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Learn Beyond (Autonomous, NAAC "A")
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AWS Cloud and Devops

by Mr. Mahendran Selvakumar

Create a snapshot from an EBS Volume

Name: **Santhiya.S**

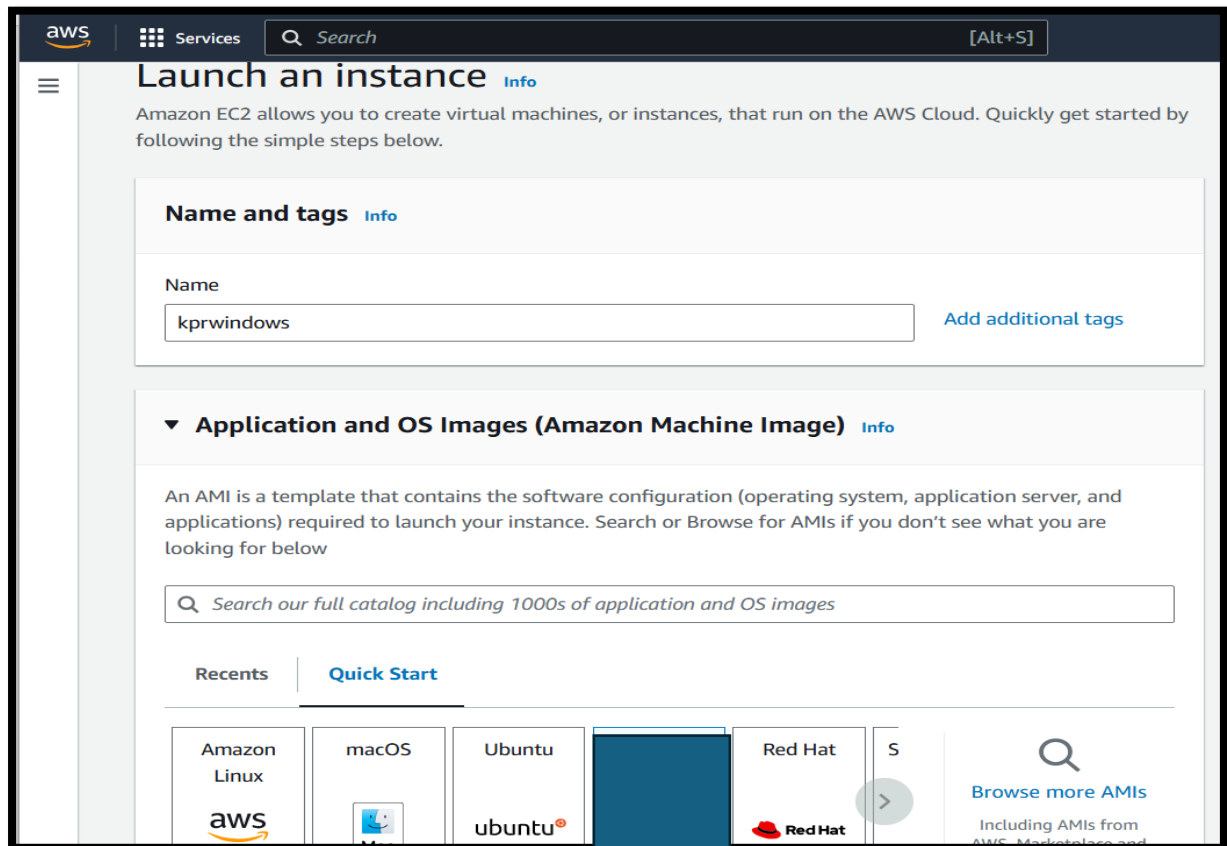
Class: **CSE-C(II year)**

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Department of Computer Science and Engineering

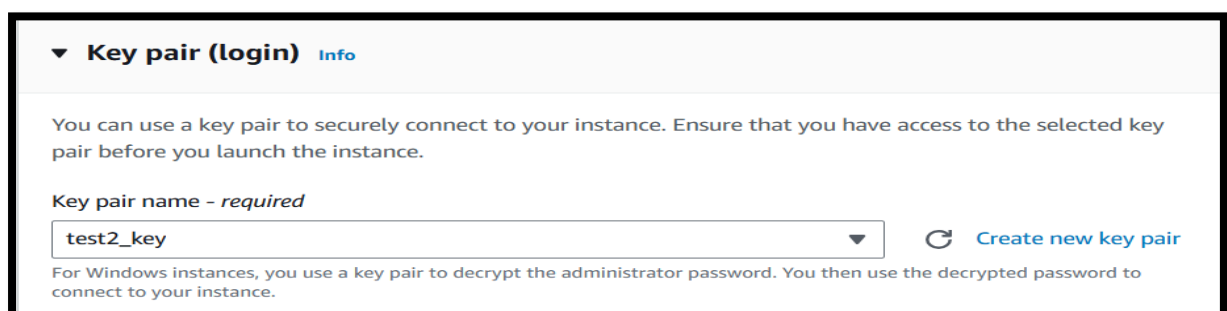
Step1: create an instance:

