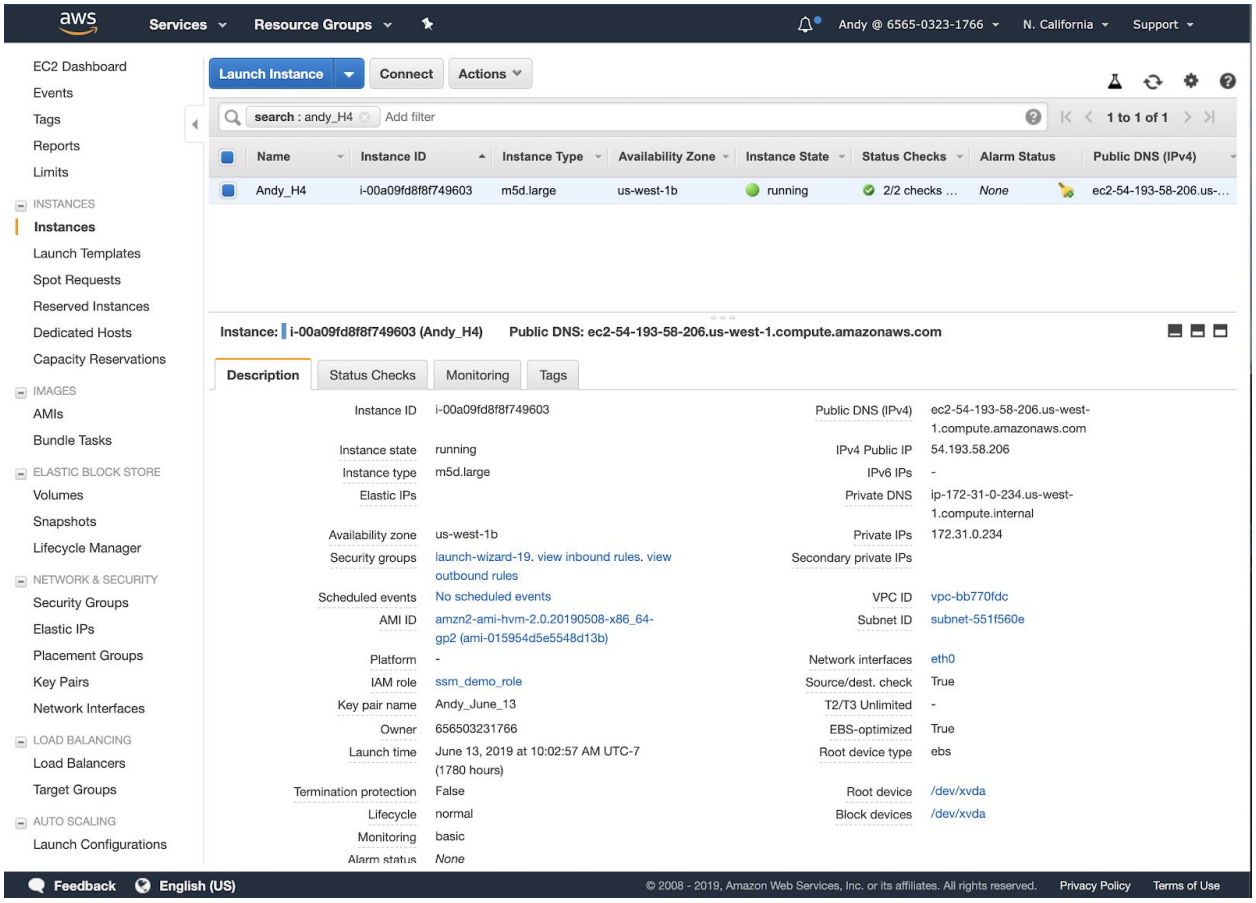
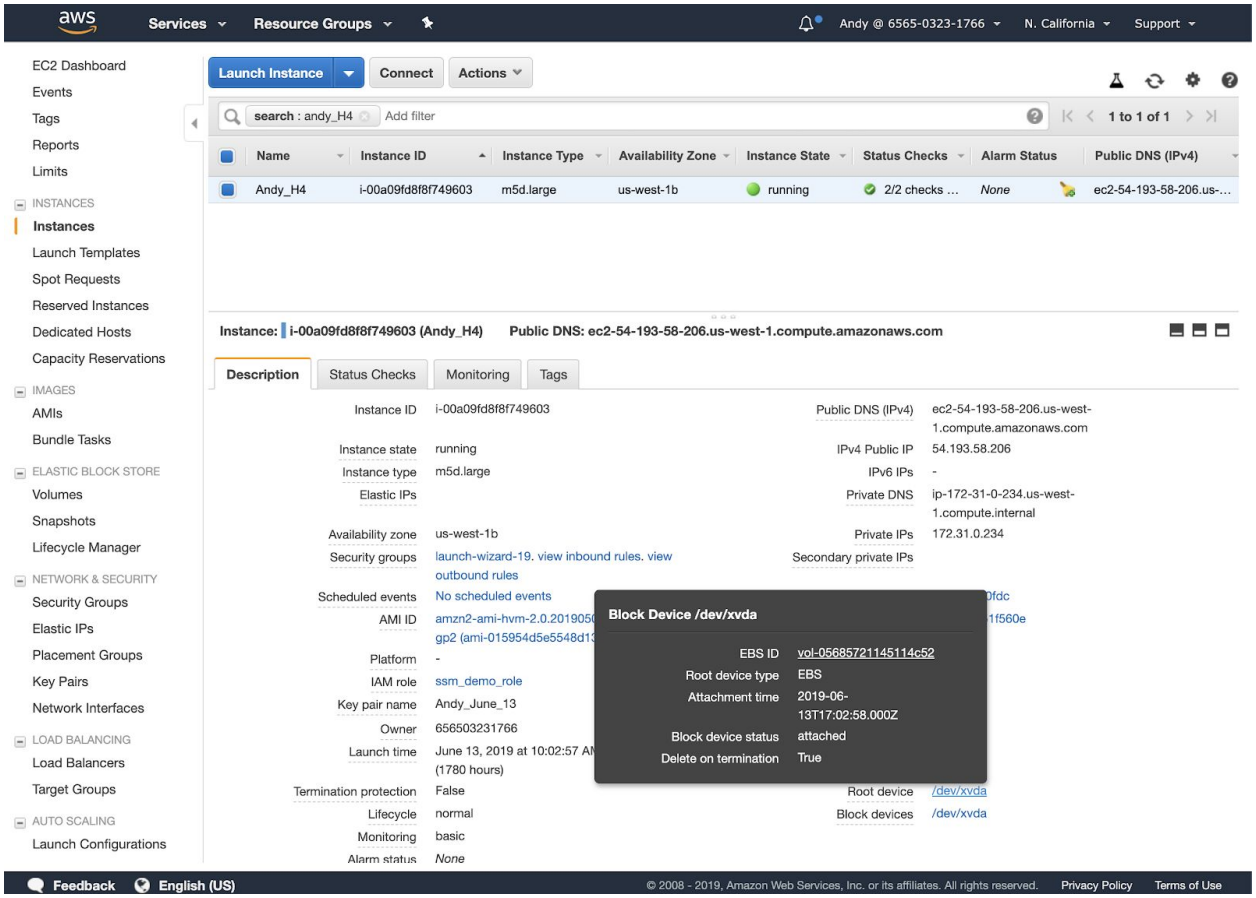
Step-by-Step Guide to Increase Disk Space in AWS

