**Amazon EFS Lab**

**Step-By-Step Guide**

**Step 1**: Create an Amazon EFS File System

1. Go to **Amazon** EFS in the AWS Console.
2. Click **create file system**.
3. Choose:

* **VPC:** Select your VPC.
* Leave default options for **Availability and durability.**

1. Click Customize.
2. Under **Mount targets:**

* Ensure a subnet from each AZ is selected.
* Attach the correct security group.

1. Leave performance mode as default ( General Purpose).
2. Click **Next,** then **Create.**

**Step 2**: Launch EC2 Instances

1. Go to **EC2 Dashboard**  Launch Instance.
2. Choose **Amazon Linux 2023** AMI.
3. Select t2.micro (free tier eligible).
4. Network: Choose the same **VPC** as your EFS.
5. Subset: Select **one per AZ** (create 2 instances).
6. Add storage (default is fine).
7. Assign a **Security Group** that:

* Allows SSH (port 22) from your IP.
* Allows NFS (port 2049) from the EFS SG.

1. Launch the instances with a key pair.

**Step 3:** Install NFS Utils and Mount EFS

SSH into both EC2 instances and run.

bash

sudo yum update -y

sudo yum install -y nfs -utils

Create a mount point:

bash

sudo mkdir -p /mnt/efs

Mount EFS using DNS name from EFS Console:

bash

sudo mount -t nfs4 -o nfsvers=4.1 fs – xxxxxxxx.efs.<region>.amazon.com:/ /mnt/efs

Checking it’s working:

bash

df -h

Create a test file:

bash

sudo touch / mnt/efs/testfile.txt

On the second instance, mount EFS in the same way and verify that testfile.txt exists.

**Step 4:** Clean Up

To avoid charges:

1. Unmount EFS:

bash

sudo umount /mnt/efs

1. Terminate EC2 instances.
2. Delete the EFS file system.
3. Delete VPC (if created for this lab).

**Diagram (EFS Lab Architecture)**

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Amazon EFS

(Mount Targets)

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EC2-AZ1 EC2-AZ2

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