



## Module 2: EC2 and EFS Assignment

## Tasks To Be Performed:

1. 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.

# Module 2 - Introduction to EC2, EBS, EFS and Amazon FSx

## Assignment 3 – EC2 and EFS

The screenshot shows the AWS EC2 landing page. On the left, there's a navigation sidebar with sections like Dashboard, EC2 Global View, Instances, Images, Elastic Block Store, Network & Security, and CloudShell. The main content area has a dark header: "Amazon Elastic Compute Cloud (EC2)" and "Create, manage, and monitor virtual servers in the cloud." Below this, a paragraph describes EC2's broad compute platform. To the right, there's a callout box for "Launch a virtual server" with "Launch instance" and "View dashboard" buttons. Another box on the right lists "Get started" walk-throughs and tutorials. A third box at the bottom right contains "Additional actions" like "View running instances".

This screenshot shows the first step of the "Launch an instance" wizard. It asks for the instance name, which is "amazon-linux-instance". Below it, there's a section for "Application and OS Images (Amazon Machine Image)" with a search bar and a list of operating systems. A callout box highlights the "Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type" entry, which is selected and highlighted with a red border. The box displays its AMI ID, kernel type, and root device type.

aws | Search [Alt+S] | United States (N. Virginia) | Rubesh Project

EC2 > Instances > Launch an instance

**Instance type**

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Windows base pricing: 0.162 USD per Hour  
On-Demand Ubuntu Pro base pricing: 0.0154 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour On-Demand RHEL  
On-Demand Linux base pricing: 0.0116 USD per Hour

Additional costs apply for AMIs with pre-installed software

**Key pair (login)**

You can use a key pair to securely connect to your instance. Ensure your key pair name is required.

**Network settings**

Network: Info  
vpc-0e515b587e264cb7f  
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 key pair**

**Key pair name:** new private key  
The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

**Key pair type:**

- RSA RSA encrypted private and public key pair
- ED25519 ED25519 encrypted private and public key pair

**Private key file format:**

- .pem For use with OpenSSH
- .ppk For use with PuTTY

**Summary**

Number of instances: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more  
ami-0f5f13f145e6aa0a3

Virtual server type (instance type): t2.micro

Firewall (security group): default

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

**Free tier:** In your first year of opening an AWS account, you get 750 hours per month of t2.micro instance usage (or t3.micro where t2.micro isn't available) when used with free tier AMIs, 750 hours per month of public IPv4 address usage, 30 GiB of EBS storage, 2 million I/Os, 1 GiB of snapshots, and 100 GiB of bandwidth to the internet.

Cancel Create key pair

Launch instance Preview code

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EC2 > Instances > Launch an instance

**Network settings**

Network: Info  
vpc-0e515b587e264cb7f  
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:** default

**Common security groups**

default sg-06735561931ccb5af X  
VPC: vpc-0e515b587e264cb7f

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

**Configure storage**

1x 8 GiB gp2 Root volume, Not encrypted

**Advanced**

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

**Summary**

Number of instances: 1

Software Image (AMI): Amazon Linux 2 Kernel 5.10 AMI...read more  
ami-0f5f13f145e6aa0a3

Virtual server type (instance type): t2.micro

Firewall (security group): default

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

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Cancel Launch instance Preview code

**Summary**

**Number of instances** | [Info](#)

1

**Software Image (AMI)**  
Amazon Linux 2 Kernel 5.10 AMI...[read more](#)  
ami-0f3f13f145e66a0a3

**Virtual server type (instance type)**  
t2.micro

**Firewall (security group)**  
default

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

[Cancel](#) [Launch instance](#)  [Preview code](#)

**Launch an instance** [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

**Name and tags** [Info](#)

Name: ubuntu-instance [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

**Recent** **Quick Start**

Amazon Linux | macOS | Ubuntu | Windows | Red Hat | SUSE Linux | Debian | [aws](#) | Mac | [ubuntu](#) | Microsoft | Red Hat | SUSE | Debian

[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-020cba7c55df1f615 (64-bit (x86)) / ami-07041441b708acbd6 (64-bit (Arm))  
Virtualization: hvm ENA enabled: true Root device type: ebs

**Description**

[CloudShell](#) [Feedback](#)

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**Summary**

Number of instances: 1

**Software Image (AMI)**  
Canonical, Ubuntu, 24.04, amd64... [read more](#)  
ami-020cba7c55df1f615

**Virtual server type (instance type)**  
t2.micro

**Firewall (security group)**  
New security group

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

[Cancel](#) [Launch instance](#) [Preview code](#)

**Instance type** [Info](#) [Get advice](#)

Instance type: t2.micro [Free tier eligible](#)

t2.micro Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Windows base pricing: 0.0102 USD per Hour  
On-Demand Ubuntu Pro base pricing: 0.0134 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

[All generations](#) [Compare instance types](#)

**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: [new private key](#) [Edit](#) [Create new key pair](#)

**Network settings** [Info](#)

Network: [Info](#)  
vpc-0e515b587e264cb7f

Subnet: [Info](#)  
No preference (Default subnet in any availability zone)

Auto-assign public IP: [Info](#)  
Enable

**Summary**

Number of instances: 1

**Software Image (AMI)**  
Canonical, Ubuntu, 24.04, amd64... [read more](#)  
ami-020cba7c55df1f615

**Virtual server type (instance type)**  
t2.micro

**Firewall (security group)**  
New security group

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

[Cancel](#) [Launch instance](#) [Preview code](#)

aws | Search [Alt+S] United States (N. Virginia) Rubesh Project

EC2 > Instances > Launch an instance

**Network settings**

**Network** Info vpc-0e515b587e264cb7f

**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-06735361951ccb5af X VPC: vpc-0e515b587e264cb7f

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

**Summary**

Number of instances Info 1

**Software Image (AMI)** Canonical, Ubuntu, 24.04, amd64...read more ami-020cba7c55d1ff615

**Virtual server type (instance type)** t2.micro

**Firewall (security group)** default

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

**Cancel** **Launch instance** **Preview code**

1x 8 GiB gp3 Root volume, 3000 IOPS, Not encrypted

Advanced

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

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**Summary**

Number of instances | [Info](#)

1

**Software Image (AMI)**  
Canonical, Ubuntu, 24.04, amd64 noble image  
ami-020cba7c55df1f615

**Virtual server type (instance type)**  
t2.micro

**Firewall (security group)**  
default

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

[Cancel](#) [Launch instance](#)  [Preview code](#)

Screenshot of the AWS EC2 'Launch an instance' wizard, Step 1: Set instance details.

**Name and tags**

Name: redhat-instance

**Application and OS Images (Amazon Machine Image)**

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

Recent OS Images:

- Amazon Linux
- macOS
- Ubuntu
- Windows
- Red Hat** (selected)
- SUSE Linux
- Debian

**Amazon Machine Image (AMI)**

Red Hat Enterprise Linux 10 (HVM), SSD Volume Type

ami-03a13a09a711d3871 | (64-bit (x86)) / ami-03a13a09a711d3871 | (64-bit (Arm))

Virtualization: HVM | ENA enabled: true | Root device type: ebs

**Summary**

Number of instances: 1

Software Image (AMI): Provided by Red Hat, Inc. ami-03a13a09a711d3871

Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 10 GiB

Launch instance | Preview code

**Instance type**

t2.micro: 1 vCPU, 1 GiB Memory, Current generation: true

On-Demand Windows base pricing: 0.0162 USD per Hour

On-Demand Ubuntu Pro base pricing: 0.0134 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

All generations | Compare instance types

**Key pair (login)**

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: new private key

Create new key pair

**Network settings**

Network: vpc-0e515b587e264cb7f

Subnet: No preference (Default subnet in any availability zone)

Auto-assign public IP: Enable

Edit

aws | [Alt+S] Search United States (N. Virginia) ▾ Rubesh Project ▾

EC2 > Instances > Launch an instance

▼ Network settings [Info](#)

Network [Info](#)  
vpc-0e515b587e264cb7f

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-06735361931cbb5af [X](#)  
VPC: vpc-0e515b587e264cb7f

Compare security group rules

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

▼ Summary

Number of instances [Info](#)  
1

Software Image (AMI)  
Provided by Red Hat, Inc.  
ami-03a13a09a711d3871

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
default

Storage (volumes)  
1 volume(s) - 10 GiB

Cancel [Launch instance](#) [Preview code](#)

▼ Configure storage [Info](#)

Advanced

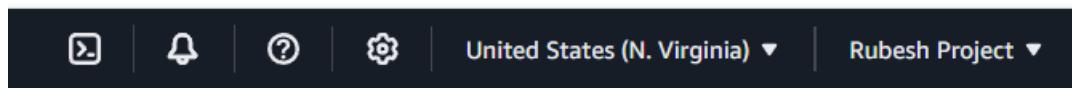
1x 10 GiB gp3 Root volume, 3000 IOPS, Not encrypted

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

Add new volume

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This screenshot shows the 'Launch an instance' wizard in the AWS Management Console. The 'Network settings' section is active, displaying basic VPC and subnet information. It includes options for auto-assigning public IP and creating or selecting security groups. A note about additional charges for public IP assignment is present. The 'Configure storage' section is also visible, showing a single 10 GiB gp3 root volume. A message indicates that free-tier eligible customers can get up to 30 GB of EBS storage. The right side of the screen displays a summary of the instance configuration, including the AMI, instance type (t2.micro), and storage (1 volume - 10 GiB). The bottom of the screen shows standard AWS navigation links like CloudShell and Feedback, along with copyright and legal information.



▼ Summary

Number of instances | Info

1

**Software Image (AMI)**  
Provided by Red Hat, Inc.  
ami-03a13a09a711d3871

**Virtual server type (instance type)**  
t2.micro

**Firewall (security group)**  
default

**Storage (volumes)**  
1 volume(s) - 10 GiB

[Cancel](#) [Launch instance](#)  [Preview code](#)

EC2		Instances (3) <a href="#">Info</a>									
		<a href="#">Find Instance by attribute or tag (case-sensitive)</a>									
		<a href="#">Connect</a> <a href="#">Instance state</a> <a href="#">Actions</a> <a href="#">Launch instances</a>									
Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public				
amazon-linux-instance	i-01406a24cf991d9f2	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a> +	us-east-1b	ec2-1:				
ubuntu-instance	i-0ffcbde564a953d46	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a> +	us-east-1b	ec2-3:				
redhat-instance	i-0b78016be4e7e9b16	Running	t2.micro	2/2 checks passed	<a href="#">View alarms</a> +	us-east-1b	ec2-4:				

Screenshot of the AWS Elastic File System (EFS) console showing the creation of a new file system.

**Amazon Elastic File System**  
Scalable, elastic, cloud-native NFS file system

What is Amazon Elastic File System?

**Create file system**

**Pricing**  
With EFS, there are no minimum fees. You pay only for the storage that you use, the data that you read and write, and any additional throughput that you provision.  
Estimate your cost using the [AWS Pricing Calculator](#).  
[Learn more about pricing](#).

**Get started**

**Create file system**

Create a file system with the recommended settings shown below by choosing Create file system. To view all settings or to customize your file system, choose Customize. [Learn more](#)

**Name - optional**  
Name your file system.

Name can include letters, numbers, and +-=\_:\* symbols, up to 256 characters.

**Virtual Private Cloud (VPC)**  
Choose the VPC where you want EC2 instances to connect to your file system.

**Recommended settings**

Your file system is created with the following recommended settings unless you choose to customize the file system. You will be charged for storage and throughput. We recommend reviewing pricing for these features using the [AWS Pricing Calculator](#).

