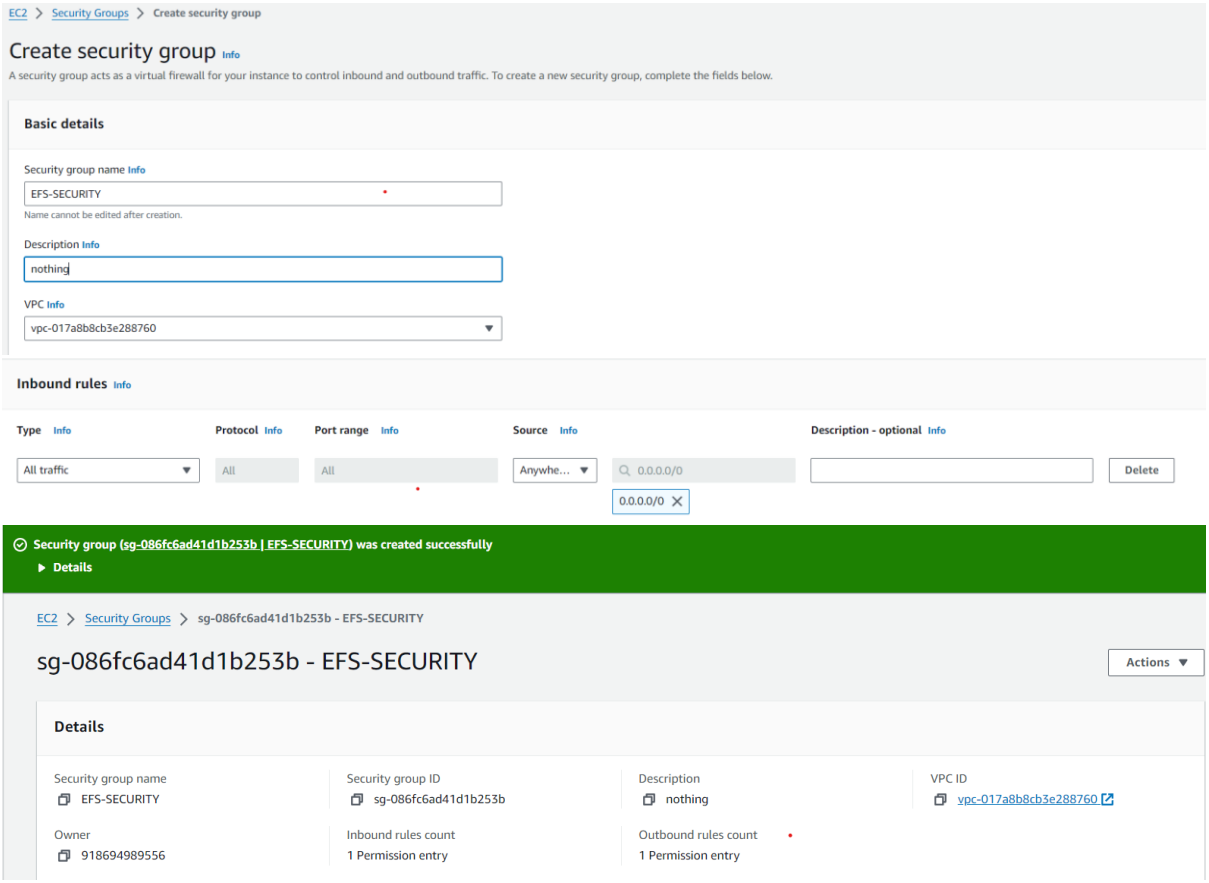
CREATE AN EFS AND ATTACH TO TWO EC2 INSTANCE.

1)EFS:

Step1:

Create security group:



Step2: Create EFS

Name - *optional*
Name your file system.

EFSFILESYSTEM

File system type

Choose to either store data across multiple Availability Zones or within a single Availability Zone. Learn more

- (•) Regional
  Offers the highest levels of availability and durability by storing file system data across multiple Availability Zones within an AWS Region.
- ( ) One Zone
  Provides continuous availability to data within a single Availability Zone within an AWS Region.

Automatic backups

Automatically backup your file system data with AWS Backup using recommended settings. Additional pricing applies. Learn more

[x] Enable automatic backups

Lifecycle management

Automatically save money as access patterns change by moving files into the Infrequent Access (IA) or Archive storage class. Learn more

Transition into Infrequent Access (IA)	Transition into Archive	Transition into Standard
Transition files to IA based on the time since they were last accessed in Standard storage.	Transition files to Archive based on the time since they were last accessed in Standard storage.	Transition files back to Standard storage based on when they are first accessed in IA or Archive storage.
30 day(s) since last access	90 day(s) since last access	None

Mount targets

A mount target provides an NFSv4 endpoint at which you can mount an Amazon EFS file system. We recommend creating one mount target per Availability Zone. Learn more