- Create new EC2 Instance. I named instance as “kprwindows”
- Choose Windows OS or any other.



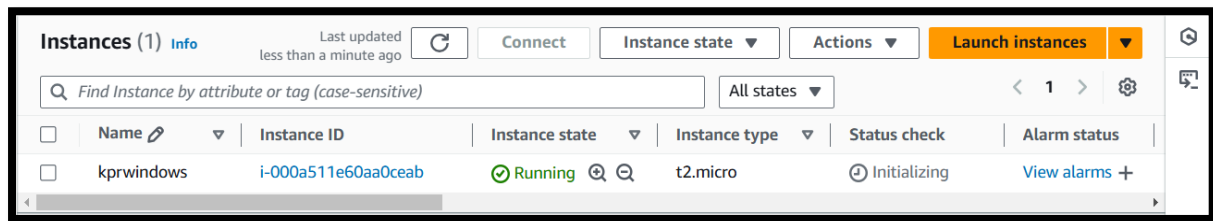
The screenshot shows the 'Launch an instance' page in the AWS Management Console. The page has a dark header with the AWS logo, 'Services' menu, and a search bar. The main content area is titled 'Launch an instance' with an 'Info' link. Below the title is a brief description of Amazon EC2. The 'Name and tags' section has a text input field containing 'kprwindows' and a link to 'Add additional tags'. The 'Application and OS Images (Amazon Machine Image)' section is expanded, showing a search bar and a 'Quick Start' tab. Under 'Quick Start', there are buttons for 'Amazon Linux', 'macOS', 'Ubuntu', 'Red Hat', and 'S'. The 'Ubuntu' button is highlighted with a blue border. To the right of these buttons is a 'Browse more AMIs' link with a magnifying glass icon.

- I'm gonna reuse my key pair which I have already created. Remember to create key pair with .pem file type for windows.



The screenshot shows the 'Key pair (login)' section in the AWS Management Console. It has a title 'Key pair (login)' with an 'Info' link. Below the title is a paragraph explaining that a key pair can be used to securely connect to an instance. The 'Key pair name - required' section has a dropdown menu with 'test2_key' selected. To the right of the dropdown is a 'Create new key pair' link with a circular arrow icon. At the bottom, there is a note: 'For Windows instances, you use a key pair to decrypt the administrator password. You then use the decrypted password to connect to your instance.'

You can see my instance has been successfully initiated.



Step 2:create a EBS volume

Some points to remember:

- Create volume at same location of instance.
- Allocate the required volume for an instance.
- “The availability zone of EC2 instance and the volume should be same”.

Volume settings

Volume type | [Info](#)

General Purpose SSD (gp3) ▼

Size (GiB) | [Info](#)

10

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

IOPS | [Info](#)

3000

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) | [Info](#)

125

Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone | [Info](#)

ap-south-1b ▼

Snapshot ID - optional | [Info](#)

Don't create volume from a snapshot ▼

↺

Encryption | [Info](#)

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

☐ Encrypt this volume

Tags - optional [Info](#)

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.

Key

Q name

X

Value - optional

Q winvol

X

Remove

Add tag

You can add 49 more tags.

Snapshot summary [Info](#)

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🕒 Click refresh to view backup information

The volume type that you select and the tags that you assign determine whether the volume will be backed up by any Data Lifecycle Manager policies.

Cancel

Create volume

- Now you can see we have successfully created a volume of **10Gb**, with tag named tag-**Winvol**.

