

## **Module 02 : EC2 AND EFS ASSIGNMENT**

**SUBMITTED BY :-HITESH CHAUHAN**

**COURSES OFFERED:ADVANCED CLOUD COMPUTING AND DEVELOPS**

## Tasks To Be Performed:

Create an EFS and connect it to 3 different EC2 instances. Make sure that all instances have different operating systems. For instance, Ubuntu, Red Hat Linux and Amazon Linux 2.

### 1.First we need to create the EC2 Instance Ubuntu

#### AMI SELECT-UBUNTU

Name

UBUNTU-ASSIGNMENT 03

Add additional tags

▼ Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Q Search our full catalog including 1000s of application and OS images

Recents

Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Li

SUS

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type  
ami-0e86e20dae9224db8 (64-bit (x86)) / ami-096ea6a12ea24a797 (64-bit (Arm))  
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

▼ Summary

Number of instances Info  
1

Software Image (AMI)  
Canonical, Ubuntu, 24.04, amd64...read more  
ami-0e86e20dae9224db8

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)  
1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per

Cancel

Launch instance

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type  
ami-0e86e20dae9224db8 (64-bit (x86)) / ami-096ea6a12ea24a797 (64-bit (Arm))  
Virtualization: hvm    ENA enabled: true    Root device type: ebs

Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Architecture

AMI ID

ami-0e86e20dae9224db8

Verified provider

64-bit (x86)

▼ Instance type

Info | Get advice

Instance type

t2.micro  
Family: t2    1 vCPU    1 GiB Memory    Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour  
On-Demand RHEL base pricing: 0.026 USD per Hour  
On-Demand Linux base pricing: 0.0116 USD per Hour

Free tier eligible

All generations

Compare instance types

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login)

Info

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Canonical, Ubuntu, 24.04, amd64...[read more](#)  
ami-0e86e20dae9224db8

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per

Cancel

Launch instance

Review commands

▼ 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

first instance ubuntu

Create new key pair

▼ Network settings Info

Edit

Network Info

vpc-0cd5cc6b9eceac511

Subnet Info

No preference (Default subnet in any availability zone)

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

We'll create a new security group called 'launch-wizard-1' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere  
0.0.0.0/0

☐ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet

To set up an endpoint, for example when creating a web server

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

×

▼ Configure storage Info

Advanced

1x 8 GiB gp3

Root volume (Not encrypted)

ℹ Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

×

Add new volume

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

⌚ Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

↺

0 x File systems

Edit

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Canonical, Ubuntu, 24.04, amd64...[read more](#)

ami-0e86e20dae9224db8

Virtual server type (instance type)

t2.micro

Firewall (security group)

launch-wizard-7

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month. 750 hours of public IPv4

×

Cancel

Launch instance

[Review commands](#)

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	first instance u...	i-0d5e0f0aa336799c1	<span>Running</span>	t2.micro	<span>Initializing</span>	<a href="#">View alarms</a>	us-east-1e

EC2 > Instances > i-0a633125ce1e4b5ff

Instance summary for i-0a633125ce1e4b5ff (first instance ubuntu) Info

Refresh

Connect

Instance state ▼

Actions ▼

Instance ID

i-0a633125ce1e4b5ff (first instance ubuntu)

Public IPv4 address

98.82.23.224 | [open address](#)

Private IPv4 addresses

172.31.11.200

IPv6 address

-

Instance state

Running

Public IPv4 DNS

ec2-98-82-23-224.compute-1.amazonaws.com | [open address](#)

Hostname type

IP name: ip-172-31-11-200.ec2.internal

Private IP DNS name (IPv4 only)

ip-172-31-11-200.ec2.internal

Elastic IP addresses

-

Answer private resource DNS name

IPv4 (A)

Instance type

t2.micro

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)

Auto-assigned IP address

98.82.23.224 [Public IP]

VPC ID

vpc-0cd5cc6b9eace511

Auto Scaling Group name

-

IAM Role

-

Subnet ID

subnet-01501dd93ff2c3a23

IMDSv2

Required

Instance ARN

**Port 22 (SSH) is open to all IPv4 addresses**

Port 22 (SSH) is currently open to all IPv4 addresses, indicated by **0.0.0.0/0** in the inbound rule in [your security group](#). For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 18.206.107.24/29. [Learn more](#).

Instance ID

 i-0d5e0f0aa336799c1 (first instance ubuntu)

Connection Type


**Connect using EC2 Instance Connect**

Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

**Connect using EC2 Instance Connect Endpoint**

Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address

 18.204.8.71

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.



ubuntu



**Note:** In most cases, the default username, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

**Connect**[EC2](#) > [Instances](#) > Launch an instance**Success**

Successfully initiated launch of instance (i-03b26f6ad58b291a6)

[► Launch log](#)

## Connect to instance [Info](#)

Connect to your instance i-03b26f6ad58b291a6 (UBUNTU-ASSIGNMENT 03) using any of these options

**EC2 Instance Connect**

Session Manager

SSH client

EC2 serial console



### Port 22 (SSH) is open to all IPv4 addresses

Port 22 (SSH) is currently open to all IPv4 addresses, indicated by **0.0.0.0/0** in the inbound rule in [your security group](#). For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 18.206.107.24/29. [Learn more](#).

