How to Mount a EBS Volume to EC2

Pre-requisites

- Launch an EC2 instance with root volume as 20GB.
- Create another volume with 10GB and attach it to the EC2 from AWS Console.
- Login to the EC2 Linux Machine

```
lsblk -f
```

- If there is any data on the Volume

```
sudo file -s /dev/xvdf
```

- If there is no data, Format the Volume

```
sudo mkfs -t ext4 /dev/xvdf
```

- Create a mountpoint i.e create a directory

```
sudo mkdir /newebsvolume
```

- Mount our new ext4 volume

```
sudo mount /dev/xvdf /newebsvolume/

cd /newebsvolume
df -h .
```

- To view more information :

```
blkid /dev/xvda1
df -H
fdisk -l
```

- Restart the ec2 to check the mounted volume

EBS Automount on Reboot

- To enable automount, you need to make an entry in the /etc/fstab file.
- Take a Back up the /etc/fstab file.

```
sudo cp /etc/fstab /etc/fstab.bak
```

Open /etc/fstab file and make an entry in the following format.

device_name mount_point file_system_type fs_mntops fs_freq fs_passno

```
/dev/xvdf       /newebsvolume   ext4    defaults,nofail        0       0
```

OR

```
UUID=ay44f19p-9825-793l-579m-ec978d9581ae  /newebsvolume  ext4  defaults,nofail  0
2
```

- Execute the following command to check id the fstab file has any error.

`sudo mount -a`

- If the above command shows no error, it means your fstab entry is good
- Now even if we restart the EC2 instance, the EBS Volume will be mounted to the specified directory in the /etc/fstab file.

fstab entries information

- `First field` - The block device Name

Alternative ways to reference a block device is by using its LABEL or UUID (Universal Unique IDentifier).

- `Second field - The mountpoint` In each fstab entry, the second field specifies the mountpoint for the filesystem: what directory in the system should be used to access its content.
- `Third field - The filesystem type` The third field of an fstab entry specifies the type of filesystem in use
- `Fourth field - Mount options` The fourth field of each entry in the fstab file is used to provide a list of options to be used when mounting the filesystem.
- `Fifth field - Should the filesystem be dumped ?` The fifth field in each entry can be either 0 or 1. The value is used by the dump backup program (if installed) to know what filesystem should be dumped.

- `Sixth field - Fsck order` The sixth field is used to establish the order by which another utility, fsck, should check filesystems on boot. The value of 1 must always be used for the root filesystem; for all the others we can use 2. If this value is not provided it defaults to 0, and the filesystem will not be checked. With this last field our example entry is finally complete: