

ELB Creation, Backup, Restore & Resize

Creating, attaching, formating & mounting.

Create a centos 6 ec2 instance.

Click Volumes in left pane ==> Create Volume

The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with various services like EC2 Dashboard, Instances, AMIs, and Volumes. The 'Volumes' section is currently selected. In the main content area, a 'Create Volume' dialog box is open over a list of existing volumes. The dialog box has fields for Volume Type (General Purpose SSD (GP2)), Size (5 GiB), IOPS (100 / 3000), Throughput (Not Applicable), Availability Zone (us-west-1a), Snapshot ID (Search (case-insensitive)), and Encryption (Encrypt this volume). At the bottom of the dialog is a 'Create' button. Below the dialog, there are tabs for Description, Status Checks, Monitoring, and Tags. The 'Tags' tab is selected, showing a table with one tag: Name (vp-web01-vol1) and Value (vp-web01-vol1). The main list of volumes shows three entries:

Snapshot	Created	Availability Zone	State	Alarm Status
-0120e9ad...	March 5, 2017 at 7:5...	us-west-1a	in-use	None
-0120e9ad...	March 5, 2017 at 7:4...	us-west-1a	in-use	None
-f711c830	March 5, 2017 at 7:4...	us-west-1a	in-use	None

The screenshot shows the AWS EC2 Management Console. The sidebar and overall layout are identical to the previous screenshot. The 'Create Volume' dialog box is now filled with specific values: Name (vol-0922de55a25743279), Volume ID (vol-0922de55a25743279), Size (5 GiB), Volume Type (gp2), IOPS (100 / 3000), Snapshot (snap-f711c830), Created (March 5, 2017 at 7:4...), Availability Zone (us-west-1a), State (available), and Alarm Status (None). The 'Create' button is visible at the bottom. The 'Tags' tab is selected below the dialog, showing a table with one tag: Name (vol-0922de55a25743279) and Value (vol-0922de55a25743279). The main list of volumes shows two entries:

Name	Volume ID	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State	Alarm Status
vol-0922de55a25743279	vol-0922de55a25743279	5 GiB	gp2	100 / 3000	snap-f711c830	March 5, 2017 at 7:4...	us-west-1a	available	None
vol-0c091c40...	vol-0c091c40...	8 GiB	gp2	100 / 3000		March 5, 2017 at 7:4...	us-west-1a	in-use	None

Tag the volume for future identification.

The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with various services like EC2 Dashboard, Instances, Images, and Elastic Block Store. Under EBS, 'Volumes' is selected. The main area shows a table of volumes. One volume, 'vp-web01-vol1', is highlighted. Below the table, there's a modal for 'vol-0922de55a25743279 (vp-web01-vol1)'. The 'Tags' tab is selected, showing a table with one tag: Name (vp-web01-vol1). Other tabs include Description, Status Checks, and Monitoring.

Attach the volume to ec2 instance

The screenshot shows the AWS EC2 Management Console with the 'Attach Volume' dialog open. The dialog lists a volume ('vp-web01-vol1') and an instance ('i-0d1cd9517fa97c28d (vp-web01) (running)'). The 'Attach' button is highlighted. The background shows the same EBS volumes list as the previous screenshot.

The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with navigation links like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Spot Requests, Reserved Instances, Dedicated Hosts, AMIs, Bundle Tasks, Volumes (which is selected), Snapshots, Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces, Load Balancers, Target Groups, and Auto Scaling.

In the main area, there's a table of volumes. One volume, 'vp-web01-vol1', is selected. An 'Actions' dropdown menu is open, and the 'Attach Volume' option is selected. A modal window titled 'Attach Volume' is displayed, showing the volume selection and the target instance ('i-0d1cd9517fa97c28d') and device ('/dev/sdf'). A note at the bottom of the modal says: 'Note: Newer Linux kernels may rename your devices to /dev/xvdf through /dev/xvdः internally, even when the device name entered here (and shown in the details) is /dev/sdf through /dev/sdः'. There are 'Cancel' and 'Attach' buttons at the bottom of the modal.

Login to the ec2 instance to format and mount the volume.

```
Last login: Sun Mar  5 14:13:03 2017 from 183.82.216.42
[centos@ip-172-31-11-88 ~]$ clear
[centos@ip-172-31-11-88 ~]$ sudo -i
[root@ip-172-31-11-88 ~]# fdisk -l

Disk /dev/xvda: 8589 MB, 8589934592 bytes
255 heads, 63 sectors/track, 1044 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00057cbb

      Device Boot      Start        End    Blocks   Id  System
/dev/xvda1  *          1       1045    8387584   83  Linux

Disk /dev/xvdf: 5368 MB, 5368709120 bytes
255 heads, 63 sectors/track, 652 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00000000

[root@ip-172-31-11-88 ~]#
```

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```
[root@ip-172-31-11-88 ~]# fdisk /dev/xvdf
Device contains neither a valid DOS partition table, nor Sun, SGI or OSF disklabel
Building a new DOS disklabel with disk identifier 0xc5bae138.
Changes will remain in memory only, until you decide to write them.
After that, of course, the previous content won't be recoverable.

Warning: invalid flag 0x0000 of partition table 4 will be corrected by w(rite)

WARNING: DOS-compatible mode is deprecated. It's strongly recommended to
switch off the mode (command 'c') and change display units to
sectors (command 'u').

Command (m for help): n
Command action
  e   extended
  p   primary partition (1-4)
p
Partition number (1-4):
Value out of range.
Partition number (1-4): 2
First cylinder (1-652, default 1):
Using default value 1
Last cylinder, +cylinders or +size{K,M,G} (1-652, default 652):
Using default value 652

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
[root@ip-172-31-11-88 ~]#
```

```
[root@ip-172-31-11-88 ~]# fdisk -l

Disk /dev/xvda: 8589 MB, 8589934592 bytes
255 heads, 63 sectors/track, 1044 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00057cbb

      Device Boot      Start        End      Blocks   Id  System
/dev/xvda1   *         1       1045     8387584   83  Linux

Disk /dev/xvdf: 5368 MB, 5368709120 bytes
255 heads, 63 sectors/track, 652 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

      Device Boot      Start        End      Blocks   Id  System
/dev/xvdf2      1        652     5237158+   83  Linux
[root@ip-172-31-11-88 ~]# mkfs.ext4 /dev/xvdf2
mke2fs 1.41.12 (17-May-2010)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
327680 inodes, 1309289 blocks
65464 blocks (5.00%) reserved for the super user
First data block=0
```

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```
[root@ip-172-31-11-88 ~]# mkdir /datavol
[root@ip-172-31-11-88 ~]# mount /dev/xvdf2 /datavol/
[root@ip-172-31-11-88 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/xvda1       7.8G  666M  6.7G  9% /
tmpfs           498M     0  498M  0% /dev/shm
/dev/xvdf2       4.8G   10M  4.6G  1% /datavol
[root@ip-172-31-11-88 ~]# cd /datavol/
[root@ip-172-31-11-88 datavol]# ls
lost+found
[root@ip-172-31-11-88 datavol]# mkdir chef ansible jenkins puppet
[root@ip-172-31-11-88 datavol]# ls
ansible  chef  jenkins  lost+found  puppet
[root@ip-172-31-11-88 datavol]# touch git nexus vagrant
[root@ip-172-31-11-88 datavol]# ls
ansible  chef  git  jenkins  lost+found  nexus  puppet  vagrant
[root@ip-172-31-11-88 datavol]# █
```

Backup & Restore

We will create a situation where we need to restore the lost data.

We will delete few files from the mount point after taking the backup and then restore the deleted data.

Backup the EBS volume by taking its snapshot.

Click volume ==> select the volume ==> Action ==> Create Snapshot

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The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with links like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Images, and more. The main area shows a table of volumes. A context menu is open over a volume named 'vp-web01-vol1', with 'Create Snapshot' highlighted. Below the table, a 'Volumes' section shows details for 'vol-0922de55a25743279 (vp-web01-vol1)'.

Name	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State	Alarm Status
vp-web01-vol1	5 GiB	gp2	100 / 3000		March 5, 2017 at 7:4...	us-west-1a	in-use	None
	8 GiB	gp2	100 / 3000	snap-f711c830	March 5, 2017 at 7:4...	us-west-1a	in-use	None

The screenshot shows the AWS EC2 Management Console with a 'Create Snapshot' dialog box open. The dialog box has fields for Volume (selected), Name (set to 'vp-web01-vol1-20170225'), Description (set to 'vp-web01-vol1-20170225'), and Encrypted (set to 'No'). The background shows the same volume list and volume details as the previous screenshot.