Volumes (1/2) [Info](#)

↺

Actions ▾

Create volume

Q Search

< 1 > ⚙

<input type="checkbox"/>	Name ▾	Volume ID ▾	Type ▾	Size ▾	IOPS ▾	Throughput ▾	Snapshot ID ▾	Created ▾
<input type="checkbox"/>	-	vol-00dfd47d4edcbb3c3	gp2	30 GiB	100	-	snap-0f8c3ab...	2024/11/03 16:33 GMT+5:...
<input checked="" type="checkbox"/>	Winvol	vol-09d913f670f132142	gp3	10 GiB	3000	125	-	2024/11/03 17:10 GMT+5:...

Step 3:Attach the EBS Volume to the EC2 Instance

- As the volume will be in available state, we need to attach the volume to EC2 instance.

Volumes (1/2) [Info](#)

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Actions ▴

Create volume

Q Search

< 1 > ⚙

<input type="checkbox"/>	Name ▾	Volume ID ▾	Type ▾	Size ▾	IOPS ▾	Throughput ▾	Snapshot ID ▾	Created ▾
<input type="checkbox"/>	-	vol-00dfd47d4edcbb3c3	gp2	30 GiB	100	-	snap-0f8c3ab...	2024/11/03 16:33 GMT+5:...
<input checked="" type="checkbox"/>	Winvol	vol-09d913f670f132142	gp3	10 GiB	3000	125	-	2024/11/03 17:10 GMT+5:...

Modify volume

Create snapshot

Create snapshot lifecycle policy

Delete volume

Attach volume


- Select instance from the drop down box and the device name as **xvdp** and click **attach volume**

Attach volume Info

Attach a volume to an instance to use it as you would a regular physical hard disk drive.

Basic details


Volume ID

 vol-09d913f670f132142 (Winvol)

Availability Zone

ap-south-1b

Instance Info



Only instances in the same Availability Zone as the selected volume are displayed.

Device name Info

Recommended device names for Windows: /dev/sda1 for root volume. xvd[f-p] for data volumes.


Cancel
Attach volume

Step 4: Connect to Your EC2 Instance


- Go to Instances in the EC2 dashboard.
- Select your instance and click on Connect.
- Follow the connection instructions for SSH or your preferred method of accessing the instance.

Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.

Instance ID


 i-000a511e60aa0ceab (kprwindows)

Key pair associated with this instance

 test2_key

Private key

Either upload your private key file or copy and paste its contents into the field below.

 Upload private key file

Private key contents - optional

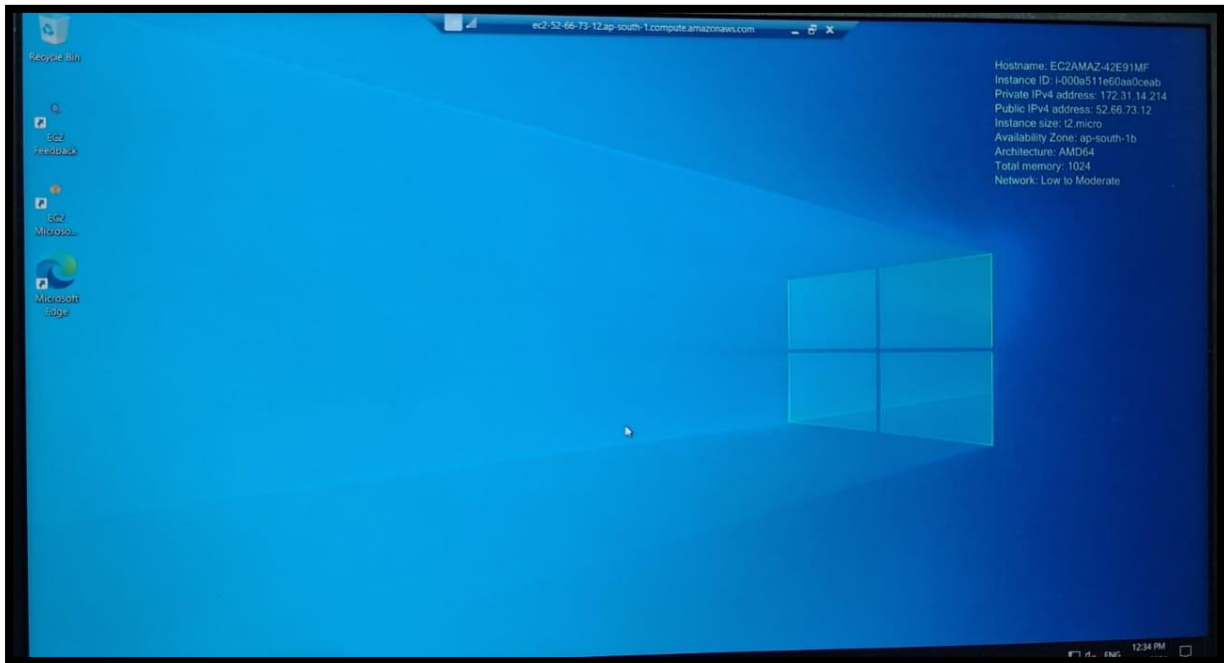
```

-----BEGIN RSA PRIVATE KEY-----
MIIEpQIBAAKCAQEA0cDQ/Dgoep7wpCil/QAgtNHucjn3qwMwPKHG8wwULpMKb2BhUttdd
nYukjPLqkNSWlmRxY7Nm6MCgYBJ+3RdW5iVIXTDwSSVv+csd+OLPpvkmbLREzE
kgzyVOJ+ZBx0BAFbiPHhP8y28jKUvmaPDDtzNM1g9EbBZusdS8j5a6/zOed2Tsx2
CMu85+ub2lVzT0c+UMtlnM1/OodgwiHZ+2MZuyQwdVjm1xhzCp+TKetCN3vgphqH
Q9Qx1QKBgHGJN7510AH9b7qJqJemlUG5BJX6ornGvmu5SVtDypJ+WYuN82xo0+IG
Ug5PiiqbC1DBuHtF5G0Jbm8D0UdbZzM45/xlIP1QWINR5pbm/gYGPwb3QLtyfqDO
u9ilUL3jkh6Ndb8i2BB1a4CrY+c8kYpy7sruikoMLWyOirJ6Dr
-----END RSA PRIVATE KEY-----

