

## Working with EBS \_ Tri Ho

### CMIT 326 7387 Cloud Technologies

#### Task 1: Create a New EBS Volume

**Successfully created volume vol-01c9a7b23cd0d8431.**

You can now create Amazon Data Lifecycle Manager policies to automate snapshot management directly from this screen. Select the volumes to back up, and then choose **Actions, Create snapshot lifecycle policy**. For more information, see the [Knowledge Center article](#).

**Volumes (1/3)**

	Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created	Availa
<input type="checkbox"/>	-	vol-0454ad1cc38c1b63d	gp2	8 GiB	100	-	snap-079f021...	2022/11/13 13:45 GMT+1	us-eas
<input type="checkbox"/>	-	vol-00d4790be2ce91ae1	gp2	8 GiB	100	-	snap-079f021...	2022/11/13 13:47 GMT+1	us-eas
<input checked="" type="checkbox"/>	My Volume	vol-01c9a7b23cd0d8431	gp2	1 GiB	100	-	-	2022/11/13 13:52 GMT+1	us-eas

**Volume ID: vol-01c9a7b23cd0d8431 (My Volume)**

**Details**

Volume ID vol-01c9a7b23cd0d8431 (My Volume)	Size 1 GiB	Type gp2	Volume status Okay
Volume state Available	IOPS 100	Throughput -	Encryption Not encrypted
KMS key ID -	KMS key alias -	KMS key ARN -	Snapshot -
Availability Zone us-east-1a	Created Sun Nov 13 2022 13:52:53 GMT+0100 (Central European Standard Time)	Multi-Attach enabled No	Attached Instances -
Outposts ARN -			

#### Task 2: Attach the Volume to an Instance

Successfully attached volume vol-01c9a7b23cd0d8431 to instance i-077ac70adb0c879f6.

You can now create Amazon Data Lifecycle Manager policies to automate snapshot management directly from this screen. Select the volumes to back up, and then choose **Actions, Create snapshot lifecycle policy**. For more information, see the [Knowledge Center article](#).

**Volumes (1/3)**

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created	Availability Zone
-	vol-0454ad1cc38c1b63d	gp2	8 GiB	100	-	snap-079f021...	2022/11/13 13:45 GMT+1	us-east-1a
-	vol-00d4790be2ce91ae1	gp2	8 GiB	100	-	snap-079f021...	2022/11/13 13:47 GMT+1	us-east-1a
<input checked="" type="checkbox"/> My Volume	vol-01c9a7b23cd0d8431	gp2	1 GiB	100	-	-	2022/11/13 13:52 GMT+1	us-east-1a

**Volume ID: vol-01c9a7b23cd0d8431 (My Volume)**

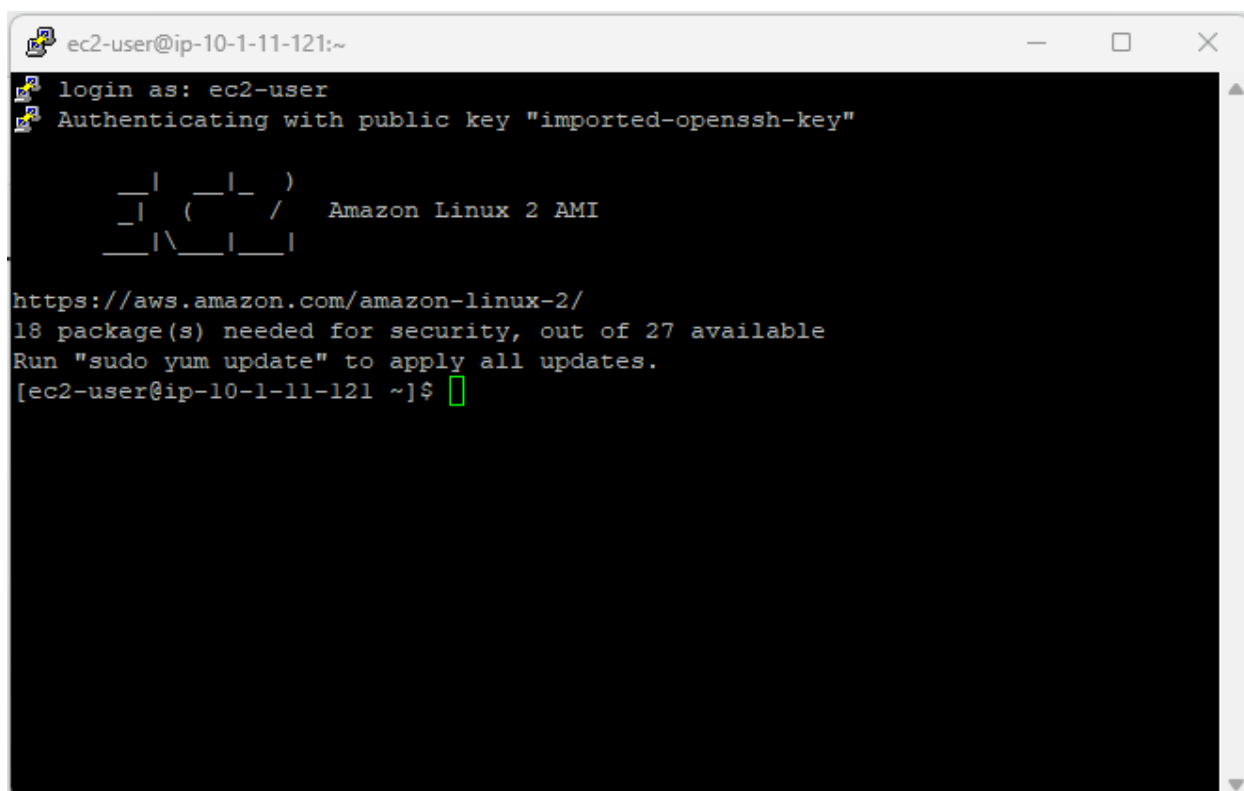
**Details**

Volume ID	vol-01c9a7b23cd0d8431 (My Volume)	Size	1 GiB	Type	gp2	Volume status	Okay
Volume state	In-use	IOPS	100	Throughput	-	Encryption	Not encrypted
KMS key ID	-	KMS key alias	-	KMS key ARN	-	Snapshot	-
Availability Zone	us-east-1a	Created	Sun Nov 13 2022 13:52:53 GMT+0100 (Central European Standard Time)	Multi-Attach enabled	No	Attached Instances	i-077ac70adb0c879f6 (Lab): /dev/sdf (attaching)
Outposts ARN	-						