Instance ID

i-03b26f6ad58b291a6 (UBUNTU-ASSIGNMENT 03)

Connection Type



### Connect using EC2 Instance Connect

Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.



### Connect using EC2 Instance Connect Endpoint

Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address

54.197.65.174

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.



ubuntu



System information as of Wed Aug 28 16:31:04 UTC 2024

System load:	0.26	Processes:	106
Usage of /:	22.8% of 6.71GB	Users logged in:	0
Memory usage:	21%	IPv4 address for enX0:	172.31.82.122
Swap usage:	0%		

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: `sudo pro status`

The list of available updates is more than a week old.  
To check for new updates run: `sudo apt update`

The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in `/usr/share/doc/*/copyright`.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.

To run a command as administrator (user "root"), use "`sudo <command>`".  
See "`man sudo_root`" for details.

```
ubuntu@ip-172-31-82-122:~$ sudo su
root@ip-172-31-82-122:/home/ubuntu#
```

```
ubuntu@ip-172-31-82-122:~$ sudo su
root@ip-172-31-82-122:/home/ubuntu# sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:6 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [323 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [73.1 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [4220 B]
Get:9 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [252 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [109 kB]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [8632 B]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [9756 B]
Get:14 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [280 kB]
Get:15 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [54.8 kB]
Get:16 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [10.6 kB]
Get:17 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [2808 B]
Get:18 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
```

```
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [212 B]
Get:38 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [532 B]
Get:39 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:40 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
Get:41 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [10.3 kB]
Get:42 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [10.5 kB]
Get:43 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [17.6 kB]
Get:44 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1016 B]
Get:45 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:46 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:47 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:48 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 28.7 MB in 6s (4868 kB/s)
Reading package lists... Done
root@ip-172-31-82-122:/home/ubuntu#
```

```
root@ip-172-31-82-122:/home/ubuntu# sudo apt-get -y install nfs-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  keyutils libnfsidmap1 rpcbind
Suggested packages:
  watchdog
The following NEW packages will be installed:
  keyutils libnfsidmap1 nfs-common rpcbind
0 upgraded, 4 newly installed, 0 to remove and 102 not upgraded.
Need to get 400 kB of archives.
After this operation, 1416 kB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libnfsidmap1 amd64 1:2.6.4-3ubuntu5 [48.2 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 rpcbind amd64 1.2.6-7ubuntu2 [46.5 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 keyutils amd64 1.6.3-3build1 [56.8 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 nfs-common amd64 1:2.6.4-3ubuntu5 [248 kB]
Fetched 400 kB in 0s (9780 kB/s)
Selecting previously unselected package libnfsidmap1:amd64.
(Reading database ... 67741 files and directories currently installed.)
Preparing to unpack .../libnfsidmap1_1%3a2.6.4-3ubuntu5_amd64.deb ...
Unpacking libnfsidmap1:amd64 (1:2.6.4-3ubuntu5) ...
Selecting previously unselected package rpcbind.
Preparing to unpack .../rpcbind_1.2.6-7ubuntu2_amd64.deb ...
Unpacking rpcbind (1.2.6-7ubuntu2) ...
Selecting previously unselected package keyutils.
Preparing to unpack .../keyutils_1.6.3-3build1_amd64.deb ...
```



```

info: Not creating home directory /var/lib/nfs :
Created symlink /etc/systemd/system/multi-user.target.wants/nfs-client.target → /usr/lib/systemd/system/nfs-client.target.
Created symlink /etc/systemd/system/remote-fs.target.wants/nfs-client.target → /usr/lib/systemd/system/nfs-client.target.
auth-rpcgss-module.service is a disabled or a static unit, not starting it.
nfs-idmapd.service is a disabled or a static unit, not starting it.
nfs-utils.service is a disabled or a static unit, not starting it.
proc-fs-nfsd.mount is a disabled or a static unit, not starting it.
rpc-gssd.service is a disabled or a static unit, not starting it.
rpc-statd-notify.service is a disabled or a static unit, not starting it.
rpc-statd.service is a disabled or a static unit, not starting it.
rpc-svcgssd.service is a disabled or a static unit, not starting it.
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-82-122:/home/ubuntu#

```

```

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-82-122:/home/ubuntu# sudo mkdir efs
root@ip-172-31-82-122:/home/ubuntu#