Since the launch of the mainnet, more and more people subscribed to become a node runner. The previously recommended 30G disk space is not enough for the future needs. This brief tutorial provides a step-by-step instruction on how to increase the disk space of an EC2 instance in AWS.

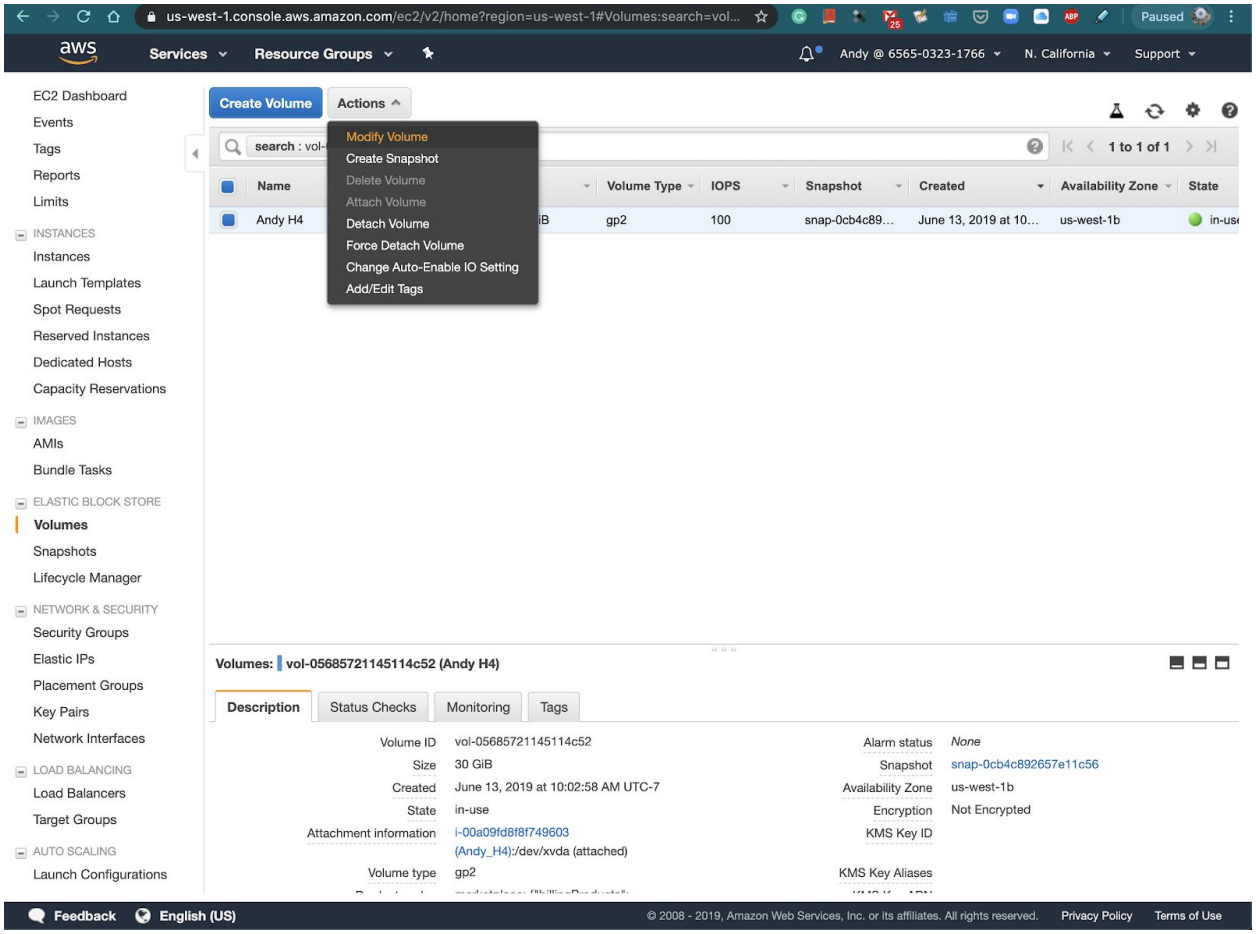
Step 1: After logging in to your AWS console, find the EC2 instance running the Harmony node.