Availability zone	Subnet ID	IP address	Security groups	
us-east-1a	subnet-0a2fba5683498…	Automatic	Choose security groups sg-086fc6ad41d1b253b EFS-SECURITY Show more (+1)	Remove
us-east-1b	subnet-084be69c328ab…	Automatic	Choose security groups sg-086fc6ad41d1b253b EFS-SECURITY	Remove
us-east-1c	subnet-06effd87207bd…	Automatic	Choose security groups sg-086fc6ad41d1b253b EFS-SECURITY	Remove
us-east-1d	subnet-0f52cb772f5b0…	Automatic	Choose security groups sg-086fc6ad41d1b253b EFS-SECURITY	Remove
us-east-1f	subnet-00a7824704d2…	Automatic	Choose security groups sg-086fc6ad41d1b253b EFS-SECURITY	Remove

Success!
File system (fs-0c3719ce359f0da6d) is available.

View file system

Amazon EFS > File systems

File systems (1)

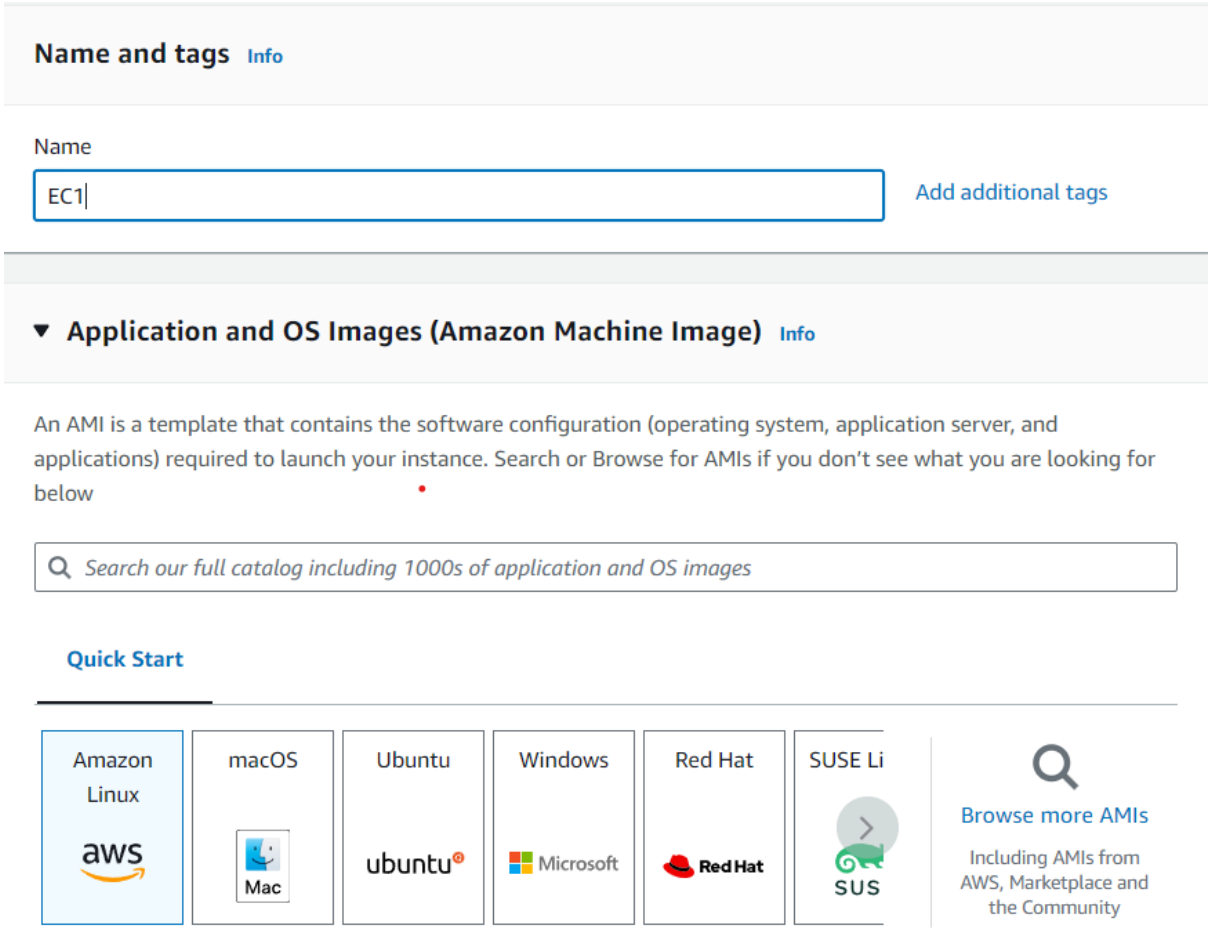
View details | Delete | Create file system