```

Amazon EFS > File systems

File systems (1) Refresh View details Delete Create file system

Filter by property values

	Name	File system ID	Encryption	Total size	Size in Standard	Size in IA	Size in Archive	Provisioned Throughput (MiB/s)	File system state	Creation time
<input type="radio"/>	<a href="#">ubuntu-01</a>	<a href="#">fs-04ea9859d578c9530</a>	Encrypt	6.00 KIB	6.00 KIB	0 Bytes	0 Bytes	-	Available	Wed, Aug 2, 16:35 GMT

ubuntu-01 (fs-04ea9859d578c9530)

Delete

Attach

General

Edit

Performance mode

General Purpose

Throughput mode

Elastic

Lifecycle management

Transition into Infrequent Access (IA): 30 day(s) since last access

Transition into Archive: 90 day(s) since last access

Transition into Standard: None

Availability zone

Regional

Automatic backups

Enabled

Encrypted

b9d453ab-184c-4bd5-ae21-57828c35765c (aws/elasticfilesystem)

File system state

Available

DNS name



fs-04ea9859d578c9530.efs.us-east-1.amazonaws.com

Replication overwrite protection

Enabled

Metered size

Monitoring

Tags

File system policy

Access points

Network

Replication

Network



Manage



Availability zone (AZ-ID) ▲	Mount target ID ▼	Subnet ID ▼	Mount target state ▼	IP address ▼	Network interface ID ▼	Security groups ▼
us-east-1a (use1-az6)	fsmt-00f16211bd2ae0633	subnet-06f06ddf53ded0c40	Creating	172.31.42.249	eni-084de28980c0b33c5	-
us-east-1b (use1-az1)	fsmt-09525ca1f0d1c04e0	subnet-01501dd93ff2c3a23	Creating	172.31.0.224	eni-0b4df64f5ac10f704	-
us-east-1c (use1-az2)	fsmt-03fec2167d955a6da	subnet-0deef32c49746b9d	Creating	172.31.89.145	eni-08d91ff01fa66874b	-
us-east-1d (use1-az4)	fsmt-0bc96f988a128e356	subnet-01bc68d289889876d	Creating	172.31.21.227	eni-0ae9d8558c06c446d	-
us-east-1f (use1-az5)	fsmt-0d387ec0a36c64d6b	subnet-094c3abb7a2e75bf1	Creating	172.31.75.171	eni-019911c4ca7fa8a19	-

Attach



Mount your Amazon EFS File system on a Linux instance. [Learn more](#)

Mount via DNS

Mount via IP

Availability zone

us-east-1a

Using the NFS client:



```
sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsiz=1048576,hard,timeo=600,retrans=2,noresvport 172.31.42.249:/ efs
```

See our user guide for more information. [Learn more](#)

Close

```
System load: 0.04      Processes:      115
Usage of /:  27.7% of 6.71GB   Users logged in: 1
Memory usage: 23%      IPv4 address for enX0: 172.31.82.122
Swap usage:  0%
```

Expanded Security Maintenance for Applications is not enabled.

9 updates can be applied immediately.  
9 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: sudo pro status

\*\*\* System restart required \*\*\*

Last login: Wed Aug 28 16:56:27 2024 from 18.206.107.27

ubuntu@ip-172-31-82-122:~\$ sudo su

root@ip-172-31-82-122:/home/ubuntu# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport 172.31.42.249:/ efs

root@ip-172-31-82-122:/home/ubuntu# df -h

Filesystem	Size	Used	Avail	Use%	Mounted on
/dev/root	6.8G	1.9G	4.9G	28%	/
tmpfs	479M	0	479M	0%	/dev/shm
tmpfs	192M	896K	191M	1%	/run
tmpfs	5.0M	0	5.0M	0%	/run/lock
/dev/xvda16	881M	76M	744M	10%	/boot
/dev/xvda15	105M	6.1M	99M	6%	/boot/efi
tmpfs	96M	12K	96M	1%	/run/user/1000
172.31.42.249:/	8.0E	0	8.0E	0%	/home/ubuntu/efs

root@ip-172-31-82-122:/home/ubuntu#

## 2. First we need to create the EC2 Instance Amazon Linux

### AMI SELECT-Amazon Linux

Name

amazon-assignment 3

Add additional tags

▼ Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Q Search our full catalog including 1000s of application and OS images

Recents Quick Start

Amazon Linux

aws

macOS

Mac

Ubuntu

ubuntu

Windows

Microsoft

Red Hat

Red Hat

SUSE Li

SUS

Q

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI

ami-066784287e358dad1 (64-bit (x86), uefi-preferred) / ami-023508951a94f0c71 (64-bit (Arm), uefi)

Free tier eligible

Virtualization: hvm ENA enabled: true Root device type: ebs

After created already used security group.