Setting	Value	Editable after creation
Throughput mode <a href="#">Learn more</a>	Elastic	Yes
Transition into Infrequent Access (IA)	30 day(s) since last access	Yes
Transition into Archive	90 day(s) since last access	Yes
Transition into Standard	None	Yes
Automatic backups	Enabled	Yes
Encryption	Enabled	No

**Create file system**

**Elastic File System**

**Success!**  
File system (fs-05ad0f06c0c5f3e8d) is available.

[View file system](#)

Name	File system ID	Encrypted	Total size	Size in Standard	Size in IA	Size in Archive	Provisioned Throughput (MiB/s)
multi-os-efs	fs-05ad0f06c0c5f3e8d	Encrypted	6.00 KiB	6.00 KiB	0 Bytes	0 Bytes	-

**EC2** > [Instances](#) > [i-01406a24cf991d9f2](#) > Connect to instance

**Connect** [Info](#)

Connect to an instance using the browser-based client.

[EC2 Instance Connect](#) [Session Manager](#) [SSH client](#) [EC2 serial console](#)

**Instance ID**  
[i-01406a24cf991d9f2](#) (amazon-linux-instance)

[Connect using a Public IP](#)  
Connect using a public IPv4 or IPv6 address

[Connect using a Private IP](#)  
Connect using a private IP address and a VPC endpoint

[Public IPv4 address](#)  
13.218.71.4

[IPv6 address](#)

**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 [X](#)

**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](#)

**Amazon Linux 2**  
AL2 End of Life is 2026-06-30.  
A newer version of Amazon Linux is available!  
Amazon Linux 2023, GA and supported until 2028-03-15.  
<https://aws.amazon.com/linux/amazon-linux-2023/>

[ec2-user@ip-172-31-92-110 ~]\$

**Edit inbound rules** [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-0d4a69c7e73b8a6ad	All traffic	All	All	Custom	<input type="text" value="sg-06735361931cbb5af"/> <a href="#">Delete</a>
sgr-012cc86cae9044698	SSH	TCP	22	Custom	<input type="text" value="0.0.0.0/0"/> <a href="#">Delete</a>

[Add rule](#)

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

[Cancel](#) [Preview changes](#) [Save rules](#)

```
Last login: Thu Jun 19 05:18:26 2025 from ec2-18-206-107-29.compute-1.amazonaws.com
  _\   _#_#
  ~ \_ \###_#
  ~~ \###_# AL2 End of Life is 2026-06-30.
  ~~ \###_# V~,_-->
  ~~ \###_# A newer version of Amazon Linux is available!
  ~~ \###_# Amazon Linux 2023, GA and supported until 2028-03-15.
  ~~ \###_# https://aws.amazon.com/linux/amazon-linux-2023/
[ec2-user@ip-172-31-92-110 ~]$ sudo su
[root@ip-172-31-92-110 ec2-user]#
```

```
Last login: Fri Jun 20 03:49:07 2025 from ec2-18-206-107-27.compute-1.amazonaws.com
  _\   _#_#
  ~ \_ \###_#
  ~~ \###_# AL2 End of Life is 2026-06-30.
  ~~ \###_# V~,_-->
  ~~ \###_# A newer version of Amazon Linux is available!
  ~~ \###_# Amazon Linux 2023, GA and supported until 2028-03-15.
  ~~ \###_# https://aws.amazon.com/linux/amazon-linux-2023/
[ec2-user@ip-172-31-92-110 ~]$ sudo su
[root@ip-172-31-92-110 ec2-user]# apt-get update
bash: apt-get: command not found
[root@ip-172-31-92-110 ec2-user]# ^C
[root@ip-172-31-92-110 ec2-user]# yum update -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core
amzn2extra-docker
amzn2extra-kernel-5.10
No packages marked for update
[root@ip-172-31-92-110 ec2-user]# ^C
[root@ip-172-31-92-110 ec2-user]#
```

```
[root@ip-172-31-92-110 ec2-user]# yum install -y nfs-utils
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core
Package 1:nfs-utils-1.3.0-0.54.amzn2.0.2.x86_64 already installed and latest version
Nothing to do
[root@ip-172-31-92-110 ec2-user]#
```

```
[root@ip-172-31-92-110 ec2-user]# mkdir efs
[root@ip-172-31-92-110 ec2-user]# ls
efs
[root@ip-172-31-92-110 ec2-user]#
```

```
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Fri Jun 20 04:25:34 UTC 2025

System load: 0.0          Processes:      110
Usage of /: 31.0% of 6.71GB Users logged in: 0
Memory usage: 24%
Swap usage: 0%

* Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.

https://ubuntu.com/aws/pro

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

Last login: Fri Jun 20 03:49:15 2025 from 18.206.107.29
ubuntu@ip-172-31-81-151:~$ sudo su
root@ip-172-31-81-151:/home/ubuntu# 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-updates/main amd64 Packages [1144 kB]
```

```
root@ip-172-31-81-151:/home/ubuntu# apt-get install nfs-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nfs-common is already the newest version (1:2.6.4-3ubuntu5.1).
0 upgraded, 0 newly installed, 0 to remove and 7 not upgraded.
root@ip-172-31-81-151:/home/ubuntu#
```

```
root@ip-172-31-81-151:/home/ubuntu# mkdir efs2
root@ip-172-31-81-151:/home/ubuntu# ls
efs2
root@ip-172-31-81-151:/home/ubuntu#
```

```
ec2-user@ip-172-31-88-51:~ x + v
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\devop> cd downloads
PS C:\Users\devop\downloads> ssh -i "rubesh-key.pem" ec2-user@13.221.68.208
Register this system with Red Hat Insights: rnc connect

Example:
# rhc connect --activation-key <key> --organization <org>

The rhc client and Red Hat Insights will enable analytics and additional
management capabilities on your system.
View your connected systems at https://console.redhat.com/insights

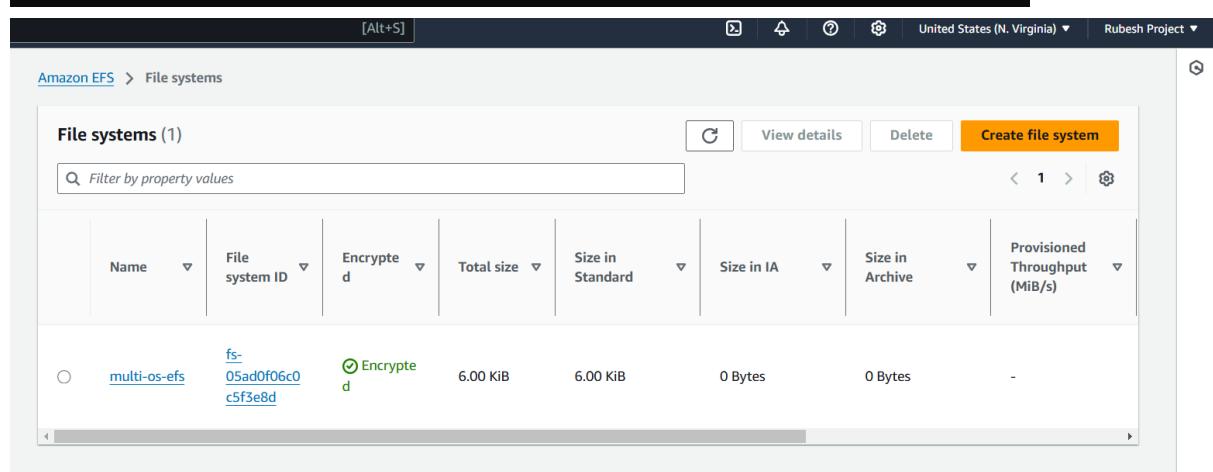
You can learn more about how to register your system
using rhc at https://red.ht/registration
Last login: Wed Jun 18 08:45:17 2025 from 117.221.209.122
[ec2-user@ip-172-31-88-51 ~]$ |
```

```
[ec2-user@ip-172-31-88-51 ~]$ sudo su
[root@ip-172-31-88-51 ec2-user]# yum install -y 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.

Last metadata expiration check: 0:40:20 ago on Fri Jun 20 05:03:56 2025.
Package nfs-utils=1:2.8.2-3.el10.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-88-51 ec2-user]# |
```

```
Complete.
[root@ip-172-31-88-51 ec2-user]# mkdir efs3
[root@ip-172-31-88-51 ec2-user]# ls
efs3
[root@ip-172-31-88-51 ec2-user]# |
```



