backup	i-0ef9cf7f55609d783	Running	t2.micro	2/2 checks passed	No alarms	us-west-2a	ec2-34-217-176-81.us-...	34.217.176.81	-

Instance: i-0ef9cf7f55609d783 (win backup)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary Info

Instance ID	i-0ef9cf7f55609d783 (win backup)	Public IPv4 address	34.217.176.81   open address	Private IPv4 addresses	10.0.3.52
IPv6 address	-	Instance state	Running	Public IPv4 DNS	ec2-34-217-176-81.us-west-2.compute.amazonaws.com   open address
Hostname type	-	Private IP DNS name (IPv4 only)	ip-10-0-3-52.us-west-2.compute.internal	Elastic IP addresses	-
IP name	ip-10-0-3-52.us-west-2.compute.internal	Instance type	t2.micro		
Answer private resource DNS name	IPv4 (A)				

Instances (1/2) Info

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
win	i-091aa8a14b65e08e	Terminated	t2.micro	-	No alarms	us-west-2a	-	-	-
win backup	i-0ef9cf7f55609d783	Running	t2.micro	2/2 checks passed	No alarms	us-west-2a	ec2-34-217-176-81.us-...	34.217.176.81	-

Instance: i-0ef9cf7f55609d783 (win backup)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary Info

Instance ID	i-0ef9cf7f55609d783 (win backup)	Public IPv4 address	34.217.176.81   open address	Private IPv4 addresses	10.0.3.52
IPv6 address	-	Instance state	Running	Public IPv4 DNS	ec2-34-217-176-81.us-west-2.compute.amazonaws.com   open address
Hostname type	-	Private IP DNS name (IPv4 only)	ip-10-0-3-52.us-west-2.compute.internal	Elastic IP addresses	-
IP name	ip-10-0-3-52.us-west-2.compute.internal	Instance type	t2.micro		
Answer private resource DNS name	IPv4 (A)				