▼ Network settings Info

Edit

Network Info

vpc-0cd5cc6b9eaceac511

Subnet Info

No preference (Default subnet in any availability zone)

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

default sg-06801d04568bec00e X

VPC: vpc-0cd5cc6b9eaceac511

Compare security group rules

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

▼
Configure storage
Info
Advanced

1x
8
GiB
gp3
Root volume (Not encrypted)

*Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage*

Add new volume

Click refresh to view backup information  
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems
Edit

Success
Successfully initiated launch of Instance (i-036014e5dbffe7b6b)

Launch Instance

After launch the instance and connect the ssh to the ubuntu os with port no 22 for inbound rule and outbound has all all traffic for particular this instance.


<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	amazon-assig...	i-036014e5dbffe7b6b	Running	t2.micro	Initializing	<a href="#">View alarms</a>	us-east-1c


EC2 Instance Connect

Session Manager

SSH client

EC2 serial console


**Port 22 (SSH) is open to all IPv4 addresses**  
Port 22 (SSH) is currently open to all IPv4 addresses, indicated by **0.0.0.0/0** in the inbound rule in [your security group](#). For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 18.206.107.24/29. [Learn more](#).

Instance ID  
 i-036014e5dbffe7b6b (amazon-assignment 3)



Connection Type


☒ **Connect using EC2 Instance Connect**  
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

☐ **Connect using EC2 Instance Connect Endpoint**  
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address  
 54.152.121.210

Username  
Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ec2-user.

 ec2-user 

 **Note:** In most cases, the default username, ec2-user, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

Connect

Now connect the instance through aws connect

After instance connect used sudo su for root access

```

#
~\##### Amazon Linux 2023
~~~\#####\
~~~\###|
~~~\#/ https://aws.amazon.com/linux/amazon-linux-2023
~~~v~' '->
~~~~
~~~~
~~~~
~/m/' '-
[ec2-user@ip-172-31-89-86 ~]$ sudo su
[root@ip-172-31-89-86 ec2-user]#

```

```
#_
~\_#### Amazon Linux 2023
~~\_#####\
~~\_###|
~~\_#/ https://aws.amazon.com/linux/amazon-linux-2023
~~V~' '->
~~~~
~~.-.
~/m/' '-/
```

[ec2-user@ip-172-31-89-86 ~]\$ sudo su

[root@ip-172-31-89-86 ec2-user]# sudo yum update

Then Updated the amazon instance

Sudo yum update

```
[ec2-user@ip-172-31-89-86 ~]$ sudo su
[root@ip-172-31-89-86 ec2-user]# sudo yum update
Last metadata expiration check: 0:01:24 ago on Wed Aug 28 17:03:54 2024.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-89-86 ec2-user]#
```





```

#_
~\##### Amazon Linux 2023
~~\#####\
~~\###|
~~\#/\
~~V~'-'>
~~~
~~-.-
~~-/
~/m/'-
[ec2-user@ip-172-31-89-86 ~]$ sudo su
[root@ip-172-31-89-86 ec2-user]# sudo yum update
Last metadata expiration check: 0:01:24 ago on Wed Aug 28 17:03:54 2024.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-89-86 ec2-user]# sudo yum install nfs-utils
Last metadata expiration check: 0:02:07 ago on Wed Aug 28 17:03:54 2024.
Package nfs-utils-1:2.5.4-2.rc3.amzn2023.0.3.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-89-86 ec2-user]# sudo mkdir efs
[root@ip-172-31-89-86 ec2-user]#

```

```

~ ~ ~ ~ ~
      |
    # # # # #
      |
~ ~ ~ ~ ~
      |
    # # # # #
      |
V- - - -> https://aws.amazon.com/linux/amazon-linux-2023
~ ~ ~ ~ ~
/m/

