21-04-2024

EFS Hands on

Common or Shared Storage in the AWS >>>>>

1 - EFS >>> Linux

2 - FSx >>> Linux && Windows

3 - EBS >>> Not supporting t2.micro >>> io2 >>>>

https://docs.aws.amazon.com/ebs/latest/userguide/ebs-volume-types.html

Common or Shared Storage in the AWS

Lab 1 >>> EFS for Linux

Lab 2 >>> FSx for windows

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Lab 1 >>> EFS for Linux

Step 1 > Crate a Dedicated SG with NFS port number (2049)

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Outbound should be all traffic

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Click on create Security Group

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Step 2 > Launch a EFS by using above SG

Go to Servies >> Storage>> Click on EFS

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Create a File System >>> Choose Customize A screenshot of a computer

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Name >>> Mahesh-EFS-21-04-2024

Then click on Customize

File system type >>> Regional

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Automatic backups >>> Disable

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Encryption >>> Disable

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Leave all the options as it is >>> Next

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Choose your VPC where you have created your SG

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Remove all the Default SG at the bottom and attach your SG that you have created above

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Cross verify all your AZ are selected, and your Dedicated SG is attached at Network Access Step

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Click on next

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File system policy - optional >>> Next

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Review and Create

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Make sure that status is "Available"

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Click on EFS file system

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Now click on to see the commands

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Launch EC2

Choose 2 EC2 instances

Step 3 > Launch a Linux EC2 if not already

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OS >>> Amazon Linux

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Go to Custom VPC , Choose VPC and Public sunbet and

Enable Public IP

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Choose your VPC where you have Launched your above SG and EFS

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Choose Public Subnet

SG - Default

Leave all the options as it is

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Both EC2 Instances are Launched

Step 4 > Make sure it has NFS(EFS) Port number attached (SG) in both the instances .

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And save it

Go to second EC2

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Click on Save

Step 5 > Login to the OS >> Install NFS Utility

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sudo su

yum install nfs-utils

######## NFS utility Installation need to install in both the EC2 Instances

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Step 6 > Do the host entry

######## host entry

vi /etc/hosts

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## Syntax

<IP address of your Mount Target> <EFS DNS> <EFS without FQDN>

## Get the above details from the EFS >> Attach

Example -

10.0.0.70 fs-02d891831af02f32f.efs.eu-central-1.amazonaws.com fs-02d891831af02f32f

Our Syntax

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Copy IP address

10.0.0.45

Then go to mount via DNS   
copy DNS

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10.0.0.70 fs-02d891831af02f32f.efs.eu-central-1.amazonaws.com fs-02d891831af02f32f

10.0.0.45 fs-015d2e16f74619186.efs.ap-south-1.amazonaws.com fs-015d2e16f74619186

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Description automatically generated

Step 6 > Do the host entry

######## host entry

Press insert

Copy the entry

10.0.0.45 fs-015d2e16f74619186.efs.ap-south-1.amazonaws.com fs-015d2e16f74619186

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Description automatically generated

Save the file as

Pres ESC

Type :wq!

Go to Second EC2 Instacne

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Description automatically generated

Copy the Syntax

Press Esc and :wq! To save

##########Mounting of your EFS

## Syntax

mount <EFS DNS>:/ /mnt

example

mount fs-02d891831af02f32f.efs.eu-central-1.amazonaws.com:/ /mnt

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Description automatically generated

Step 7 > Try to mount EFS

example

mount fs-02d891831af02f32f.efs.eu-central-1.amazonaws.com:/ /mnt

Actual command

mount fs-015d2e16f74619186.efs.ap-south-1.amazonaws.com:/ /mnt

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Now run the syntax

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Description automatically generated

Mounted Successfully in one server now same syntax copy in second server

mount fs-015d2e16f74619186.efs.ap-south-1.amazonaws.com:/ /mnt

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Successfully Mounted in Second server also

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Description automatically generated

Step 8 > Test your EFS is working as shared storage or common storage

Create a folder mahesh in the EFS

Type the command

cd /mnt

mkdir mahesh

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Now go to send server

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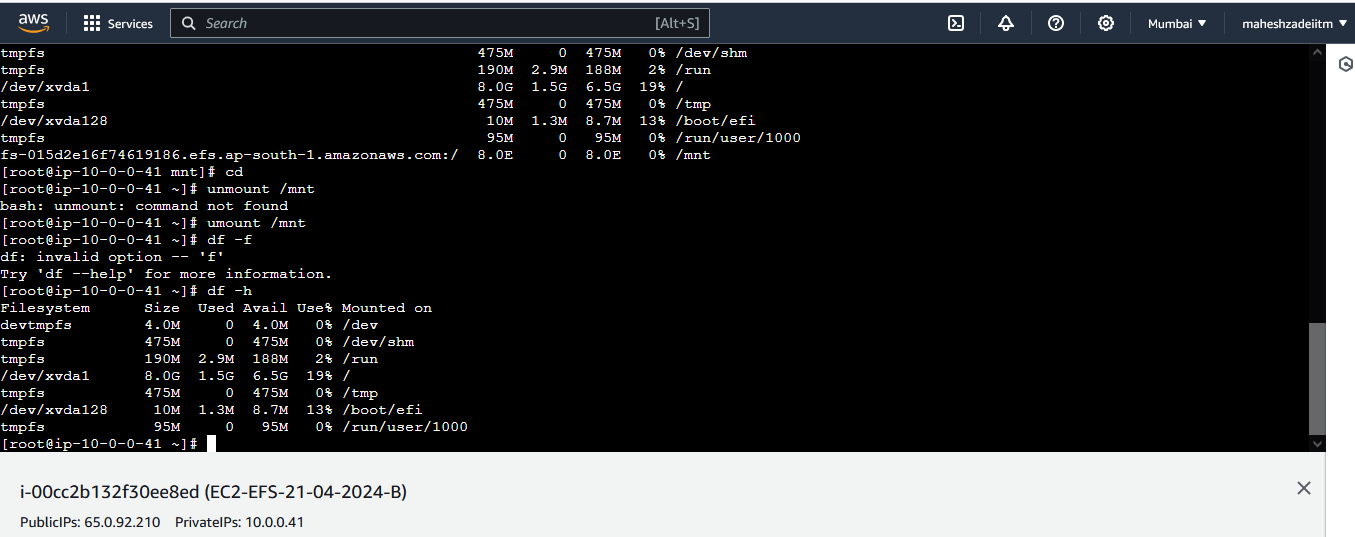
Description automatically generated

Mahesh folder can be seen from both the servers

Now unmount the EFS

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**umount /mnt**

**A screenshot of a computer

Description automatically generated**

**Now Delete the EC2 Instances, EFS , Security Group and clear the Lab.**

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**Go to send server and type history command**

**A screenshot of a computer

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Pls check EFS Hands on and confirm .

Thanks