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EBS

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=> EBS stands for Elastic Block Store

=> It is block level storage device (Hard Disc / SSD)

=> When we create ec2 instance then ebs volume gets created automatically.

Note: If we remove EBS volume from EC2 instance then we can't start/use that EC2 instance.

=> In EBS we have 2 types of volumes (storages)

1) Root Volume

2) Additional Volume

Ntoe: When we launch EC2 instance by default we will get one Root volume.

=> Root volume is mandatory to launch EC2 instance.

=> If we remove root volume from EC2 then we can't start/use that instance.

=> Additional EBS volumes are optional devices (we can add/remove)

=> For windows VM, we will get 30 GB as default volume size.

=> For Linux VM, we will get 8 GB as default volume size.

Note: EBS volume can have upto 16 TB for IOPS (io2) we have 65 TB.

=> One EC2 VM can have multiple EBS volumes.

=> One EBS volume can be attached to one EC2 VM at a time..

=> EBS volumes are Availability Zone Specific

Mumbai : ap-south-1

ap-south-1a

ap-south-1b

ap-south-1c

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EBS Volume Types

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=> We have 5 types of EBS volumes

1) General Purpose Volume (Min: 1 GiB, Max: 16384 GiB)

2) Provisioned IOPS (io1) (Min: 4 GiB, Max: 16384 GiB)

\*(io2) => Min: 4 GiB, Max: 65536 GiB

3) Cold HDD (Min: 125 GiB, Max: 16384 GiB)

4) Throuput Optimized (Min: 125 GiB, Max: 16384 GiB)

5) Magnetic (standard) (Min: 1 GiB, Max: 1024 GiB)

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Lab Task

1. Create EC2 VM (VM -1) (AMAZON Linux) we will get the EBS root volume 8GB

2. Attached Additional EBS Volume to EC2-1 with 12 GB (Check AZ)

3. Attach Additional Volume to EC2-1

NOte : Now EC2-1 will have 2 EBS Volumes (root vol + addnl vol)

4. Connect EC2-1 to mobaxterm and check volumes attched

lsblk

5. Store the data in additional volume using mounting with some commands

$ sudo mkfs -t ext4 /dev/xvdf

$ mkdir gaurav

$ sudo mount /dev/xvdf gaurav

$ cd gaurav

$ sudo touch f1.txt f2.txt

6. Detach aditional volume from VM-1

7. Create New EC2-2 and attach EBS addional volume to EC2-2

8. Check the data is present or not

$ lsblk

$ mkdir demo

$ sudo mount /dev/xvdf demo

$ ls -l demo

http://13.201.2.101:8080/