The screenshot shows the AWS EFS console interface. At the top, there's a navigation bar with 'Amazon EFS' and 'File systems'. Below it is a search bar with 'Filter by property values'. A table lists one file system:

Name	File system ID	Encrypted	Total size	Size in Standard	Size in IA	Size in Archive	Provisioned Throughput (MiB/s)
multi-os-efs	fs-05ad0f06c0c5f3e8d	Encrypted	6.00 KiB	6.00 KiB	0 Bytes	0 Bytes	-

Amazon EFS > File systems > fs-05ad0f06c0c5f3e8d

## multi-os-efs (fs-05ad0f06c0c5f3e8d)

[Delete](#) [Attach](#)

### General

Amazon resource name (ARN)	Automatic backups
<input type="text"/> arn:aws:elasticfilesystem:us-east-1:103975338085:file-system/fs-05ad0f06c0c5f3e8d	<input checked="" type="checkbox"/> Enabled
Performance mode	Encrypted
General Purpose	5ba1ae61-c5a6-4360-b0df-dcd112f0598b (aws/elasticfilesystem)
Throughput mode	File system state
Elastic	<input checked="" type="checkbox"/> Available
Lifecycle management	DNS name
Transition into Infrequent Access (IA): 30 day(s) since last access	<input type="text"/> fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com
Transition into Archive: 90 day(s) since last access	Replication overwrite protection
Transition into Standard: None	<input checked="" type="checkbox"/> Enabled
Availability zone	
Regional	

[Edit](#)

---

Metered size    Monitoring    Tags    File system policy    Access points    Network    Replication

### Metered size

[Alt+S]

Regional

Metered size    Monitoring    Tags    File system policy    Access points    [Network](#)    Replication

### Network

[G](#) [Manage](#)

Availability zone (AZ-ID)	Mount target ID	Subnet ID	Mount target state	IPv4 address	IPv6 address	Network interface ID	Security groups
us-east-1a (use1-az1)	fsmt-04cad64425516e9c7	subnet-0e6f15f2bd7af29a8	<input checked="" type="checkbox"/> Available	172.31.7.110	N/A	eni-06c6ef4dc6a0f329	sg-06735361931ccb5af (default)
us-east-1b (use1-az2)	fsmt-0e38befedec1dc eefc	subnet-064c04ff8b428428a	<input checked="" type="checkbox"/> Available	172.31.93.221	N/A	eni-0bb84954c68659ca1	sg-06735361931ccb5af (default)
us-east-1c (use1-az4)	fsmt-06e23c363f6fd091f	subnet-0f7baf65ffc286f02	<input checked="" type="checkbox"/> Available	172.31.31.116	N/A	eni-090080647ee8362fd	sg-06735361931ccb5af (default)
us-east-1d (use1-az6)	fsmt-005119aa4699a97cd	subnet-026931fcf2c8c9466	<input checked="" type="checkbox"/> Available	172.31.41.250	N/A	eni-0fef2f52ff89d48bf	sg-06735361931ccb5af (default)
us-east-1f (use1-az5)	fsmt-095726a6443d69ad7	subnet-01b2e9fc0d3ea8e33	<input checked="" type="checkbox"/> Available	172.31.70.53	N/A	eni-068dcab061ca105d4	sg-06735361931ccb5af (default)

