

[KAN-1] Day 2 : Task 1 - Customizing EC2 machine (Static IP, Volume Adjustments, Instance type, Snapshot, AMI) - Gautham

Created: 22/Oct/24 Updated: 23/Oct/24 Resolved: 23/Oct/24

Status:	Done		
Project:	Alpha		
Components:	None		
Affects versions:	None		
Fix versions:	None		

Type:	Task	Priority:	Medium
Reporter:	Gautham Srinivasan	Assignee:	Gautham Srinivasan
Resolution:	Done	Votes:	0
Labels:	None		
Remaining Estimate:	Not Specified		
Time Spent:	Not Specified		
Original estimate:	Not Specified		

Attachments:

image-20241022-125547.png

image-20241022-125503.png

image-20241022-125635.png

image-20241022-125658.png

image-20241022-125333.png

image-20241022-132759.png

image-20241022-180253.png

image-20241022-182739.png

image-20241022-184115.png

image-20241022-184543.png

image-20241022-184646.png

image-20241022-185134.png

Issue links:

Cloners

is cloned by

KAN-2

Day 2 : Task 1 - Customizing EC2 mac...

Done

Rank:

0|hzzzt:

Description

1. Associate elastic IP while your server instance is running

2. Mount the added new volume to the original volume

3. Change the instance type of your server instance

4. Create snapshot for root volume

5. Create snapshot for the instance with multiple volume

6. Create AMI and launch your instance using AMI

Comments

Comment by Gautham Srinivasan [22/Oct/24]

1. before associating static ip address

←→↺🏠

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#InstanceDetails:instanceId=i-0ff7b7691feb688d3

aws

Services

Search

[Alt+S]