[ec2-user@ip-172-31-89-86 ~]$ sudo su
[root@ip-172-31-89-86 ec2-user]# sudo yum update
Last metadata expiration check: 0:01:24 ago on Wed Aug 28 17:03:54 2024.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-89-86 ec2-user]# sudo yum install nfs-utils
Last metadata expiration check: 0:02:07 ago on Wed Aug 28 17:03:54 2024.
Package nfs-utils-1:2.5.4-2.rc3.amzn2023.0.3.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-89-86 ec2-user]# sudo mkdir efs
[root@ip-172-31-89-86 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport 172.31.42.249:/ efs
[root@ip-172-31-89-86 ec2-user]# █
```

Command used for nfs mount confirmation.

df -h


Name

redhat 03

[Add additional tags](#)

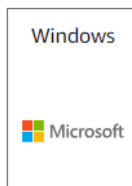
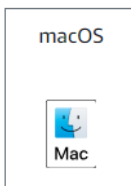
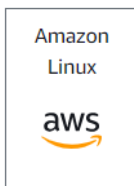
## ▼ Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

 Search our full catalog including 1000s of application and OS images

Recents

**Quick Start**



  
[Browse more AMIs](#)  
Including AMIs from  
AWS, Marketplace and  
the Community

Network | [Info](#)

vpc-0cd5cc6b9eceac511

Subnet | [Info](#)

No preference (Default subnet in any availability zone)

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

default sg-06801d04568bec00e ✕  
VPC: vpc-0cd5cc6b9eceac511


 [Compare security group rules](#)

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

## ▼ Configure storage [Info](#)


Advanced

1x  GiB  Root volume (Not encrypted)

 Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage



Add new volume

 Click refresh to view backup information



The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems

[Edit](#)

### Instance summary for i-02c99417283062af5 [Info](#)


Updated less than a minute ago



Connect

Instance state ▼


Actions ▼

Instance ID  
 i-02c99417283062af5

IPv6 address  
—


Hostname type  
IP name: ip-172-31-90-251.ec2.internal

Answer private resource DNS name  
IPv4 (A)


Auto-assigned IP address  
 107.21.84.192 [Public IP]

IAM Role  
—

IMDSv2  
Required

Public IPv4 address  
 107.21.84.192 | [open address](#)

Instance state  
 Stopping


Private IP DNS name (IPv4 only)  
 ip-172-31-90-251.ec2.internal

Instance type  
t2.micro

VPC ID  
 vpc-0cd5cc6b9eace511


Subnet ID  
 subnet-0deef32c49746b9d

Instance ARN  
 arn:aws:ec2:us-east-1:381492076809:instance/i-02c99417283062af5

Private IPv4 addresses  
 172.31.90.251

Public IPv4 DNS  
 ec2-107-21-84-192.compute-1.amazonaws.com | [open address](#)

Elastic IP addresses  
—

AWS Compute Optimizer finding  
 Opt-in to AWS Compute Optimizer for recommendations. | [Learn more](#)

Auto Scaling Group name  
—

```
• MobaXterm Personal Edition v24.2 •
(SSH client, X server and network tools)

▶ SSH session to ec2-user@107.21.84.192
  • Direct SSH      : ✓
  • SSH compression : ✓
  • SSH-browser     : ✓
  • X11-forwarding  : ✗ (disabled or not supported by server)

▶ For more info, ctrl+click on help or visit our website.

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Thu Aug 29 15:04:20 2024 from 110.226.178.176
[ec2-user@ip-172-31-90-251 ~]$
```

```
• MobaXterm Personal Edition v24.2 •
(SSH client, X server and network tools)

▶ SSH session to ec2-user@107.21.84.192
  • Direct SSH      : ✓
  • SSH compression : ✓
  • SSH-browser     : ✓
  • X11-forwarding  : ✗ (disabled or not supported by server)

▶ For more info, ctrl+click on help or visit our website.