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### Task 3: Connect to Your Amazon EC2 Instance



```
ec2-user@ip-10-1-11-121:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
  
  _ | _ | _ )  
  _ | ( _ | /  Amazon Linux 2 AMI  
  _ | \ _ | _ |  
  
https://aws.amazon.com/amazon-linux-2/  
18 package(s) needed for security, out of 27 available  
Run "sudo yum update" to apply all updates.  
[ec2-user@ip-10-1-11-121 ~]$
```

#### Task 4: Create and Configure Your File System

```

ec2-user@ip-10-1-11-121:~
Authenticating with public key "imported-openssh-key"

  _ _ _ _ _
 _/ ( _ _ _ _ \
/_/_/_/_/_/_/_/ Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
18 package(s) needed for security, out of 27 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-1-11-121 ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        484M   0  484M   0% /dev
tmpfs           492M   0  492M   0% /dev/shm
tmpfs           492M 468K  491M   1% /run
tmpfs           492M   0  492M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  1.5G  6.6G  19% /
tmpfs           99M   0   99M   0% /run/user/0
tmpfs           99M   0   99M   0% /run/user/1000
[ec2-user@ip-10-1-11-121 ~]$ sudo mkfs -t ext3 /dev/sdf
mke2fs 1.42.9 (28-Dec-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
65536 inodes, 262144 blocks
13107 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=268435456
8 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376

Allocating group tables: done
Writing inode tables: done
Creating journal (8192 blocks): done
Writing superblocks and filesystem accounting information: done

[ec2-user@ip-10-1-11-121 ~]$ sudo mkdir /mnt/data-store
[ec2-user@ip-10-1-11-121 ~]$ sudo mount /dev/sdf /mnt/data-store
[ec2-user@ip-10-1-11-121 ~]$ echo "/dev/sdf /mnt/data-store ext3 defaults,noatime 1 2" | sudo tee -a /etc/fstab
/dev/sdf /mnt/data-store ext3 defaults,noatime 1 2
[ec2-user@ip-10-1-11-121 ~]$ cat /etc/fstab
#
UUID=36e0888b-d80b-4854-b1c7-d5a1eac1d52 / xfs defaults,noatime 1 1
/dev/sdf /mnt/data-store ext3 defaults,noatime 1 2
[ec2-user@ip-10-1-11-121 ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        484M   0  484M   0% /dev
tmpfs           492M   0  492M   0% /dev/shm
tmpfs           492M 468K  491M   1% /run
tmpfs           492M   0  492M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  1.5G  6.6G  19% /
tmpfs           99M   0   99M   0% /run/user/0
tmpfs           99M   0   99M   0% /run/user/1000
/dev/xvdf       975M  60K  924M   1% /mnt/data-store
[ec2-user@ip-10-1-11-121 ~]$ sudo sh -c "echo some text has been written > /mnt/data-store/file.txt"
[ec2-user@ip-10-1-11-121 ~]$ cat /mnt/data-store/file.txt
some text has been written
[ec2-user@ip-10-1-11-121 ~]$

```

## Task 5: Create an Amazon EBS Snapshot

**Snapshots (1/1)**

Owned by me	Name	Snapshot ID	Size	Description	Storage...	Snapshot status	Started
<input checked="" type="checkbox"/>	My Snapshot	snap-0bb21602a87779201	1 GiB	-	Standard	Completed	2022/11/13 14:15 GMT+1

**Snapshot ID: snap-0bb21602a87779201 (My Snapshot)**

Details	Permissions	Storage tier	Tags
<b>Snapshot ID</b> snap-0bb21602a87779201 (My Snapshot)	<b>Size</b> 1 GiB	<b>Progress</b> Available (100%)	<b>Snapshot status</b> Completed
<b>Owner</b> 160021428869	<b>Volume ID</b> vol-01c9a7b23cd0d8431	<b>Started</b> Sun Nov 13 2022 14:15:20 GMT+0100 (Central European Standard Time)	<b>Product codes</b> -
<b>Encryption</b> Not encrypted	<b>KMS key ID</b> -	<b>KMS key alias</b> -	<b>KMS key ARN</b> -
<b>Fast snapshot restore</b> -	<b>Description</b> -		

```
[ec2-user@ip-10-1-11-121 ~]$ sudo rm /mnt/data-store/file.txt
[ec2-user@ip-10-1-11-121 ~]$ ls /mnt/data-store/
lost+found
[ec2-user@ip-10-1-11-121 ~]$
```

## Task 6: Restore the Amazon EBS Snapshot

```
[ec2-user@ip-10-1-11-121 ~]$ sudo mkdir /mnt/data-store2
[ec2-user@ip-10-1-11-121 ~]$ sudo mount /dev/sdg /mnt/data-store2
[ec2-user@ip-10-1-11-121 ~]$ ls /mnt/data-store2/
file.txt lost+found
[ec2-user@ip-10-1-11-121 ~]$
```

**Lab Complete**