Filter by property values

1

Name	File system ID	Encrypted	Total size	Size in Standard	Size in IA	Size in Archive	Provisioned Throughput (MiB/s)	File system state	Creation time
EFSFILESYSTEM	fs-0c3719ce359f0da6d	Encrypted	6.00 KiB	6.00 KiB	0 Bytes	0 Bytes	-	Available	Thu, 2024 05:26 GMT

Step3: Launch first instance:



Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

DILEEP1 | Create new key pair

Network settings Info

VPC - *required* Info

vpc-017a8b8cb3e288760 (default)
172.31.0.0/16

Subnet Info

subnet-0a2fba56834986310
VPC: vpc-017a8b8cb3e288760 Owner: 918694989556
Availability Zone: us-east-1a IP addresses available: 4090 CIDR: 172.31.0.0/20)

Create new subnet

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

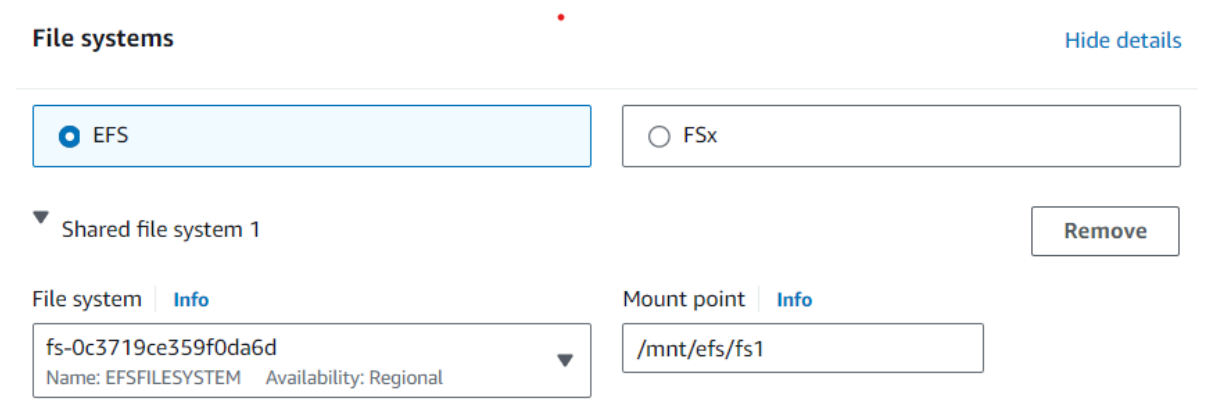
- ○ Create security group
- ◉ Select existing security group