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Thu Aug 29 15:04:20 2024 from 110.226.178.176
[ec2-user@ip-172-31-90-251 ~]$ sudo su
[root@ip-172-31-90-251 ec2-user]# sudo yum update
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Red Hat Enterprise Linux 9 for x86_64 - AppStream from RHUI (RPMs)
41 MB/s | 39 MB 00:00
```

glibc-gconv-extra	x86_64	2.34-100.el9_4.3	rhel-9-baseos-rhui-rpms	1
glibc-langpack-en	x86_64	2.34-100.el9_4.3	rhel-9-baseos-rhui-rpms	6
kernel-tools	x86_64	5.14.0-427.33.1.el9_4	rhel-9-baseos-rhui-rpms	5
kernel-tools-libs	x86_64	5.14.0-427.33.1.el9_4	rhel-9-baseos-rhui-rpms	5
kexec-tools	x86_64	2.0-27-8.el9_4.3	rhel-9-baseos-rhui-rpms	4
libcurl	x86_64	7.76.1-29.el9_4.1	rhel-9-baseos-rhui-rpms	2
libndp	x86_64	1.8-6.el9_4	rhel-9-baseos-rhui-rpms	1
libsss_certmap	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
libsss_idmap	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
libsss_nss_idmap	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
libsss_sudo	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
linux-firmware	noarch	20240603-143.1.el9_4	rhel-9-baseos-rhui-rpms	3
linux-firmware-whence	noarch	20240603-143.1.el9_4	rhel-9-baseos-rhui-rpms	1
openssh	x86_64	8.7p1-38.el9_4.4	rhel-9-baseos-rhui-rpms	4
openssh-clients	x86_64	8.7p1-38.el9_4.4	rhel-9-baseos-rhui-rpms	7
openssh-server	x86_64	8.7p1-38.el9_4.4	rhel-9-baseos-rhui-rpms	4
python-unversioned-command	noarch	3.9.18-3.el9_4.3	rhel-9-appstream-rhui-rpms	1
python3	x86_64	3.9.18-3.el9_4.3	rhel-9-baseos-rhui-rpms	1
python3-libs	x86_64	3.9.18-3.el9_4.3	rhel-9-baseos-rhui-rpms	7
python3-perf	x86_64	5.14.0-427.33.1.el9_4	rhel-9-baseos-rhui-rpms	5
python3-setuptools	noarch	53.0.0-12.el9_4.1	rhel-9-baseos-rhui-rpms	9
python3-setuptools-wheel	noarch	53.0.0-12.el9_4.1	rhel-9-baseos-rhui-rpms	4
rh-amazon-rhui-client	noarch	4.0.19-1.el9	rhui-client-config-server-9	1
selinux-policy	noarch	38.1.35-2.el9_4.2	rhel-9-baseos-rhui-rpms	1
selinux-policy-targeted	noarch	38.1.35-2.el9_4.2	rhel-9-baseos-rhui-rpms	6
shim-x64	x86_64	15.8-4.el9_3	rhel-9-baseos-rhui-rpms	4
sssd-client	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
sssd-common	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
sssd-kcm	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	1
systemd	x86_64	252-32.el9_4.6	rhel-9-baseos-rhui-rpms	4
systemd-libs	x86_64	252-32.el9_4.6	rhel-9-baseos-rhui-rpms	6
systemd-pam	x86_64	252-32.el9_4.6	rhel-9-baseos-rhui-rpms	2
systemd-rpm-macros	noarch	252-32.el9_4.6	rhel-9-baseos-rhui-rpms	1
systemd-udev	x86_64	252-32.el9_4.6	rhel-9-baseos-rhui-rpms	1

Transaction Summary

Install 4 Packages  
Upgrade 44 Packages

Total download size: 532 M  
Is this ok [y/N]: y

Upgraded:

NetworkManager-1:1.46.0-13.el9_4.x86_64	NetworkManager-cloud-setup-1:1.46.0-13.el9_4.x86_64	NetworkManager-libnm-1:1.46.0-13.el9_4.x86_64
NetworkManager-team-1:1.46.0-13.el9_4.x86_64	NetworkManager-tui-1:1.46.0-13.el9_4.x86_64	ca-certificates-2024.2.69.v8.0.303-91.4.el9_4.noarch
ccloud-init-23.4-7.el9_4.5.noarch	curl-7.76.1-29.el9_4.1.x86_64	glibc-2.34-100.el9_4.3.x86_64
glibc-common-2.34-100.el9_4.3.x86_64	glibc-gconv-extra-2.34-100.el9_4.3.x86_64	glibc-langpack-en-2.34-100.el9_4.3.x86_64
kernel-tools-5.14.0-427.33.1.el9_4.x86_64	kernel-tools-libs-5.14.0-427.33.1.el9_4.x86_64	kexec-tools-2.0-27-8.el9_4.3.x86_64
libcurl-7.76.1-29.el9_4.1.x86_64	libndp-1.8-6.el9_4.x86_64	libsss_certmap-2.9.4-6.el9_4.1.x86_64
libsss_idmap-2.9.4-6.el9_4.1.x86_64	libsss_nss_idmap-2.9.4-6.el9_4.1.x86_64	libsss_sudo-2.9.4-6.el9_4.1.x86_64
linux-firmware-20240603-143.1.el9_4.noarch	linux-firmware-whence-20240603-143.1.el9_4.noarch	openssh-8.7p1-38.el9_4.4.x86_64
openssh-clients-8.7p1-38.el9_4.4.x86_64	openssh-server-8.7p1-38.el9_4.4.x86_64	python-unversioned-command-3.9.18-3.el9_4.3.noarch
python3-3.9.18-3.el9_4.3.x86_64	python3-libs-3.9.18-3.el9_4.3.x86_64	python3-perf-5.14.0-427.33.1.el9_4.x86_64
python3-setuptools-53.0.0-12.el9_4.1.noarch	python3-setuptools-wheel-53.0.0-12.el9_4.1.noarch	rh-amazon-rhui-client-4.0.19-1.el9.noarch
selinux-policy-38.1.35-2.el9_4.2.noarch	selinux-policy-targeted-38.1.35-2.el9_4.2.noarch	shim-x64-15.8-4.el9_3.x86_64
sssd-client-2.9.4-6.el9_4.1.x86_64	sssd-common-2.9.4-6.el9_4.1.x86_64	sssd-kcm-2.9.4-6.el9_4.1.x86_64
systemd-252-32.el9_4.6.x86_64	systemd-libs-252-32.el9_4.6.x86_64	systemd-pam-252-32.el9_4.6.x86_64
systemd-rpm-macros-252-32.el9_4.6.noarch	systemd-udev-252-32.el9_4.6.x86_64	

Installed:

kernel-5.14.0-427.33.1.el9_4.x86_64	kernel-core-5.14.0-427.33.1.el9_4.x86_64	kernel-modules-5.14.0-427.33.1.el9_4.x86_64
kernel-modules-core-5.14.0-427.33.1.el9_4.x86_64		

Complete!  
[root@ip-172-31-90-251 ec2-user]#

Completed.

[root@ip-172-31-90-251 ec2-user]# sudo yum install nfs-utils

Updating Subscription Management repositories.

Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.

Red Hat Enterprise Linux 9 for x86_64 - AppStream from RHUI (RPMs)	74 kB/s	4.5 kB	00:00
Red Hat Enterprise Linux 9 for x86_64 - BaseOS from RHUI (RPMs)	72 kB/s	4.1 kB	00:00
Red Hat Enterprise Linux 9 Client Configuration	27 kB/s	1.5 kB	00:00

Dependencies resolved.

Package	Architecture	Version	Repository	Size
Installing:				
nfs-utils	x86_64	1:2.5.4-25.el9	rhel-9-baseos-rhui-rpms	463 k
Installing dependencies:				
gssproxy	x86_64	0.8.4-6.el9	rhel-9-baseos-rhui-rpms	114 k
keyutils	x86_64	1.6.3-1.el9	rhel-9-baseos-rhui-rpms	78 k
libev	x86_64	4.33-5.el9	rhel-9-baseos-rhui-rpms	56 k
libnfsidmap	x86_64	1:2.5.4-25.el9	rhel-9-baseos-rhui-rpms	66 k
libtirpc	x86_64	1.3.3-8.el9_4	rhel-9-baseos-rhui-rpms	96 k
libverto-libev	x86_64	0.3.2-3.el9	rhel-9-baseos-rhui-rpms	15 k
quota	x86_64	1:4.06-6.el9	rhel-9-baseos-rhui-rpms	202 k
quota-nls	noarch	1:4.06-6.el9	rhel-9-baseos-rhui-rpms	81 k
rpcbind	x86_64	1.2.6-7.el9	rhel-9-baseos-rhui-rpms	62 k
sssd-nfs-idmap	x86_64	2.9.4-6.el9_4.1	rhel-9-baseos-rhui-rpms	44 k

Transaction Summary

Install 11 Packages

Total download size: 1.2 M  
Installed size: 3.2 M  
Is this ok [y/N]:

```
Running scriptlet: gssproxy-0.8.4-6.el9.x86_64
Running scriptlet: nfs-utils-1:2.5.4-25.el9.x86_64
Installing      : nfs-utils-1:2.5.4-25.el9.x86_64
Running scriptlet: nfs-utils-1:2.5.4-25.el9.x86_64
Installing      : sssd-nfs-idmap-2.9.4-6.el9_4.1.x86_64
Running scriptlet: sssd-nfs-idmap-2.9.4-6.el9_4.1.x86_64
Verifying       : libev-4.33-5.el9.x86_64
Verifying       : libverto-libev-0.3.2-3.el9.x86_64
Verifying       : quota-1:4.06-6.el9.x86_64
Verifying       : quota-nls-1:4.06-6.el9.noarch
Verifying       : keyutils-1.6.3-1.el9.x86_64
Verifying       : gssproxy-0.8.4-6.el9.x86_64
Verifying       : libnfsidmap-1:2.5.4-25.el9.x86_64
Verifying       : libtirpc-1.3.3-8.el9_4.x86_64
Verifying       : nfs-utils-1:2.5.4-25.el9.x86_64
Verifying       : rpcbind-1.2.6-7.el9.x86_64
Verifying       : sssd-nfs-idmap-2.9.4-6.el9_4.1.x86_64
Installed products updated.

Installed:
gssproxy-0.8.4-6.el9.x86_64      keyutils-1.6.3-1.el9.x86_64      libev-4.33-5.el9.x86_64      libnfsidmap-1:2.5.4-25.el9.x86_64
libtirpc-1.3.3-8.el9_4.x86_64  libverto-libev-0.3.2-3.el9.x86_64  nfs-utils-1:2.5.4-25.el9.x86_64  quota-1:4.06-6.el9.x86_64
quota-nls-1:4.06-6.el9.noarch  rpcbind-1.2.6-7.el9.x86_64      sssd-nfs-idmap-2.9.4-6.el9_4.1.x86_64

Complete!
[root@ip-172-31-90-251 ec2-user]#
```

```
Verifying       : sssd-nfs-idmap-2.9.4-6.el9_4.1.x86_64
Installed products updated.

Installed:
gssproxy-0.8.4-6.el9.x86_64      keyutils-1.6.3-1.el9.x86_64      libev-4.33-5.el9.x86_64      libnfsidmap-1:2.5.4-25.el9.x86_64
libtirpc-1.3.3-8.el9_4.x86_64  libverto-libev-0.3.2-3.el9.x86_64  nfs-utils-1:2.5.4-25.el9.x86_64  quota-1:4.06-6.el9.x86_64
quota-nls-1:4.06-6.el9.noarch  rpcbind-1.2.6-7.el9.x86_64      sssd-nfs-idmap-2.9.4-6.el9_4.1.x86_64