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity

Reservations New

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

EC2 > Instances > i-0ff7b7691feb688d3

Instance summary for i-0ff7b7691feb688d3 (linux) Info

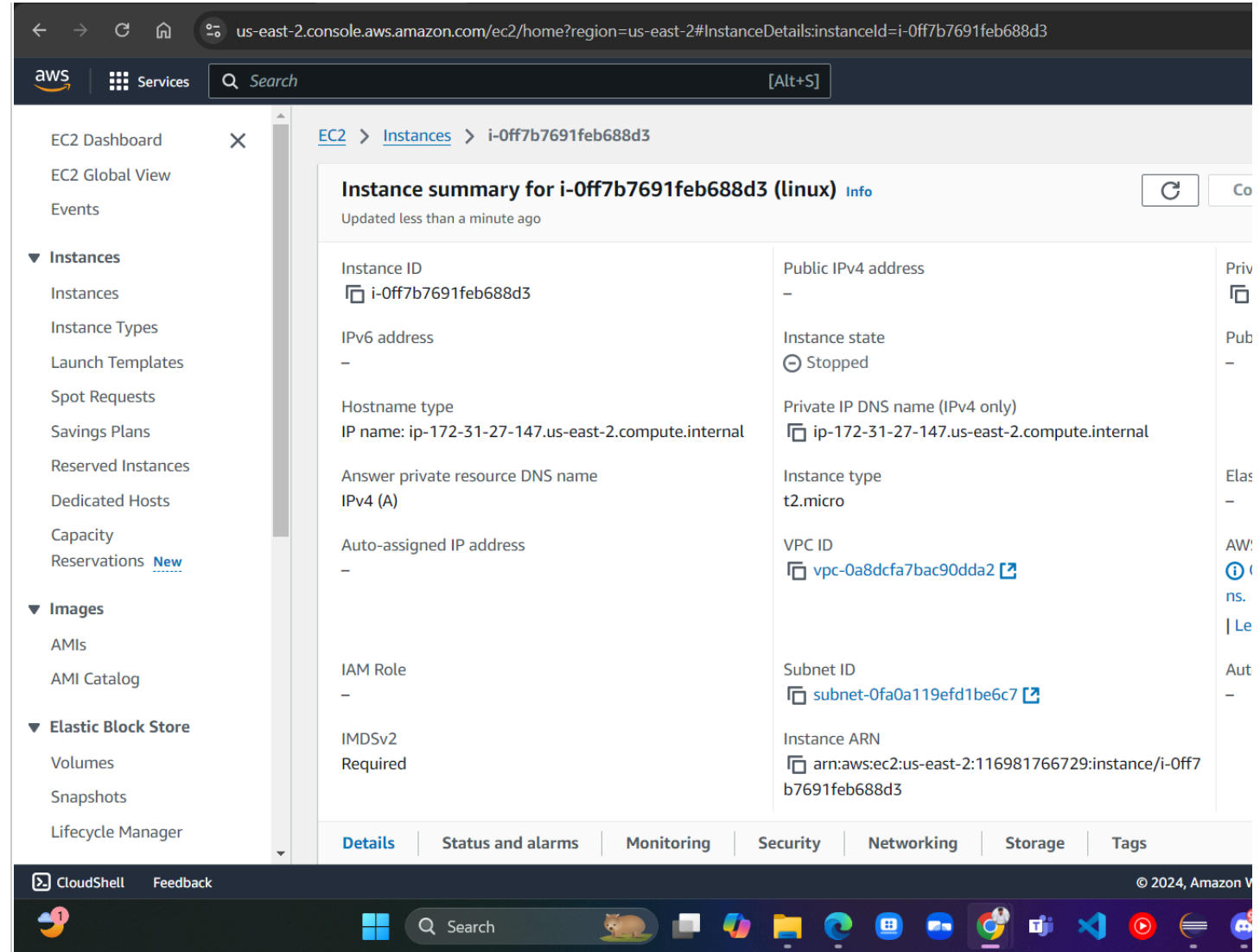
Updated less than a minute ago

Instance ID	Public IPv4 address	Priv
i-0ff7b7691feb688d3	18.191.151.111 open address	
IPv6 address	Instance state	Pub
–	Running	ec2
Hostname type	Private IP DNS name (IPv4 only)	op
IP name: ip-172-31-27-147.us-east-2.compute.internal	ip-172-31-27-147.us-east-2.compute.internal	
Answer private resource DNS name	Instance type	Elas
IPv4 (A)	t2.micro	–
Auto-assigned IP address	VPC ID	AW!
18.191.151.111 [Public IP]	vpc-0a8dcfa7bac90dda2	ns.
		Le
IAM Role	Subnet ID	Aut
–	subnet-0fa0a119efd1be6c7	–
IMDSv2	Instance ARN	
Required	arn:aws:ec2:us-east-2:116981766729:instance/i-0ff7b7691feb688d3	