```

Cancel
Decrypt password

- In RDC, copy the ipv4 address of the instance and paste the password that has been decrypted in the above step, a new desktop will be opened.

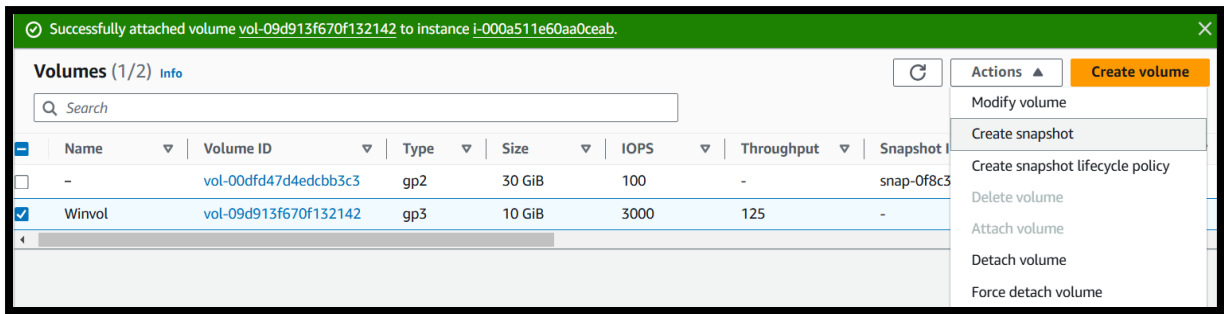


Step 4: Create a new volume (refer the previous documents)