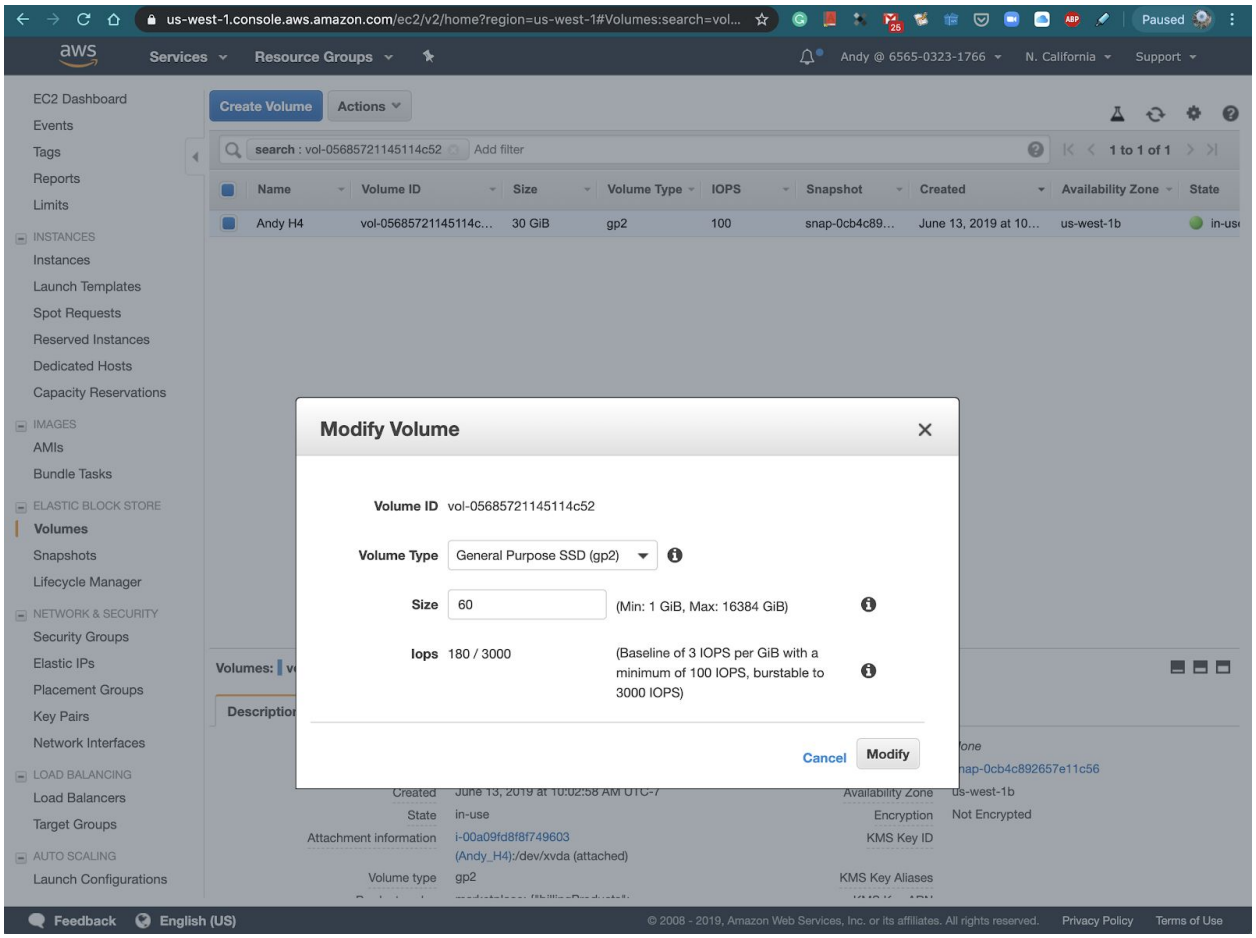
Step 2: Click the link (/dev/xvda) located in the bottom right area to show the information of the root device.



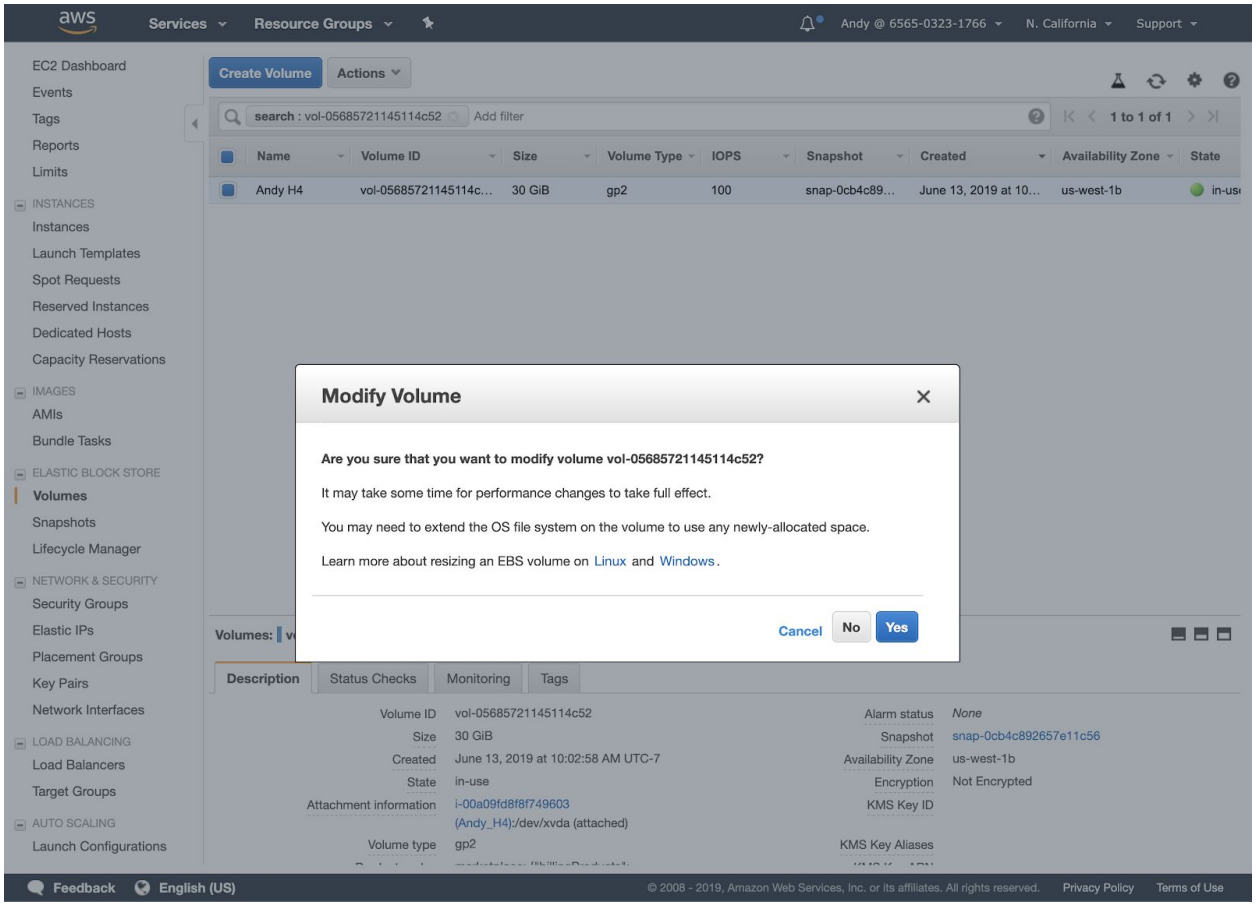
Step 3: Click the EBS ID link (vol-05685721145114c52 for this demo, your volume might have a different identifier), this will jump to a webpage to modify volume size.