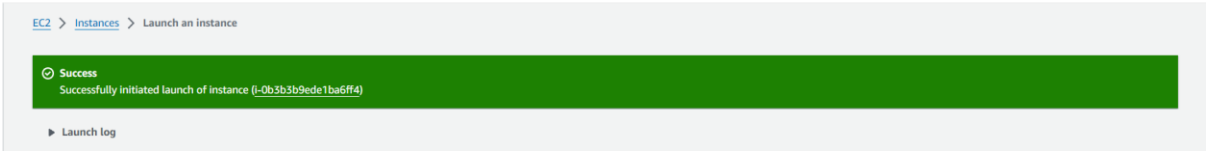
Common security groups Info

Select security groups

EFS-SECURITY sg-086fc6ad41d1b253b
VPC: vpc-017a8b8cb3e288760

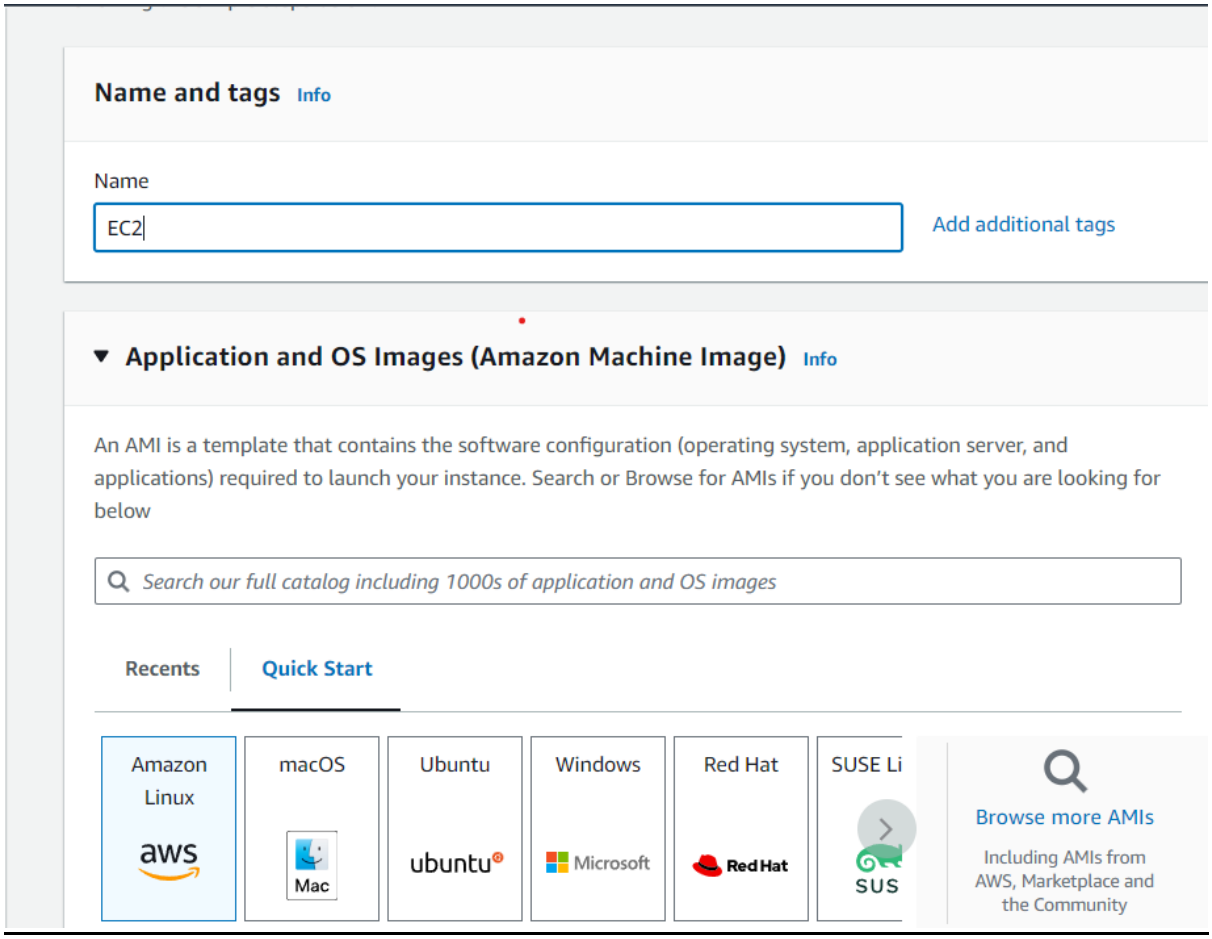
Compare security group rules





Step 4: EC1 instance connect to web:

Step 5: Launch 2nd instance:



Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

DILEEP1 | Create new key pair

Network settings Info

VPC - *required* Info

vpc-017a8b8cb3e288760 (default)
172.31.0.0/16

Subnet Info

subnet-084be69c328ab97fd
VPC: vpc-017a8b8cb3e288760 Owner: 918694989556
Availability Zone: us-east-1b IP addresses available: 4090 CIDR: 172.31.80.0/20)

Create new subnet

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

○ Create security group ◉ Select existing security group

Common security groups Info

Select security groups

EFS-SECURITY sg-086fc6ad41d1b253b
VPC: vpc-017a8b8cb3e288760

Compare security group rules

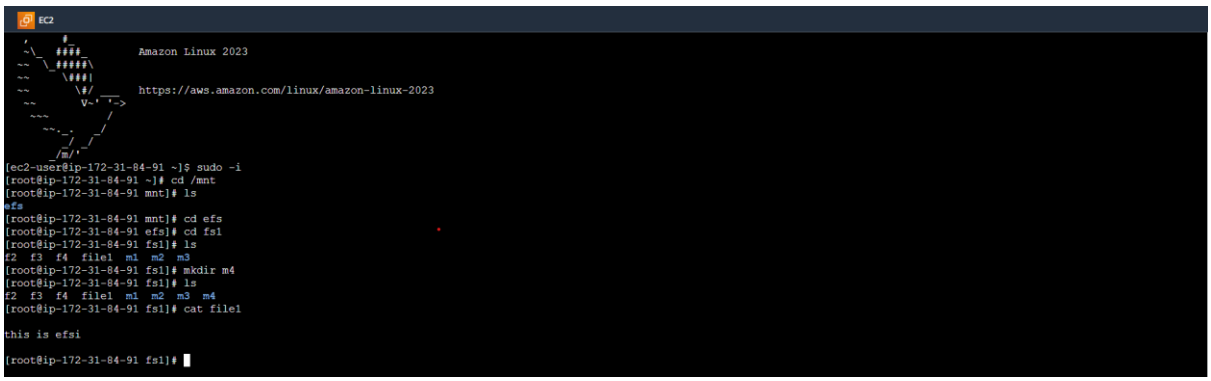
Security groups that you add or remove here will be added to or removed from all your network interfaces

EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance (i-00d7850778259907b)