The screenshot shows the AWS EC2 Management Console. On the left, there's a navigation sidebar with links like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, AMIs, and Snapshots. The 'Schemas' link is currently selected. In the main content area, there's a table titled 'Owned By Me' showing a single snapshot entry:

Name	Snapshot ID	Size	Description	Status	Started	Progress
vp-web01-vol...	snap-0120e9ad883a838ca	5 GiB	vp-web01-vol1-20170225	Pending	March 5, 2017 at 7:54:29 PM ...	1%

Below the table, a modal window is open for the specific snapshot, showing its details:

Snapshot: snap-0120e9ad883a838ca (vp-web01-vol1-20170225)		
Description	Permissions	Tags
Snapshot ID: snap-0120e9ad883a838ca Status: pending Volume: vol-0922de55a25743279 Started: March 5, 2017 at 7:54:29 PM UTC+5:30 Owner: 171225278948	Progress: 1% Capacity: 5 GiB Encrypted: Not Encrypted KMS Key ID: KMS Key Aliases:	

After the snapshot we will delete few files from the mountpoint.

```
[root@ip-172-31-11-88 ~]# cd /datavol/
[root@ip-172-31-11-88 datavol]# ls
ansible chef git jenkins lost+found nexus puppet vagrant
[root@ip-172-31-11-88 datavol]# rm -rf ansible/ chef/ jenkins/ vagrant
[root@ip-172-31-11-88 datavol]# ls
git lost+found nexus puppet
[root@ip-172-31-11-88 datavol]# cd
[root@ip-172-31-11-88 ~]# clear
```

Create Volume from Snapshot & Resize.

Now if we want to recover the lost data, we have to create a new volume from snapshot & replace old volume with the new one. We will also increase the volume size.

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Click Snapshots in left pane ==> Select snapshot ==> Action ==> Create volume.

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The screenshot shows the AWS EC2 Management Console. On the left sidebar, under 'ELASTIC BLOCK STORE' > 'Schemas', the 'Schemas' link is highlighted. In the main content area, a table lists snapshots. One row is selected, showing details for 'Snapshot: snap-0120e9ad883a838ca (vp-web01-vol1-20170225)'. A context menu is open over this row, with 'Actions' expanded, showing options like 'Delete', 'Create Volume', 'Create Image', 'Copy', 'Modify Permissions', and 'Add/Edit Tags'. The 'Create Volume' option is highlighted. Below the table, a modal dialog titled 'Create Volume' is displayed, containing fields for Snapshot ID (selected), Volume Type (General Purpose SSD (GP2)), Size (9 GiB), IOPS (100 / 3000), Throughput (MB/s) (Not Applicable), Availability Zone (us-west-1a), and Encryption (Not Encrypted). At the bottom right of the modal are 'Cancel' and 'Create' buttons.

This screenshot is identical to the one above, showing the 'Create Volume' dialog box in the foreground. The dialog box contains the same configuration options for creating a new volume from the selected snapshot. The background shows the same EC2 Management Console interface with the snapshot details visible.

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Tag the old volume with -old extension to identification and tag new volume name.

EC2 Managerer x New Tab https://us-west-1.console.aws.amazon.com/ec2/v2/home?region=us-west-1#Volumessort=desccreateTime

Services Resource Groups

Create Volume Actions

Filter by tags and attributes or search by keyword

Name	Volume ID	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State	Alarm Stat
vol-01d8b721...	0922de55...	9 GiB	gp2	100 / 3000	snap-0120e9ad...	March 5, 2017 at 7:5...	us-west-1a	available	None
vp-web01-vol1-old	0922de55...	5 GiB	gp2	100 / 3000	snap-0120e9ad...	March 5, 2017 at 7:4...	us-west-1a	in-use	None
17/255	0c091c40...	8 GiB	gp2	100 / 3000	snap-f711c830	March 5, 2017 at 7:4...	us-west-1a	in-use	None

Volumes: vol-0922de55a25743279 (vp-web01-vol1)

Description Status Checks Monitoring Tags

Add/Edit Tags

Key	Value
Name	vp-web01-vol1

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EC2 Managerer x New Tab https://us-west-1.console.aws.amazon.com/ec2/v2/home?region=us-west-1#Volumessort=desccreateTime

Services Resource Groups

Create Volume Actions

Filter by tags and attributes or search by keyword

Name	Volume ID	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State	Alarm Stat
vp-web01-vol1	0922de55...	9 GiB	gp2	100 / 3000	snap-0120e9ad...	March 5, 2017 at 7:5...	us-west-1a	available	None
vp-web01-vol1-old	0922de55...	5 GiB	gp2	100 / 3000	snap-0120e9ad...	March 5, 2017 at 7:4...	us-west-1a	in-use	None
vol-0c091c40...	0c091c40...	8 GiB	gp2	100 / 3000	snap-f711c830	March 5, 2017 at 7:4...	us-west-1a	in-use	None

Volumes: vol-01d8b7217258fe15f (vp-web01-vol1)

Description Status Checks Monitoring Tags

Add/Edit Tags

Key	Value
Name	vp-web01-vol1

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Unmount & detach Old Volume.