The screenshot shows the AWS EFS Attach dialog box. At the top, there's a breadcrumb navigation: 'Amazon EFS > File systems > fs-05ad0f06c0c5f3e8d'. The main title is 'multi-os-efs (fs-05ad0f06c0c5f3e8d)'. On the left, there's a sidebar with 'File systems' and 'Attach' buttons, where 'Attach' is highlighted with a red box. Below the title, it says 'Mount your Amazon EFS file system on a Linux instance.' with a 'Learn more' link. There are two options: 'Mount via DNS' (selected, indicated by a blue border) and 'Mount via IP'. The 'Using the EFS mount helper:' section contains a command line example: 'sudo mount -t efs -o tls fs-05ad0f06c0c5f3e8d:/ efs'. The 'Using the NFS client:' section contains a command line example: 'sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com:/ efs'. This command is also highlighted with a red box. At the bottom, there's a 'See our user guide for more information.' link and a 'Close' button.

```
aws | Search [Alt+S] United States (N. Virginia) ▾ Rubesh Project ▾

Last login: Fri Jun 20 06:19:38 2025 from ec2-18-206-107-27.compute-1.amazonaws.com
   _#_
  /###\ Amazon Linux 2
 /###\ AL2 End of Life is 2026-06-30.
 \$/| A newer version of Amazon Linux is available!
 /  Amazon Linux 2023, GA and supported until 2028-03-15.
 /   https://aws.amazon.com/linux/amazon-linux-2023/
 \m/  Amazon Linux 2023, GA and supported until 2028-03-15.
     https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-172-31-92-110 ~]$ sudo su
[root@ip-172-31-92-110 ec2-user]$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,noresvport fs-05ad0f06c0cf3e8d.efs.us-east-1.amazonaws.com: /efs
[ec2-user@ip-172-31-92-110 ~]$
```

```
Last login: Wed Jun 18 08:45:17 2025 from 117.221.209.122
[ec2-user@ip-172-31-88-51 ~]$ sudo su
[root@ip-172-31-88-51 ec2-user]# yum install -y 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.

Last metadata expiration check: 0:40:20 ago on Fri Jun 20 05:03:56 2025.
Package nfs-utils-1:2.8.2-3.el10.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-88-51 ec2-user]# mkdir efs3
[root@ip-172-31-88-51 ec2-user]# ls
efs3
[root@ip-172-31-88-51 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,
noresvport fs-05ad0f060c0c5f3e8d.efs.us-east-1.amazonaws.com:/ efs
mount: nfs4: mount point efs does not exist
[root@ip-172-31-88-51 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,
noresvport fs-05ad0f060c0c5f3e8d.efs.us-east-1.amazonaws.com:/ efs3
```

```
[ec2-user@ip-172-31-92-110 ~]$ sudo su
[root@ip-172-31-92-110 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wszie=1048576,hard,timeo=600,retrans=2,noresvport fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com:/efs
[root@ip-172-31-92-110 ec2-user]# cd efs
[root@ip-172-31-92-110 efs]# ls
[root@ip-172-31-92-110 efs]# 

Last login: Fri Jun 20 05:27:17 2025 from 18.206.107.28
ubuntu@ip-172-31-81-151:~$ sudo su
root@ip-172-31-81-151:~/home/ubuntu$ sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wszie=1048576,hard,timeo=600,retrans=2,noresvport fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com:/efs2
root@ip-172-31-81-151:~/home/ubuntu$ cd efs2
```