▸ Launch log

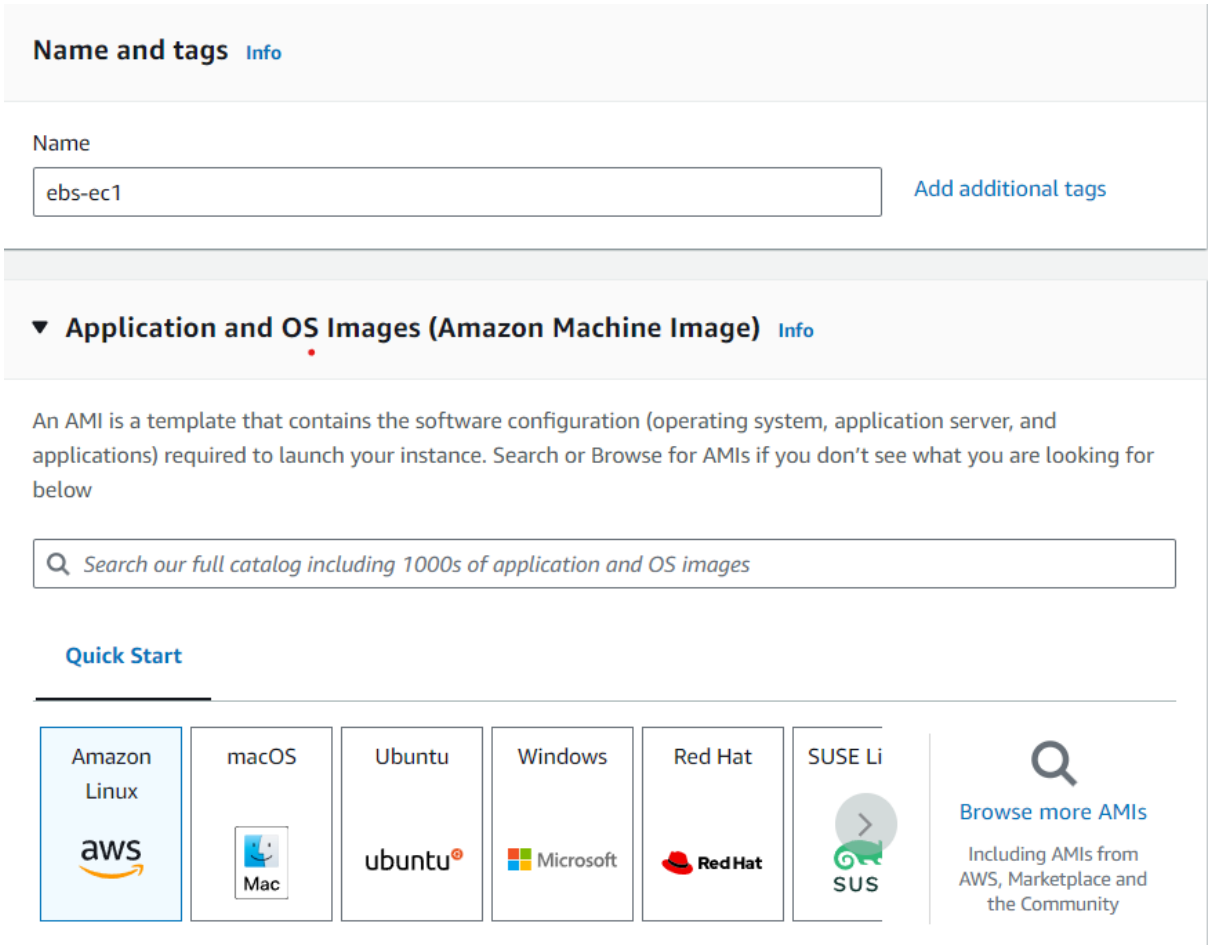
Step 6: EC2 instance connect to web:

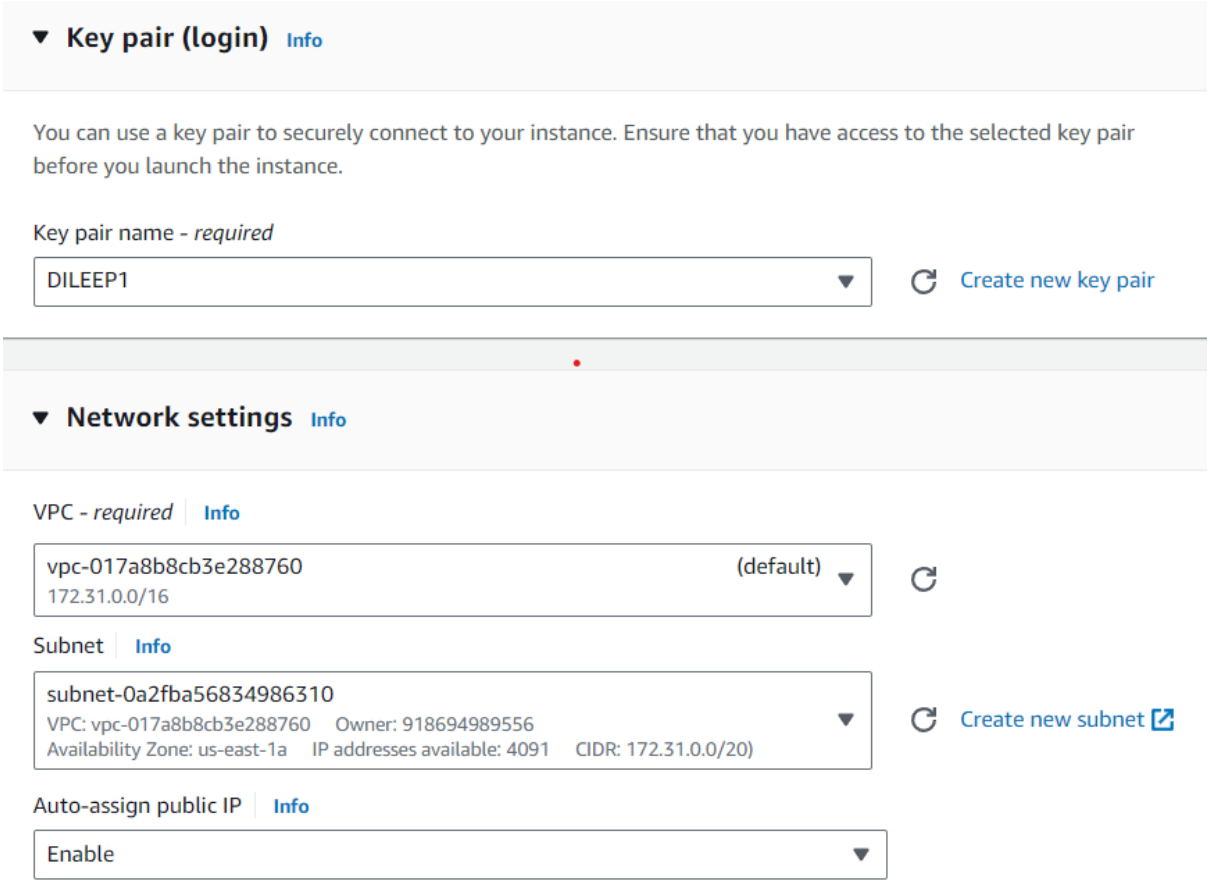


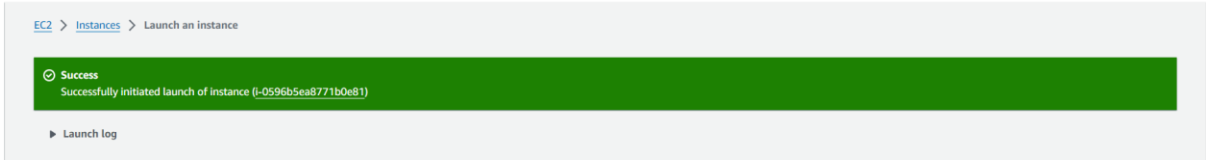
CREATE AN EBS AND ATTACH IT TO EC2 INSTANCE:

2) EBS:

Step 1: Create a EC2 instance:







Step 2: Create volume:

Create volume Info

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Volume settings

Volume type Info

Provisioned IOPS SSD (io1)

Size (GiB) Info

100

Min: 4 GiB, Max: 16384 GiB. The value must be an integer.

IOPS Info

300

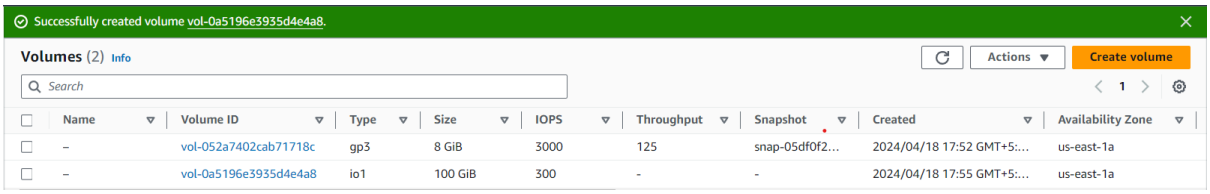
Min: 100 IOPS, Max: 5000 IOPS (up to 50 IOPS per GiB)