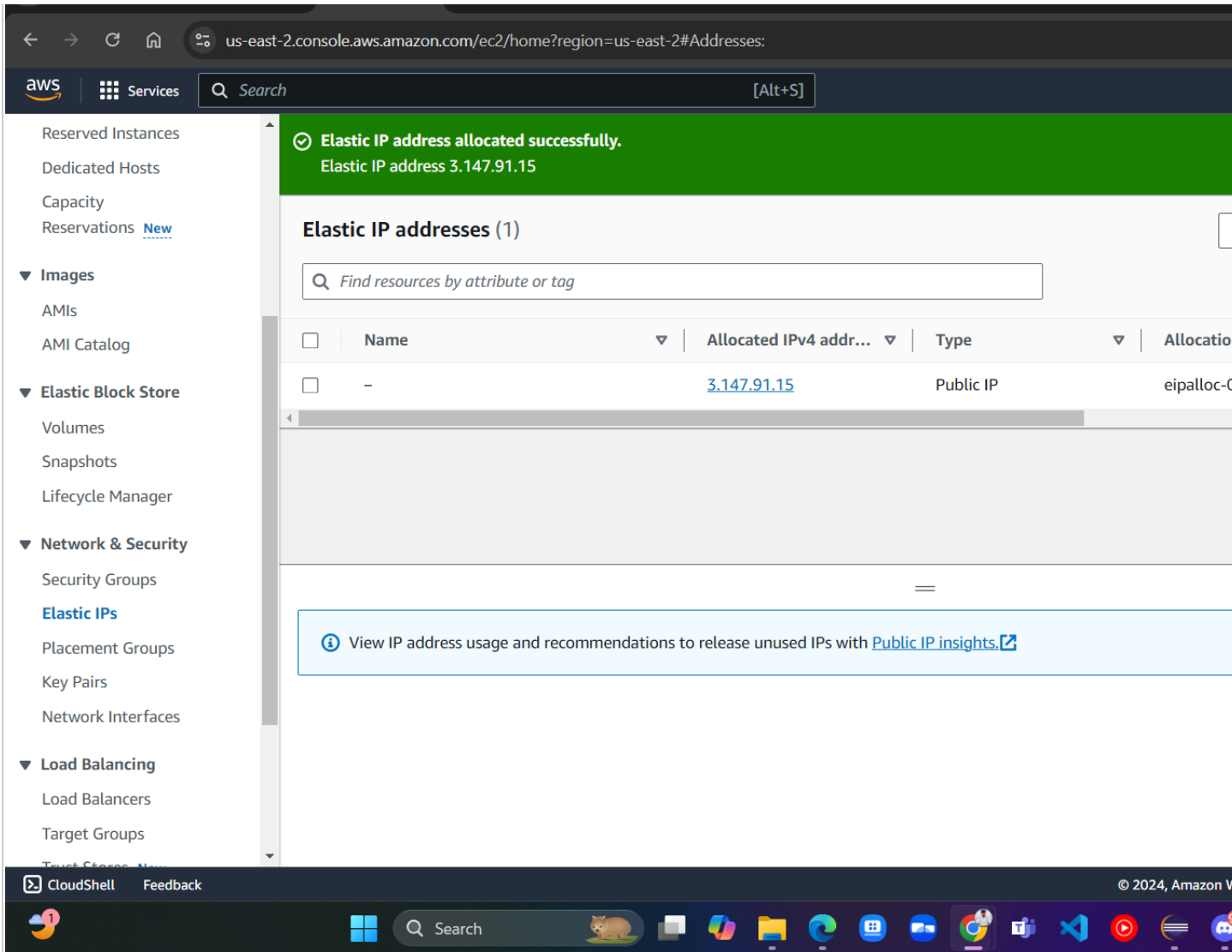
CloudShell Feedback

© 2024, Amazon V

1. after stopping the instance



after allocating a static ip



after associating the ip

← → ↺ 🏠

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#AssociateAddress:PublicIp=3.147.91.15

aws

Services

Search

[Alt+S]

Elastic IP address: 3.147.91.15

Resource type

Choose the type of resource with which to associate the Elastic IP address.

☒ Instance

☐ Network interface

⚠️

If you associate an Elastic IP address with an instance that already has an Elastic IP address associated, the previously associated Elastic IP address will be disassociated, but the address will still be allocated to your account. [Learn more](#)

If no private IP address is specified, the Elastic IP address will be associated with the primary private IP address.

Instance

Q i-0ff7b7691feb688d3

×

↺

Private IP address

The private IP address with which to associate the Elastic IP address.

Q 172.31.27.147

×

Reassociation

Specify whether the Elastic IP address can be reassociated with a different resource if it already associated with a resource.

☐ Allow this Elastic IP address to be reassociated

Cancel

Associate

CloudShell Feedback

© 2024, Amazon V

👤 1

🖼️

🔍 Search

🐾

💻

📁

🌐

📺

📧

🔍

👤

🔧

📺

📺

📺

Google

Cost M

Elastic

Instan

How ti

How ti

install

How Ti

www.p

Downl

← → ↺ 🏠

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#InstanceDetails:instanceId=i-0ff7b7691feb688d3

aws Services 🔍 Search [Alt+S]

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity

Reservations [New](#)

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

EC2 > Instances > i-0ff7b7691feb688d3

Instance summary for i-0ff7b7691feb688d3 (linux) [Info](#)

Updated less than a minute ago

Instance ID	i-0ff7b7691feb688d3	Public IPv4 address	3.147.91.15 open address	Priv
IPv6 address	–	Instance state	Stopped	Pub
Hostname type	IP name: ip-172-31-27-147.us-east-2.compute.internal	Private IP DNS name (IPv4 only)	ip-172-31-27-147.us-east-2.compute.internal	op
Answer private resource DNS name	IPv4 (A)	Instance type	t2.micro	Elas
Auto-assigned IP address	–	VPC ID	vpc-0a8dcfa7bac90dda2	AW:
IAM Role	–	Subnet ID	subnet-0fa0a119efd1be6c7	ns.
IMDSv2	Required	Instance ARN	arn:aws:ec2:us-east-2:116981766729:instance/i-0ff7b7691feb688d3	Le

CloudShell Feedback

© 2024, Amazon V

🔍 Search

Comment by [Gautham Srinivasan](#) [22/Oct/24]

mount using command

```
ec2-user@ip-172-31-27-147:~  
└─xvda128 259:1    0 10M 0 part /boot/efi  
[root@ip-172-31-27-147 ~]#  
login as: ec2-user  
Authenticating with public key "linux-pwd"  
#  
#####  
~~~~\#####\  
~~~\###|  
~~~\#/ https://aws.amazon.com/linux/amazon-linux-2023  
~~~V~'-'->  
~~~~  
~-.-.  
~/m/'-/  
  
