

5 Format and Mount an EBS Volume

Successfully created volume **vol-0a39388d4d8ed6311**.

Volumes (1/4) Info

| Name | Volume ID | Type | Size | IOPS |
|------|------------------------------|------|--------|------|
| - | vol-05316a4c107f240fb | gp3 | 8 GiB | 300 |
| - | vol-04654295b03eca9de | gp2 | 15 GiB | 100 |
| - | vol-0fdea2055a3494083 | gp3 | 8 GiB | 300 |
| - | vol-0a39388d4d8ed6311 | gp2 | 1 GiB | 100 |

Volume ID: vol-0a39388d4d8ed6311

Details

| Property | Value |
|-------------------------------|-----------------------|
| Volume ID | vol-0a39388d4d8ed6311 |
| Size | 1 GiB |
| Type | gp2 |
| Volume status | Okay |
| AWS Compute Optimizer finding | Available |
| Volume state | Available |
| IOPS | 100 |
| Throughput | - |

Basic details

Volume ID: **vol-0a39388d4d8ed6311**

Availability Zone: **us-east-1d**

Instance: **i-0e768fb675b180d9e**

Device name: **/dev/sdf**

Recommended device names for Linux: /dev/sda1 for root volume, /dev/sd[f-p] for data volumes.

Newer Linux kernels may rename your devices to **/dev/xvdf** through **/dev/xvdp** internally, even when the device name entered here (and shown in the details) is **/dev/sdf** through **/dev/sdp**.

```
ec2-user@ip-172-31-93-119:~$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M  0    4.0M  0% /dev
tmpfs           475M  0    475M  0% /dev/shm
tmpfs           190M  2.8M  188M  2% /run
/dev/xvda1      8.0G  1.5G  6.5G  19% /
tmpfs           475M  0    475M  0% /tmp
tmpfs           95M   0    95M   0% /run/user/1000

[ec2-user@ip-172-31-93-119 ~]$ ldblck
-bash: ldblck: command not found
[ec2-user@ip-172-31-93-119 ~]$ ls /dev/sdf
/dev/sdf

[ec2-user@ip-172-31-93-119 ~]$ df -h /dev/sdf
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M  0    4.0M  0% /dev

[ec2-user@ip-172-31-93-119 ~]$ 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
xvdf        202:80   0   1G  0 disk
```

```
file -C [-m <magicfiles>]
file [--help]

[ec2-user@ip-172-31-93-119 ~]$ sudo mkfs -t ext4/dev/xvdf
mkfs: no device specified
Try 'mkfs --help' for more information.
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[ec2-user@ip-172-31-93-119 ~]$ mkfs -t ext4 /dev/xvdf
mke2fs 1.46.5 (30-Dec-2021)
mkfs.ext4: Permission denied while trying to determine filesystem size
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mke2fs 1.46.5 (30-Dec-2021)
Creating filesystem with 262144 4k blocks and 65536 inodes
Filesystem UUID: d460660c-aca7-4525-addd-4671b499a6b7
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-172-31-93-119 ~]$
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[ec2-user@ip-172-31-93-119 ~]$ sudo mkdir/newvolume
sudo: mkdir/newvolume: command not found
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sudo: mkdir/newvolume: command not found
[ec2-user@ip-172-31-93-119 ~]$ sudo mkdir /newvolume
[ec2-user@ip-172-31-93-119 ~]$
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sudo: mkdir/newvolume: command not found
[ec2-user@ip-172-31-93-119 ~]$ sudo mkdir /newvolume
[ec2-user@ip-172-31-93-119 ~]$ sudo mount /dev/xvdf /newvolume/
[ec2-user@ip-172-31-93-119 ~]$
```

```
ec2-user@ip-172-31-93-119/n x + v
File
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[ec2-user@ip-172-31-93-119 ~]$ sudo mkdir /newvolume
[ec2-user@ip-172-31-93-119 ~]$ sudo mount /dev/xvdf /newvolume/
[ec2-user@ip-172-31-93-119 ~]$ cd /newvolume
[ec2-user@ip-172-31-93-119 newvolume]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M  0    4.0M  0% /dev
tmpfs           475M  0    475M  0% /dev/shm
tmpfs           190M  2.8M  188M  2% /run
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tmpfs           475M  0    475M  0% /tmp
tmpfs          95M    0    95M  0% /run/user/1000
/dev/xvdf       974M  24K  907M  1% /newvolume
[ec2-user@ip-172-31-93-119 newvolume]$
```

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[ec2-user@ip-172-31-93-119 newvolume]$ umount dev/xvdf
umount: dev/xvdf: No such file or directory
[ec2-user@ip-172-31-93-119 newvolume]$ umount /dev/xvdf
umount: /newvolume: must be superuser to unmount.
[ec2-user@ip-172-31-93-119 newvolume]$
```