Throughput (MiB/s) Info

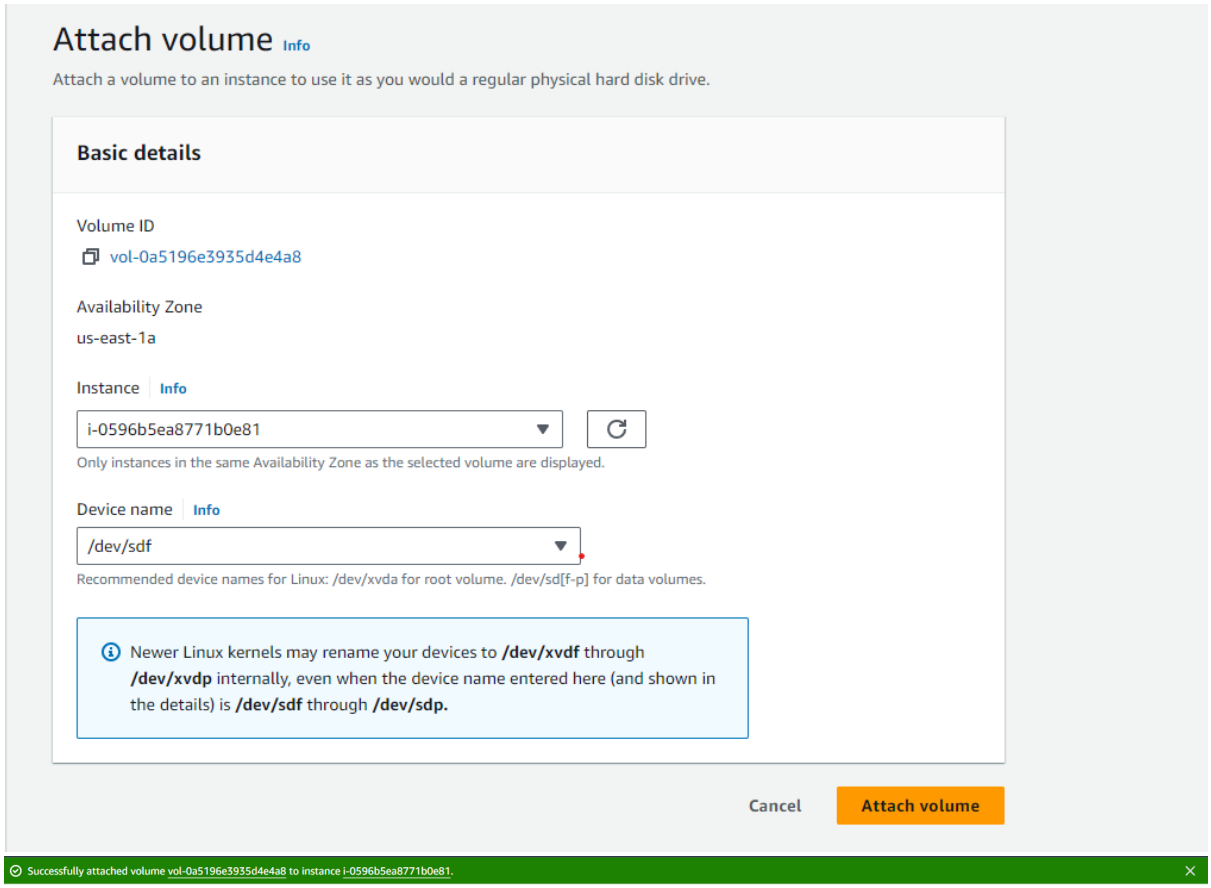
Not applicable

Availability Zone Info

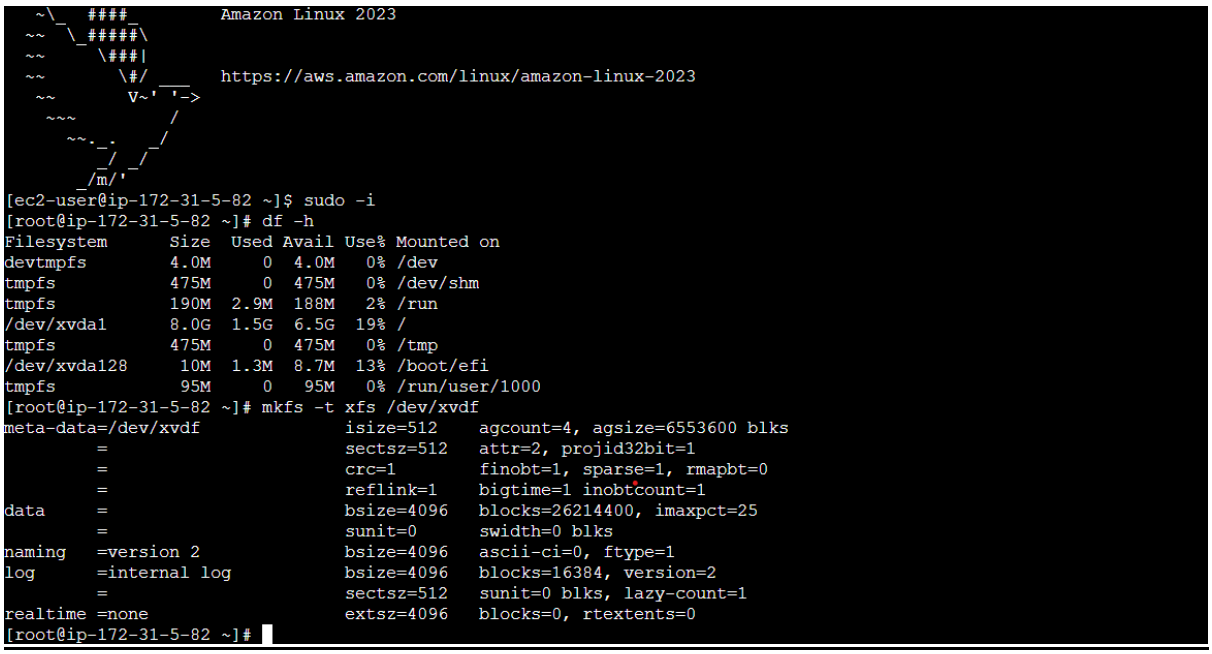
us-east-1a



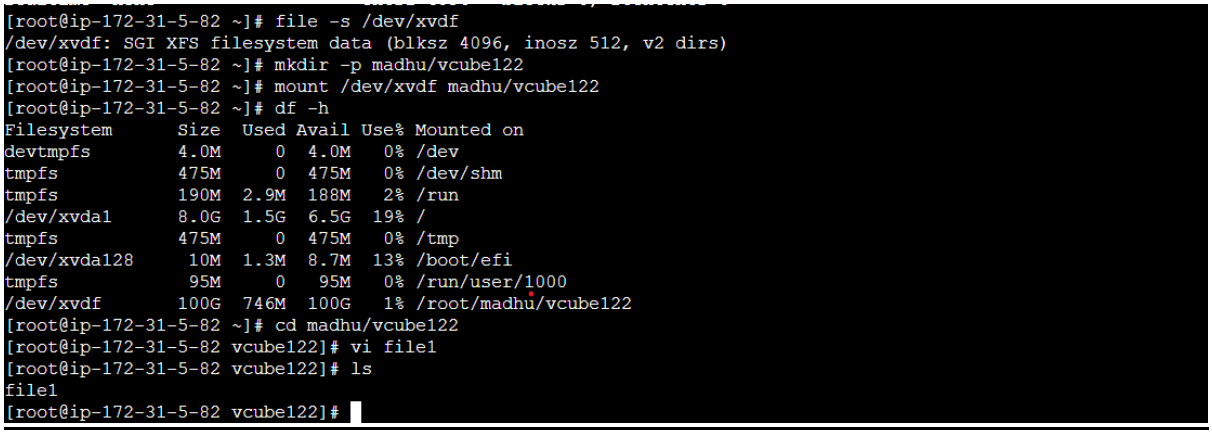
Step 3: Attach a volume to an instance:



Step 4: EC2 instance connect to web:



```
   ~\_  ####_        Amazon Linux 2023
  ~~  \_#####\
  ~~     \###|
  ~~       \#/ ___   https://aws.amazon.com/linux/amazon-linux-2023
   ~~       V~' '->
    ~~~         /
      ~~._.   _/
         _/ _/
       _/m/'
[ec2-user@ip-172-31-5-82 ~]$ sudo -i
[root@ip-172-31-5-82 ~]# 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  2.9M  188M   2% /run
/dev/xvda1      8.0G  1.5G  6.5G  19% /
tmpfs           475M     0  475M   0% /tmp
/dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
tmpfs            95M     0   95M   0% /run/user/1000
[root@ip-172-31-5-82 ~]# mkfs -t xfs /dev/xvdf
meta-data=/dev/xvdf              isize=512    agcount=4, agsize=6553600 blks
         =                       sectsz=512   attr=2, projid32bit=1
         =                       crc=1        finobt=1, sparse=1, rmapbt=0
         =                       reflink=1    bigtime=1 inobtcount=1