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```
[root@ip-172-31-11-88 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/xvda1      7.8G  666M  6.7G  9% /
tmpfs          498M     0  498M  0% /dev/shm
/dev/xvdf2      4.8G   10M  4.6G  1% /datavol
[root@ip-172-31-11-88 ~]# umount /datavol/
[root@ip-172-31-11-88 ~]#
```

EC2 Managerer New Tab

<https://us-west-1.console.aws.amazon.com/ec2/v2/home?region=us-west-1#Volumessort=desccreateTime>

Services Resource Groups

EC2 Dashboard Events Tags Reports Limits

INSTANCES Instances Spot Requests Reserved Instances Dedicated Hosts

IMAGES AMIs Bundle Tasks

ELASTIC BLOCK STORE Volumes Snapshots

NETWORK & SECURITY Security Groups Elastic IPs Placement Groups Key Pairs Network Interfaces

LOAD BALANCING Load Balancers Target Groups

AUTO SCALING

Create Volume Actions

Modify Volume Delete Volume Attach Volume Detach Volume Force Detach Volume Create Snapshot Change Auto-Enable IO Setting Add/Edit Tags

Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State	Alarm Status
9 GiB	gp2	100 / 3000	snap-0120e9ad...	March 5, 2017 at 7:5...	us-west-1a	available	None
5 GiB	gp2	100 / 3000		March 5, 2017 at 7:4...	us-west-1a	in-use	None
8 GiB	gp2	100 / 3000	snap-f711c830	March 5, 2017 at 7:4...	us-west-1a	in-use	None

Volumes: vol-0922de55a25743279 (vp-web01-vol1-old)

Description	Status Checks	Monitoring	Tags
Volume ID: vol-0922de55a25743279	Size: 5 GiB	Created: March 5, 2017 at 7:45:26 PM UTC+5:30	Availability Zone: us-west-1a
		State: in-use	Encrypted: Not Encrypted
		Attachment information: i-0d1cd9517fa97c28d (vp-web01) /dev/sdf (attached)	KMS Key ID:
		Volume type: gp2	KMS Key Alias:

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Attach and mount new volume.

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Select new volume ==> Action ==> Attach

The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with various services like EC2 Dashboard, Instances, Images, and Elastic Block Store. In the main area, under 'VOLUMES', a list of volumes is shown, including 'vp-web01-vol1' (9 GiB, gp2, available) and 'vp-web01-vol1-old' (5 GiB, gp2, available). A modal window titled 'Attach Volume' is open, showing the selected volume 'vp-web01-vol1' and instance 'i-0d1cd9517fa97c28d'. The device is set to '/dev/sdf'. A note at the bottom of the modal says: 'Note: 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.' At the bottom right of the modal are 'Cancel' and 'Attach' buttons.

The screenshot shows three terminal windows. The first window shows the output of the 'fdisk -l' command:

```
Disk /dev/xvda: 8589 MB, 8589934592 bytes
255 heads, 63 sectors/track, 1044 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x00057cbb

   Device Boot      Start        End      Blocks   Id  System
/dev/xvda1  *           1       1045     8387584   83  Linux
```

The second window shows the output of 'fdisk -l' for the second volume:

```
Disk /dev/xvdf: 9663 MB, 9663676416 bytes
255 heads, 63 sectors/track, 1174 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

   Device Boot      Start        End      Blocks   Id  System
/dev/xvdf2  *           1       652     5237158+   83  Linux
```

The third window shows the output of 'mount /dev/xvdf2 /datavol/' and 'df -h' command:

```
[root@ip-172-31-11-88 ~]# mount /dev/xvdf2 /datavol/
[root@ip-172-31-11-88 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/xvda1      7.8G  666M  6.7G  9% /
tmpfs          498M    0  498M  0% /dev/shm
/dev/xvdf2      4.8G  11M  4.6G  1% /datavol
[root@ip-172-31-11-88 ~]# ls /datavol/
ansible  chef  git  jenkins  lost+found  nexus  puppet  vagrant
[root@ip-172-31-11-88 ~]#
```

In the above screenshot you see the data is restored.

But the mount point size is still around 5 GB even though we changed the EBS volume size to 9 GB.

This is because the rest of the volume is still unformatted and we need to format it.

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Resizing the increased volume.

We have already mounted the new volume but to resize it we need to umount, delete partition, recreate it with new size, resize the format and mount it.

