

This Blog will guide you the step-by-step process for configuring Amazon EFS with Amazon EC2 Instance.

1. Create one EFS file system from AWS console. (Select your VPC and Subnets on which you are going to configure the EFS and click on next)

Create file system

Step 1: Configure file system access

Step 2: Configure optional settings

Step 3: Review and create

Configure file system access

An Amazon EFS file system is accessed by EC2 instances running inside one of your VPCs. Instances connect to a file system by using a network interface called a mount target. Each mount target has an IP address, which we assign automatically or you can specify.

VPC

Create mount targets

Instances connect to a file system by using mount targets you create. We recommend creating a mount target in each of your VPC's Availability Zones so that EC2 instances across your VPC can access the file system.

	Availability Zone	Subnet	IP address	Security groups
<input checked="" type="checkbox"/>	us-east-1a	<input type="text" value="subnet-43079708 - Cloud2Learn-Pub-Sub-1"/>	Automatic	<input type="text" value="sg-6613b513 - default"/>
<input checked="" type="checkbox"/>	us-east-1b	<input type="text" value="subnet-ec24ecb1 - Cloud2Learn-Pub-Sub-2"/>	Automatic	<input type="text" value="sg-6613b513 - default"/>
<input type="checkbox"/>	us-east-1c			

2. Add a Tag name to your EFS and leave other information default and click on next.

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Configure optional settings

Add tags

You can add tags to describe your file system. A tag consists of a case-sensitive key-value pair. (For example, you can define a tag with key-value pair with key = Corporate Department and value = Sales and Marketing.) At a minimum, we recommend a tag with key = Name.

Key	Value	Remove
<input type="text" value="Name"/>	<input type="text" value="PROD-EFS"/>	<input type="button" value="x"/>
<input type="text" value="Add New Key"/>	<input type="text"/>	

Choose performance mode

We recommend **General Purpose** performance mode for most file systems. **Max I/O** performance mode is optimized for applications where tens, hundreds, or thousands of EC2 instances are accessing the file system — it scales to higher levels of aggregate throughput and operations per second with a tradeoff of slightly higher latencies for file operations.

- ☒ General Purpose (default)
☐ Max I/O

3. Then click on next step.

Step 2: Configure optional settings

Step 3: Review and create

Review and create

Review the configuration below before proceeding to create your file system.

File system access

VPC	Availability Zone	Subnet	IP address	Security groups
vpc-2ed74556 - Cloud2Learn	us-east-1a	subnet-43079708 - Cloud2Learn-Pub-Sub-1	Automatic	sg-6613b513 - default
	us-east-1b	subnet-ec24ecb1 - Cloud2Learn-Pub-Sub-2	Automatic	sg-6613b513 - default
	us-east-1c	Not configured		
	us-east-1d	Not configured		
	us-east-1e	Not configured		
	us-east-1f	Not configured		

Optional settings

Tags

Performance mode General Purpose (default)

Encrypted No

Cancel Previous Create File System

4. Create two EC2 instances which you are going to map with the EFS.

5. Login into the EC2 instance and install NFS Clients with the below command:

```
# yum install -y amazon-efs-utils (EC2)
# yum install nfs-utils -y ----- (in RHEL/CentOS)
# apt-get -y install nfs-common ----- (in Ubuntu/Debian)
```

6. Create a Dir in one instance:

```
#mkdir /mnt/prodefsf
```

7. Mount the the dir with EFS:

```
# mount -t nfs -o vers=4.1 fs-f00e3eb9.efs.us-east-1.amazonaws.com:/
/mnt/prodefsf/
```

8. Verify the mount point:

```
# df -h
```

9. Create one dir/file inside the /mnt/prodefsf folder and check it.

10. Follow ste 5-to-9 for the second instance.

11. Create some files inside /mnt/prodefsf files of 1st instance and some files in 2nd instance then verify on both the instance you will see the same files exists on the both instances.

IMPORTANT NOTE :

- Make sure you allowed NFS port on the SG (inbound) of EFS from the EC2 SG on which you will mount the EFS

Thank you...!!!