

HOW TO CREATE EFS AND MOUNT THAT ON EC2 LINUX

Amazon Elastic File System (EFS) provides a simple, server less, scalable, fully managed, elastic NFS file system for use with AWS Cloud services & on-premises resources. Amazon RFS easy to use & offers a simple interface that allows you to create and configure file system quickly & easily.

It is a web serving & content management.

Pre-requisites for mounting the EFS system on your EC2 :-

1. EC2 instance 1
2. EC2 instance 2
3. EFS

If required entities are not present with you, kindly build the same with considering below major points:

1. EC2 1 & EC2 2 should have the same security group.
2. Both instances should have SSH port open for connection.
3. You can have same or different key pair for both the instances.
4. For EFS, name you EFS & select standard so that EFS can be available to multiple availability zones.
5. Mount target is your choice to select to how many availability zone can have the permission.
6. **Note :-** add the EFS VPC which we selected default to both the EC2 by going to Actions>security>Change security group> add EFS VPC to both the EC2s.

After creating the EC2s & EFS, follow the below steps to link your EFS with EC2s :-

1. Open your machine terminal & change directory where you have saved the .pem file.
2. Then open the Amazon EC2-1 SSH client & connect through your terminal

```
Microsoft Windows [Version 10.0.10240]
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C:\Users\Dell>cd desktop

C:\Users\Dell\Desktop>ssh -i "efs-key.pem" ec2-user@ec2-13-233-255-83.ap-south-1.compute.amazonaws.com
The authenticity of host 'ec2-13-233-255-83.ap-south-1.compute.amazonaws.com (13.233.255.83)' can't be established.
ED25519 key fingerprint is SHA256:5by6rVW1nW/y/K27G9FKP+BTaQAjJeiJqwPyErVkvHk.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-13-233-255-83.ap-south-1.compute.amazonaws.com' (ED25519) to the list of known hosts.

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                Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-11-192 ~]$
```

3. Please note :- If your SSH port is not working in your terminal then download it from GitHub & change the environment, specify the path in system settings then save.
4. Now install the package :- ***"sudo yum install -y amazon-efs-utils"***

```
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$
]2-user@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$ sudo yum install -y amazon-efs-utils
```

5. Now make a directory by mkdir EFS

```
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$  
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$  
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$  
user@ip-172-31-13-225 ~]$  
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$  
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$  
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$  
ser@ip-172-31-13-225:~[ec2-user@ip-172-31-13-225 ~]$ mkdir efs
```

6. Now go to your EFS click on it and then click on attach copy the command
Using the EFS mount helper:

Attach

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

☒ Mount via DNS

☐ Mount via IP

Using the EFS mount helper:

```
sudo mount -t efs -o tls fs-064d552a19ecbb394:/ efs
```

Using the NFS client:

```
sudo mount -t nfs4 -o  
nfsvers=4.1,rsize=1048576,wsize=1048576,hard,timeo=600,retrns=2,noresvport fs-  
064d552a19ecbb394.efs.ap-south-1.amazonaws.com:/ efs
```

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

Close

7. Put the command in your amazon terminal and click enter.

8. Now go to the EFS directory by cd command & create some files.
9. Start your second EC2 instance.
10. Again install the utils by following the 4th step.
11. Create a new directory called EFS & again go to the EFS click attach then again copy the same command and paste in your amazon terminal.
12. Now create some file using touch, nano etc. If not working try Sudo to give root user rights.

```
];2-user@ip-172-31-13-225:~/efs[ec2-user@ip-172-31-13-225 efs]$ ls
dummy1  dummy2
sudo touch testfile
-bash: sudtouch: command not found
sudo touch testfile
];2-user@ip-172-31-13-225:~/efs[ec2-user@ip-172-31-13-225 efs]$ ls
dummy1  dummy2  testfile
```

13. Now go to the previous EC2 instance & change directory to efs then use ls command to check whether real time data is syncing or not.

```
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C:\Users\Dell>cd desktop

C:\Users\Dell\Desktop>ssh -i "efs-key.pem" ec2-user@ec2-13-233-255-83.ap-south-1.compute.amazonaws.com
Last login: Mon Jan 16 18:45:18 2023 from 103.83.128.30

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Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-11-192 ~]$ ls
efs
cd efs
];2-user@ip-172-31-11-192:~/efs[ec2-user@ip-172-31-11-192 efs]$ ls
dummy1  dummy2  testfile
```

14. Now after everything is completed you can shut down all the services.