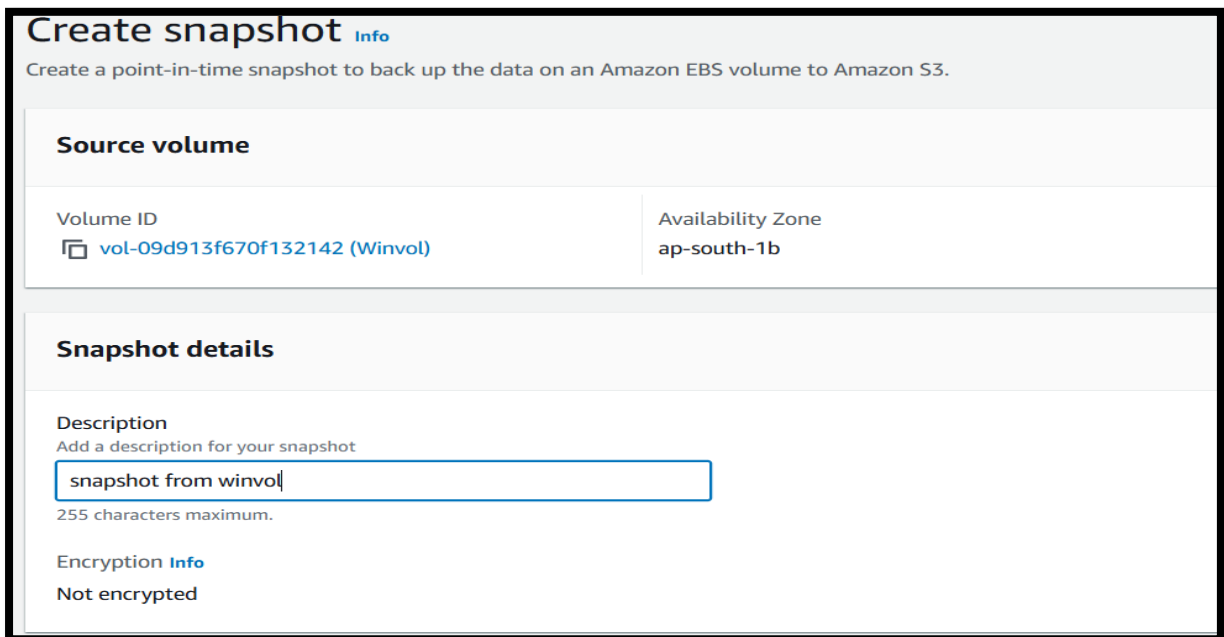
- After creating a new volume (d drive) ,create a **two new folder** and a **text folder** in that newly created volume to take a snapshot

Step 5: Creating a snapshot:

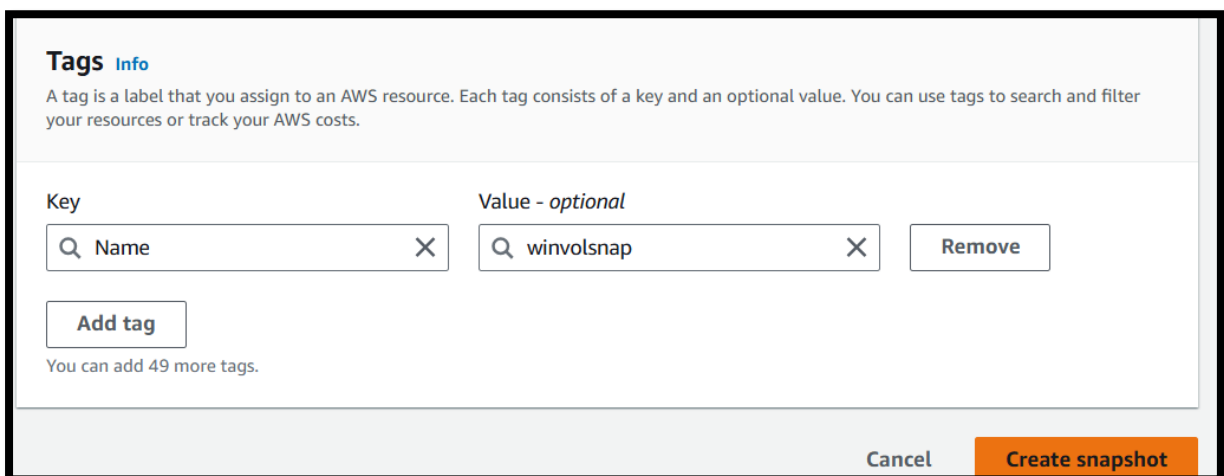
- Now in volume, Select the **Window volume**
- In Actions, select **create snapchat** from the dropdown menu



- Now, give any description



- Give the key and tag name



- Now a snapshot has been successfully created and a snapshot id is also visible

✔ Successfully created snapshot `snap-0a082ef8d93e983f2` from volume `vol-09d913f670f132142`.
If you need your snapshot to be immediately available consider using Fast Snapshot Restore.

Manage fast snapshot restore

Volumes (2) Info

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Actions

Create volume

🔍 Search

< 1 > ⚙

<input type="checkbox"/>	Name ▾	Volume ID ▾	Type ▾	Size ▾	IOPS ▾	Throughput ▾	Snapshot ID ▾	Created ▾
<input type="checkbox"/>	-	vol-00dfd47d4edcbb3c3	gp2	30 GiB	100	-	snap-0f8c3ab...	2024/11/03 16:33 GMT+5:...
<input type="checkbox"/>	Winvol	vol-09d913f670f132142	gp3	10 GiB	3000	125	-	2024/11/03 17:10 GMT+5:...