To connect an Amazon Elastic File System (EFS) to your Ubuntu EC2 instance, follow these steps:

**1. Install NFS Client on Ubuntu**

EFS uses the NFS protocol, so you’ll need to install the NFS client on your Ubuntu EC2 instance. SSH into your instance, and then run:

sudo apt update

sudo apt install -y nfs-common

**2. Create a Mount Point Directory**

Decide on a directory where you want to mount the EFS. For example, you could create a directory called /mnt/efs:

sudo mkdir -p /mnt/efs

3. **Mount the EFS File System**

Obtain the EFS DNS name from the EFS console. The format is typically:

file-system-id.efs.region.amazonaws.com

Then, mount the EFS using the following command:

sudo mount -t nfs4 -o nfsvers=4.1 file-system-id.efs.region.amazonaws.com:/ /mnt/efs

Replace file-system-id with your EFS file system ID and region with your AWS region (e.g., us-west-2).

**4. Verify the Mount**

To ensure the EFS is mounted correctly, you can use the df -h command:

df -h

You should see the EFS file system listed, showing it’s mounted on /mnt/efs.

5. **Make the Mount Permanent (Optional)**

To automatically mount the EFS at boot, edit the /etc/fstab file. Add the following line:

file-system-id.efs.region.amazonaws.com:/ /mnt/efs nfs4 defaults,\_netdev 0 0

Replace file-system-id and region with your specific details.

After completing these steps, your Ubuntu EC2 instance should be successfully connected to your EFS file system. You can now read from and write to the EFS just like any other directory.