Complete!
[root@ip-172-31-90-251 ec2-user]# sudo mkdir efs
[root@ip-172-31-90-251 ec2-user]#
```



Success! File system (fs-00139347717fe86eb) is available. View file system

Amazon EFS > File systems

File systems (1) Filter by property values View details Delete Create file system

	Name	File system ID	Encrypte d	Total size	Size in Standard	Size in IA	Size in Archive	Provisioned Throughput (MiB/s)	File system state	Creat time
	<a href="#">redhat_efs</a>	fs-00139347717fe86eb	<span>Encrypte d</span>	6.00 KiB	6.00 KiB	0 Bytes	0 Bytes	-	<span>Available</span>	Thu, 2024 16:01 GMT

redhat\_efs (fs-00139347717fe86eb)

Delete

Attach

General

Edit

Performance mode

General Purpose

Throughput mode

Elastic

Lifecycle management

Transition into Infrequent Access (IA): 30 day(s) since last access

Transition into Archive: 90 day(s) since last access

Transition into Standard: None

Availability zone

Regional

Automatic backups

Enabled

Encrypted

b9d453ab-184c-4bd5-ae21-57828c35765c (aws/elasticfilesystem)

File system state

Available

DNS name

fs-00139347717fe86eb.efs.us-east-1.amazonaws.com

Replication overwrite protection

Enabled

Metered size

Monitoring

Tags

File system policy

Access points

Network

Replication

Metered size

Monitoring

Tags

File system policy

Access points

Network

Replication

Network



Manage



Availability zone (AZ-ID)	Mount target ID	Subnet ID	Mount target state	IP address	Network interface ID	Security groups
us-east-1a (use1-az6)	fsmt-01ab3eb292c2cd99f	subnet-06f06ddf53ded0c40	Available	172.31.44.6	eni-05cd2fc89873c31b4	sg-06801d04568bec00e (default)
us-east-1b (use1-az1)	fsmt-05f87539da496f489	subnet-01501dd93ff2c3a23	Available	172.31.1.24	eni-0e79ec978779c732a	sg-06801d04568bec00e (default)
us-east-1c (use1-az2)	fsmt-0f9337ad4342f0f07	subnet-0deef32c49746b9d	Available	172.31.82.176	eni-014d5d4a4f133cb7e	sg-06801d04568bec00e (default)
us-east-1d (use1-az4)	fsmt-0766b8041fce5e09d	subnet-01bc68d289889876d	Available	172.31.30.17	eni-0ebcee774c1b1f158	sg-06801d04568bec00e (default)
us-east-1f (use1-az5)	fsmt-0f0dbc3a35267636f	subnet-094c3abb7a2e75bf1	Available	172.31.69.75	eni-0701794d74e65d2ed	sg-06801d04568bec00e (default)

Amazon EFS > File systems > fs-00139347717fe86eb

redhat\_efs (fs-00139347717fe86eb)

Delete

Attach

General

Edit

Performance mode

General Purpose

Throughput mode

Elastic

Lifecycle management

Transition into Infrequent Access (IA): 30 day(s) since last access

Transition into Archive: 90 day(s) since last access

Transition into Standard: None

Availability zone

Regional

Automatic backups

Enabled

Encrypted

b9d453ab-184c-4bd5-ae21-57828c35765c (aws/elasticfilesystem)

File system state

Available

DNS name

fs-00139347717fe86eb.efs.us-east-1.amazonaws.com

Replication overwrite protection

Enabled

Attach

Mount your Amazon EFS file system on a Linux instance. [Learn more](#)

☐ Mount via DNS

☒ Mount via IP

Availability zone

us-east-1a

Using the NFS client:

`sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsiz=1048576,hard,timeo=600,retrans=2,noresvport 172.31.44.6:/ efs`

See our user guide for more information. [Learn more](#)

Close

```
Complete!
[root@ip-172-31-90-251 ec2-user]# sudo mkdir efs
[root@ip-172-31-90-251 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsiz=1048576,hard,timeo=600,retrans=2,noresvport 172.31.44.6:/ efs
[root@ip-172-31-90-251 ec2-user]#
```

```
Complete!
[root@ip-172-31-90-251 ec2-user]# sudo mkdir efs
[root@ip-172-31-90-251 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsiz=1048576,hard,timeo=600,retrans=2,noresvport 172.31.44.6:/ efs
[root@ip-172-31-90-251 ec2-user]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M   0  4.0M   0% /dev
tmpfs           383M   0  383M   0% /dev/shm
tmpfs           154M   6.5M  147M   5% /run
/dev/xvda4       8.8G  1.7G   7.1G  20% /
/dev/xvda3      960M  262M  699M  28% /boot
/dev/xvda2      200M   7.1M  193M   4% /boot/efi
tmpfs           77M    0   77M   0% /run/user/1000
172.31.44.6:/    8.0E   0   8.0E   0% /home/ec2-user/efs
[root@ip-172-31-90-251 ec2-user]#
```