Last login: Tue Oct 22 13:07:12 2024 from 106.198.32.112  
[ec2-user@ip-172-31-27-147 ~]$ lsblk  
NAME        MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS  
xvda         202:0    0   8G  0 disk  
├─xvda1      202:1    0   8G  0 part /  
├─xvda127    259:0    0   1M  0 part  
└─xvda128    259:1    0  10M  0 part /boot/efi  
xvdb         202:16   0   2G  0 disk  
[ec2-user@ip-172-31-27-147 ~]$ mkfs -t ext4 /dev/xvdb  
mke2fs 1.46.5 (30-Dec-2021)  
mkfs.ext4: Permission denied while trying to determine filesystem size  
[ec2-user@ip-172-31-27-147 ~]$ sudo mkfs -t ext4 /dev/xvdb  
mke2fs 1.46.5 (30-Dec-2021)  
Creating filesystem with 524288 4k blocks and 131072 inodes  
Filesystem UUID: c0fbff23-8b11-43ff-8b32-03f15120449e  
Superblock backups stored on blocks:  
        32768, 98304, 163840, 229376, 294912  
  
Allocating group tables: done  
Writing inode tables: done  
Creating journal (16384 blocks): done  
Writing superblocks and filesystem accounting information: done  
  
[ec2-user@ip-172-31-27-147 ~]$ mkdir new_volume  
[ec2-user@ip-172-31-27-147 ~]$ mount /dev/xvdb new_volume  
mount: /home/ec2-user/new_volume: must be superuser to use mount.  
[ec2-user@ip-172-31-27-147 ~]$ sudo mount /dev/xvdb new_volume  
[ec2-user@ip-172-31-27-147 ~]$ lsblk  
NAME        MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS  
xvda         202:0    0   8G  0 disk  
├─xvda1      202:1    0   8G  0 part /  
├─xvda127    259:0    0   1M  0 part  
└─xvda128    259:1    0  10M  0 part /boot/efi  
xvdb         202:16   0   2G  0 disk /home/ec2-user/new_volume  
[ec2-user@ip-172-31-27-147 ~]$
```

Comment by [Gautham Srinivasan](#) [22/Oct/24]

step 3: Changing the instance type from t2.micro to t3.micro

←→↺🏠

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#Instances:

aws

Services

Search

[Alt+S]

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity

Reservations New

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

✔ Instance type changed successfully

Instances (1/1) Info

Last updated less than a minute ago

Connect

Instance sta

Find Instance by attribute or tag (case-sensitive)

All states ▼

☑

Name

▼

Instance ID

Instance state

▼

Instance type

▼

Status check

☑

i-0073b4ff1989f0dd2

⏸ Stopped

🔍

t3.micro

–

i-0073b4ff1989f0dd2

Details

Status and alarms

Monitoring

Security

Networking

Storage

Tags

▼ Instance summary Info

Instance ID

☑ i-0073b4ff1989f0dd2

Public IPv4 address

–

Private IPv4 address

☑

IPv6 address

–

Instance state

⏸ Stopped

Public IPv6 address

–

Hostname type

IP name: ip-172-31-21-186.us-east-2.compute.internal

Private IP DNS name (IPv4 only)

☑ ip-172-31-21-186.us-east-2.compute.internal

Private IP DNS name (IPv6 only)

–

Amazon private resource DNS name

–

Instance type

t3.micro

CloudShell

Feedback

© 2024, Amazon W

28°

Search

Comment by [Gautham Srinivasan](#) [22/Oct/24]

step 4: creating a snapshot from root volume

←→↺🏠🔍

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#SnapshotDetails:snapshotId=snap-08f774d10a305ffc3

aws

Services

Search [Alt+S]

EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity

Reservations [New](#)

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

EC2 > Snapshots > snap-08f774d10a305ffc3

snap-08f774d10a305ffc3

Snapshot ID	Progress	Snapshot status
snap-08f774d10a305ffc3	Available (100%)	Completed
Started	Product codes	Fast snapshot restore
Tue Oct 22 2024 23:56:08 GMT+0530 (India Standard Time)	-	-
▼ Source volume		
Volume ID	Volume size	
vol-03a16ebfee9d530c2	8 GiB	
▼ Encryption		
Encryption	KMS key ID	KMS key alias
Not encrypted	-	-

Snapshot settings

Storage tier

Tags

▼ Snapshot Lock - new

Lock mode

CloudShell Feedback

© 2024, Amazon

28°

Search