Step 4: Click the Actions dropdown button, and then select “Modify Volume” option. We suggest extending to the size to 100 GiB, but we use 60 GiB for this demo. Then click “Modify”.



Step 5: Click “Yes” to confirm this action.



Step 6: it may take 20 to 30 mins to resize the disk space. The action is done until the state change from “in-use modifying…” yellow circle to “in use” green circle.

Step 7: Then the next step is to ssh to the node. Check the basic information about the block devices.

```
$lsblk
```

```
ec2-user@ip-172-31-0-234:~
[ec2-user@ip-172-31-0-234 ~]$ lsblk
NAME          MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
nvme1n1       259:0    0 69.9G  0 disk
nvme0n1       259:1    0   60G  0 disk
├─nvme0n1p1   259:2    0   30G  0 part /
└─nvme0n1p128 259:3    0    1M  0 part
[ec2-user@ip-172-31-0-234 ~]$
```

```
$sudo growpart /dev/nvme0n1 1
```

Expected result:

```
[ec2-user@ip-172-31-0-234 ~]$ sudo growpart /dev/nvme0n1 1
CHANGED: partition=1 start=4096 old: size=62910431 end=62914527 new: size=125824991,end=125829087
```

```
$sudo xfs_growfs /dev/nvme0n1p1
```

Expected result:

```
[ec2-user@ip-172-31-0-234 ~]$ sudo xfs_growfs /dev/nvme0n1p1
meta-data=/dev/nvme0n1p1         isize=512    agcount=16, agsize=524159 blks
         =                       sectsz=512   attr=2, projid32bit=1
         =                       crc=1        finobt=1 spinodes=0
data     =                       bsize=4096   blocks=7863803, imaxpct=25
         =                       sunit=0      swidth=0 blks
naming   =version 2              bsize=4096   ascii-ci=0 ftype=1
log      =internal               bsize=4096   blocks=2560, version=2
         =                       sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                   extsz=4096   blocks=0, rtextents=0
data blocks changed from 7863803 to 15728123
```

Step 8: verification - if you see the size of /dev/nvme0n1p1 has been increased to the specified size (60G in our demo), you are good to go.

```
$df -h
```

```
[ec2-user@ip-172-31-0-234 ~]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        3.8G     0  3.8G   0% /dev
tmpfs           3.8G     0  3.8G   0% /dev/shm
tmpfs           3.8G  412K  3.8G   1% /run
tmpfs           3.8G     0  3.8G   0% /sys/fs/cgroup
/dev/nvme0n1p1   60G   22G   39G  36% /
tmpfs           769M     0  769M   0% /run/user/1000
```

In case you need some extra help for this task, feel free to reach out to our engineer (Andy@harmony.one) on Discord, Wechat, and email.