

Create a new EC2 instance with 100GB boot volume and additional EBS 200 GB /u01 mount point and format it and mount it on /u01 need to work using both terraform and AWS console make sure that once with VM is up make sure boot volume is 100GB

AWS Console:

The screenshot displays the AWS Management Console interface. The top navigation bar shows the user is logged in as 'shivani' in the 'us-east-2' region. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Tags, Limits, and various EC2 services like Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, AMIs, AMI Catalog, Elastic Block Store, and Volumes.

The main content area shows the 'Instances (1/2)' page. A table lists the instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
try1	i-071d868dc7d18191a	Terminated	t2.micro	-	No alarms	us-east-2c	-
-	i-057abcead263d185f	Running	t2.micro	2/2 checks passed	No alarms	us-east-2c	ec2-18-222-140-

The details for the instance 'i-057abcead263d185f' are shown below the table. The 'Root device details' section indicates the root device name is '/dev/xvda', the root device type is 'EBS', and EBS optimization is disabled. The 'Block devices' section shows a table of attached volumes:

Volume ID	Device name	Volume size (GiB)	Attachment status	Attachment time	Encrypted	KMS key ID
vol-08be29045f726704a	/dev/xvda	100	Attached	Thu Feb 10 2022 14:48:19 ...	No	-
vol-0a5f2a78d7e11cdc3	/dev/sdb	200	Attached	Thu Feb 10 2022 14:48:19 ...	No	-

Below the console screenshot, a terminal window shows the commands executed on the EC2 instance:

```
[ec2-user@ip-172-31-34-169 ~]$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
xvda        202:0    0 100G  0 disk 
└─xvda1     202:1    0 100G  0 part /
xvdb        202:16   0 200G  0 disk 
[ec2-user@ip-172-31-34-169 ~]$ sudo file -s /dev/xvdb
/dev/xvdb: data
[ec2-user@ip-172-31-34-169 ~]$ sudo mkfs -t ext4 /dev/xvdb
mke2fs 1.42.9 (28-Dec-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
13107200 inodes, 52428800 blocks
2621440 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=2199912448
1600 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000, 7962624, 11239424, 20480000, 23887872
Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[ec2-user@ip-172-31-34-169 ~]$ sudo mkdir /u01
[ec2-user@ip-172-31-34-169 ~]$ sudo mount /dev/xvdb /u01/
[ec2-user@ip-172-31-34-169 ~]$ cd /u01
[ec2-user@ip-172-31-34-169 /u01]$ df -h
```

The instance ID 'i-057abcead263d185f' is displayed below the terminal output. At the bottom, the public and private IP addresses are listed: Public IPs: 18.222.140.240, Private IPs: 172.31.34.169.

mx.massmutual.com x Instances | EC2 Management Co x i-057abcead263d185f | EC2 Insto x How To Attach And Mount An El x +

us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-057abcead263d185f

```
Filesystem label=
OS type: Linux
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    4096000, 7962624, 11239424, 20480000, 23887872

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[ec2-user@ip-172-31-34-169 ~]$ sudo mkdir /u01
[ec2-user@ip-172-31-34-169 ~]$ sudo mount /dev/xvdb /u01/
[ec2-user@ip-172-31-34-169 ~]$ cd /u01
[ec2-user@ip-172-31-34-169 u01]$ df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        475M   0  475M   0% /dev
tmpfs           483M   0  483M   0% /dev/shm
tmpfs           483M 404K  483M   1% /run
tmpfs           483M   0  483M   0% /sys/fs/cgroup
/dev/xvda1      100G  1.7G   99G   2% /
tmpfs           97M   0   97M   0% /run/user/1000
/dev/xvdb       197G  61M  187G   1% /u01
[ec2-user@ip-172-31-34-169 u01]$
```

i-057abcead263d185f

Public IPs: 18.222.140.240 Private IPs: 172.31.34.169

Windows taskbar: Type here to search, 29°C Mostly sunny, 1501, 10-02-2022

Terraform :

The screenshot shows the AWS Management Console for the us-east-2 region. The left sidebar contains navigation links for EC2 Dashboard, Events, Tags, Limits, Instances, Images, Elastic Block Store, and Volumes. The main content area displays the 'Instances (1/3)' page. A table lists three instances, with the first one (Public_subnet...) selected. Below the table, the details for instance i-01d229fb6e85d3386 (Public_subnet_EC2) are shown. The instance is in a 'Running' state. The root device name is /dev/xvda, and the root device type is EBS. The block devices section shows two volumes: vol-0ee36a54d1c5fb06b (100 GiB) and vol-03cf9e167441eba0d (200 GiB), both attached to the instance. The 'Recent root volume replacement tasks' section is also visible.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Public_subnet...	i-0ebadb52192564d	Terminated	t2.micro	-	No alarms	us-east-2a	-
Public_subnet...	i-019bff16f707872f8	Terminated	t2.micro	-	No alarms	us-east-2a	-
Public_subnet...	i-01d229fb6e85d3386	Running	t2.micro	Initializing	No alarms	us-east-2a	ec2-18-191-104-

Instance: i-01d229fb6e85d3386 (Public_subnet_EC2)

Root device name: /dev/xvda
Root device type: EBS
EBS optimization: disabled

Block devices

Volume ID	Device name	Volume size (GiB)	Attachment status	Attachment time	Encrypted	KMS key ID
vol-0ee36a54d1c5fb06b	/dev/xvda	100	Attached	Fri Feb 11 2022 14:27:56 G...	No	-
vol-03cf9e167441eba0d	/dev/xvdb	200	Attached	Fri Feb 11 2022 14:28:43 G...	No	-

Recent root volume replacement tasks

Replace root volume

The screenshot shows the AWS Management Console for the us-east-2 region, specifically the 'Connect' page for instance i-01d229fb6e85d3386. The terminal output shows the Amazon Linux 2 AMI booting up. The output includes the following text:

```
Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/
3 package(s) needed for security, out of 6 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-0-0-104 ~]$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
xvda        202:0    0 100G 0 disk
└─xvda1     202:1    0 100G 0 part /
xvdb        202:16   0 200G 0 disk
[ec2-user@ip-10-0-0-104 ~]$
```

i-01d229fb6e85d3386 (Public_subnet_EC2)

Public IPs: 18.191.104.27 Private IPs: 10.0.0.104

The screenshot shows the Windows taskbar at the bottom of the screen. The system clock displays 14:31 on 11-02-2022. The network status shows 29°C Mostly sunny.