data     =                       bsize=4096   blocks=26214400, imaxpct=25
         =                       sunit=0      swidth=0 blks
naming   =version 2              bsize=4096   ascii-ci=0, ftype=1
log      =internal log           bsize=4096   blocks=16384, version=2
         =                       sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                   extsz=4096   blocks=0, rtextents=0
[root@ip-172-31-5-82 ~]#
```



```
[root@ip-172-31-5-82 ~]# file -s /dev/xvdf
/dev/xvdf: SGI XFS filesystem data (blksz 4096, inosz 512, v2 dirs)
[root@ip-172-31-5-82 ~]# mkdir -p madhu/vcube122
[root@ip-172-31-5-82 ~]# mount /dev/xvdf madhu/vcube122
[root@ip-172-31-5-82 ~]# 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  2.9M  188M   2% /run
/dev/xvda1      8.0G  1.5G  6.5G  19% /
tmpfs           475M     0  475M   0% /tmp
/dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
tmpfs            95M     0   95M   0% /run/user/1000
/dev/xvdf       100G  746M  100G   1% /root/madhu/vcube122
[root@ip-172-31-5-82 ~]# cd madhu/vcube122
[root@ip-172-31-5-82 vcube122]# vi file1
[root@ip-172-31-5-82 vcube122]# ls
file1
[root@ip-172-31-5-82 vcube122]#
```