```
root@ip-172-31-18-249:~/new-volume
tmpfs          95M    0   95M    0% /run/user/1000
[ec2-user@ip-172-31-18-249 ~]$ lsblk
NAME        MAJ:MIN RM  SIZE RO  TYPE MOUNTPOINTS
xvda        202:0    0   8G  0 disk
├─xvda1     202:1    0   8G  0 part /
├─xvda127   259:0    0   1M  0 part
└─xvda128   259:1    0  10M  0 part /boot/efi
xvdb        202:16   0   8G  0 disk
├─xvdb1     202:17   0   8G  0 part
├─xvdb127   259:2    0   1M  0 part
└─xvdb128   259:3    0  10M  0 part
[ec2-user@ip-172-31-18-249 ~]$ mkfs -t ext4 /dev/xvdb
mke2fs 1.46.5 (30-Dec-2021)
mkfs.ext4: Permission denied while trying to determine filesystem size
[ec2-user@ip-172-31-18-249 ~]$ mkfs -t ext4 /dev/xvdb/
mke2fs 1.46.5 (30-Dec-2021)
mkfs.ext4: Not a directory while trying to determine filesystem size
[ec2-user@ip-172-31-18-249 ~]$ mkfs -t ext4 xvdb
mke2fs 1.46.5 (30-Dec-2021)
The file xvdb does not exist and no size was specified.
[ec2-user@ip-172-31-18-249 ~]$
[ec2-user@ip-172-31-18-249 ~]$ mkfs -t ext4 /dev/sdb
mke2fs 1.46.5 (30-Dec-2021)
mkfs.ext4: Permission denied while trying to determine filesystem size
[ec2-user@ip-172-31-18-249 ~]$ sudo su -
[root@ip-172-31-18-249 ~]# mkfs -t ext4 /dev/sdb
mke2fs 1.46.5 (30-Dec-2021)
Found a gpt partition table in /dev/sdb
Proceed anyway? (y,N) y
Creating filesystem with 2097152 4k blocks and 524288 inodes
Filesystem UUID: ffdeb251-06eb-49b8-87ec-f9efbf70aa8a
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

[root@ip-172-31-18-249 ~]# mount dev/sdb facebook
mount: facebook: mount point does not exist.
[root@ip-172-31-18-249 ~]# mkdir new-volume
[root@ip-172-31-18-249 ~]# mount dev/sdb new-volume
mount: /root/new-volume: special device dev/sdb does not exist.
[root@ip-172-31-18-249 ~]# mount /dev/sdb new-volume
[root@ip-172-31-18-249 ~]# cd new-volume
[root@ip-172-31-18-249 new-volume]# ls
lost+found
[root@ip-172-31-18-249 new-volume]#
```

Comment by [Gautham Srinivasan](#) [22/Oct/24]

step 5 : creating snapshot from single instance and multiple volume

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#CreateSnapshot

aws Services snapshots

Create a point-in-time snapshot of an EBS volume and use it as a baseline for new volumes or for data backup. You can create snapshots from an individual volume, or you can create multi-volume snapshots from all of the volumes attached to an instance.

Source

Resource type [Info](#)

☐ Volume
Create a snapshot from a specific volume.

☒ Instance
Create multi-volume snapshots from an instance.

Instance ID
The instance from which to create multi-volume snapshots.

i-031013dd1bd2f564d (linux-facebook)
us-east-2b

Snapshot details

Description
Add a description for your snapshot.

instance-snapshot-zvol
255 characters maximum

Volumes - optional [Info](#)

© 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

23-10-2024

←→↺🏠

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#Snapshots:v=3

aws

Services

Q snapshotsX

EC2 DashboardX

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity

Reservations [New](#)

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

✔ Successfully created snapshots: snap-03595dafbaed8c8cf, snap-09ad20fa0bd4a22ef.

Snapshots (2) [Info](#)

Owned by me ▼Q Search

<input type="checkbox"/>	Name ▼	Snapshot ID ▼	Volume size ▼	Description ▼	Storage
<input type="checkbox"/>	-	snap-09ad20fa0bd4a22ef	8 GiB	instance-snapshot-2vol	Standa
<input type="checkbox"/>	-	snap-03595dafbaed8c8cf	8 GiB	instance-snapshot-2vol	Standa

Select a snapshot above.

CloudShellFeedback

© 2024, Amazon V

28°

Search

Comment by [Gautham Srinivasan](#) [22/Oct/24]

step 6: ami creation