root@ip-172-31-151:/home/ubuntu/eiszi

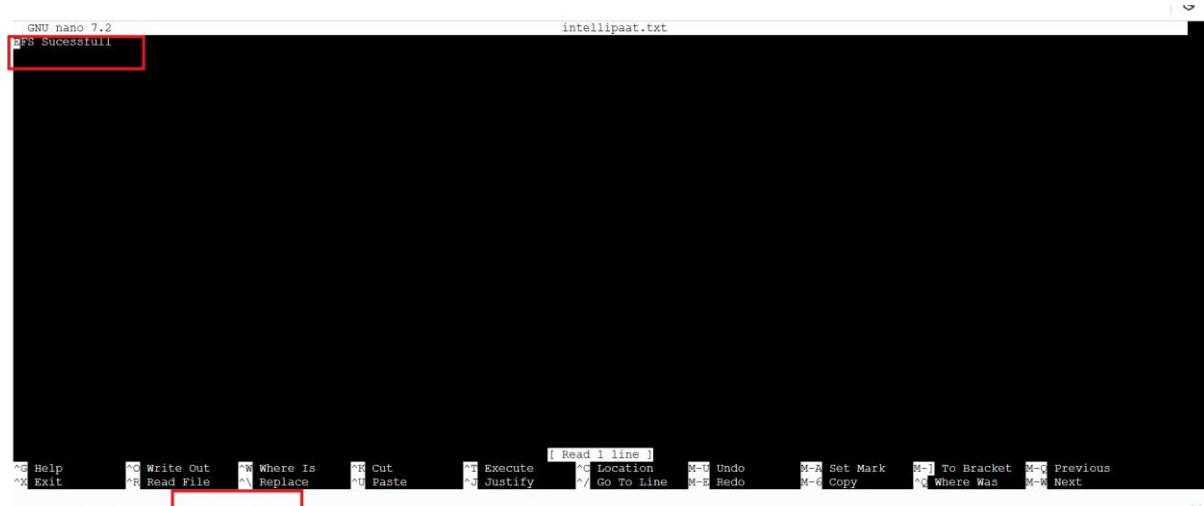
i-0f0cbde564a963d46 (ubuntu-instance)

```
[root@ip-172-31-88-51 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrans=2,norevport fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com:/ efs3
[root@ip-172-31-88-51 ec2-user]# cd efs3
[root@ip-172-31-88-51 efs3]# ls
```

```
root@ip-172-31-81-151:/home/ubuntu/efs2# nano intellipaat.txt
root@ip-172-31-81-151:/home/ubuntu/efs2#
```

### i-0f0cbde564a963d46 (ubuntu-instance)

Public IPs: 3.91.149.159 Private IPs: 172.31.81.151



```
[root@ip-172-31-92-110 efs]# ls
intellipaat.txt ←
[root@ip-172-31-92-110 efs]#
```

### i-01406a24cf991d9f2 (amazon-linux-instance)

Public IPs: 13.218.71.4 Private IPs: 172.31.92.110

```
[root@ip-172-31-92-110 efs]# ls  
intellipaat.txt  
[root@ip-172-31-92-110 efs]# cat intellipaat.txt  
EFS Sucessfull ←  
[root@ip-172-31-92-110 efs]#
```

i-01406a24cf991d9f2 (amazon-linux-instance)

PublicIPs: 13.218.71.4 PrivateIPs: 172.31.92.110

```
root@ip-172-31-88-51:/home/ ~ + - ×  
Last login: Wed Jun 18 08:45:17 2025 from 117.221.209.122  
[ec2-user@ip-172-31-88-51 ~]$ sudo su  
[root@ip-172-31-88-51 ec2-user]# yum install -y 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.  
  
Last metadata expiration check: 0:40:20 ago on Fri Jun 20 05:03:56 2025.  
Package nfs-utils-1:2.8.2-3.el10.x86_64 is already installed.  
Dependencies resolved.  
Nothing to do.  
Complete!  
[root@ip-172-31-88-51 ec2-user]# mkdir efs3  
[root@ip-172-31-88-51 ec2-user]# ls  
efs3  
[root@ip-172-31-88-51 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wszie=1048576,hard,timeo=600,retrans=2,  
noresvport fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com:/ efs  
mount.nfs4: mount point efs does not exist  
[root@ip-172-31-88-51 ec2-user]# sudo mount -t nfs4 -o nfsvers=4.1,rsize=1048576,wszie=1048576,hard,timeo=600,retrans=2,  
noresvport fs-05ad0f06c0c5f3e8d.efs.us-east-1.amazonaws.com:/ efs3  
[root@ip-172-31-88-51 ec2-user]# cd efs3  
[root@ip-172-31-88-51 efs3]# ls  
[root@ip-172-31-88-51 efs3]# LS  
bash: LS: command not found  
[root@ip-172-31-88-51 efs3]# ls  
intellipaat.txt ←  
[root@ip-172-31-88-51 efs3]# cat intellipaat.txt  
EFS Sucessfull ←  
[root@ip-172-31-88-51 efs3]# |
```

**Submitted by:**

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# Devops Architect Master's Training Program