```
[root@ip-172-31-11-88 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/xvda1       7.8G  666M  6.7G  9% /
tmpfs          498M     0  498M  0% /dev/shm
/dev/xvdf2       4.8G   11M  4.6G  1% /datavol
[root@ip-172-31-11-88 ~]# umount /datavol/
[root@ip-172-31-11-88 ~]# fdisk /dev/xvdf

WARNING: DOS-compatible mode is deprecated. It's strongly recommended to
switch off the mode (command 'c') and change display units to
sectors (command 'u').

Command (m for help): p
Disk /dev/xvdf: 9663 MB, 9663676416 bytes
255 heads, 63 sectors/track, 1174 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

  Device Boot      Start        End      Blocks   Id  System
/dev/xvdf2           1       652    5237158+  83  Linux

Command (m for help): d
Selected partition 2

Command (m for help): p
Disk /dev/xvdf: 9663 MB, 9663676416 bytes
255 heads, 63 sectors/track, 1174 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

  Device Boot      Start        End      Blocks   Id  System

Command (m for help):
```

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```

imran@DevOps:~/keys          root@ip-172-31-11-88:~          root@ip-172-31-11-88:~
Command (m for help): p
Disk /dev/xvdf: 9663 MB, 9663676416 bytes
255 heads, 63 sectors/track, 1174 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

Device Boot      Start         End      Blocks   Id  System
Command (m for help): n
Command action
  e   extended
  p   primary partition (1-4)
p
Partition number (1-4): 2
First cylinder (1-1174, default 1):
Using default value 1
Last cylinder, +cylinders or +size{K,M,G} (1-1174, default 1174):
Using default value 1174

Command (m for help): p
Disk /dev/xvdf: 9663 MB, 9663676416 bytes
255 heads, 63 sectors/track, 1174 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

Device Boot      Start         End      Blocks   Id  System
/dev/xvdf2        1       1174    9430123+  83  Linux

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
[root@ip-172-31-11-88 ~]# 

```

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```

imran@DevOps:~/keys          root@ip-172-31-11-88:~          root@ip-172-31-11-88:~
255 heads, 63 sectors/track, 1174 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0xc5bae138

Device Boot      Start         End      Blocks   Id  System
/dev/xvdf2        1       1174    9430123+  83  Linux

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
[root@ip-172-31-11-88 ~]# resize2fs /dev/xvdf2
resize2fs 1.41.12 (17-May-2010)
Please run 'e2fsck -f /dev/xvdf2' first.

[root@ip-172-31-11-88 ~]# e2fsck -f /dev/xvdf2
e2fsck 1.41.12 (17-May-2010)
Pass 1: Checking inodes, blocks, and sizes
Pass 2: Checking directory structure
Pass 3: Checking directory connectivity
Pass 4: Checking reference counts
Pass 5: Checking group summary information
/dev/xvdf2: 18/327680 files (0.0% non-contiguous), 55906/1309289 blocks
[root@ip-172-31-11-88 ~]# resize2fs /dev/xvdf2
resize2fs 1.41.12 (17-May-2010)
Resizing the filesystem on /dev/xvdf2 to 2357530 (4k) blocks.
The filesystem on /dev/xvdf2 is now 2357530 blocks long.

[root@ip-172-31-11-88 ~]# mount /dev/xvdf2 /datavol/
[root@ip-172-31-11-88 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/xvda1     7.8G  666M  6.7G  9% /
tmpfs          498M     0  498M  0% /dev/shm
/dev/xvdf2     8.8G 12M  8.3G  1% /datavol
[root@ip-172-31-11-88 ~]# ls /datavol/
ansible  chef  git  jenkins  lost+found  nexus  puppet  vagrant
[root@ip-172-31-11-88 ~]# 

```

Now the Volume size is increased and data is also restored.

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