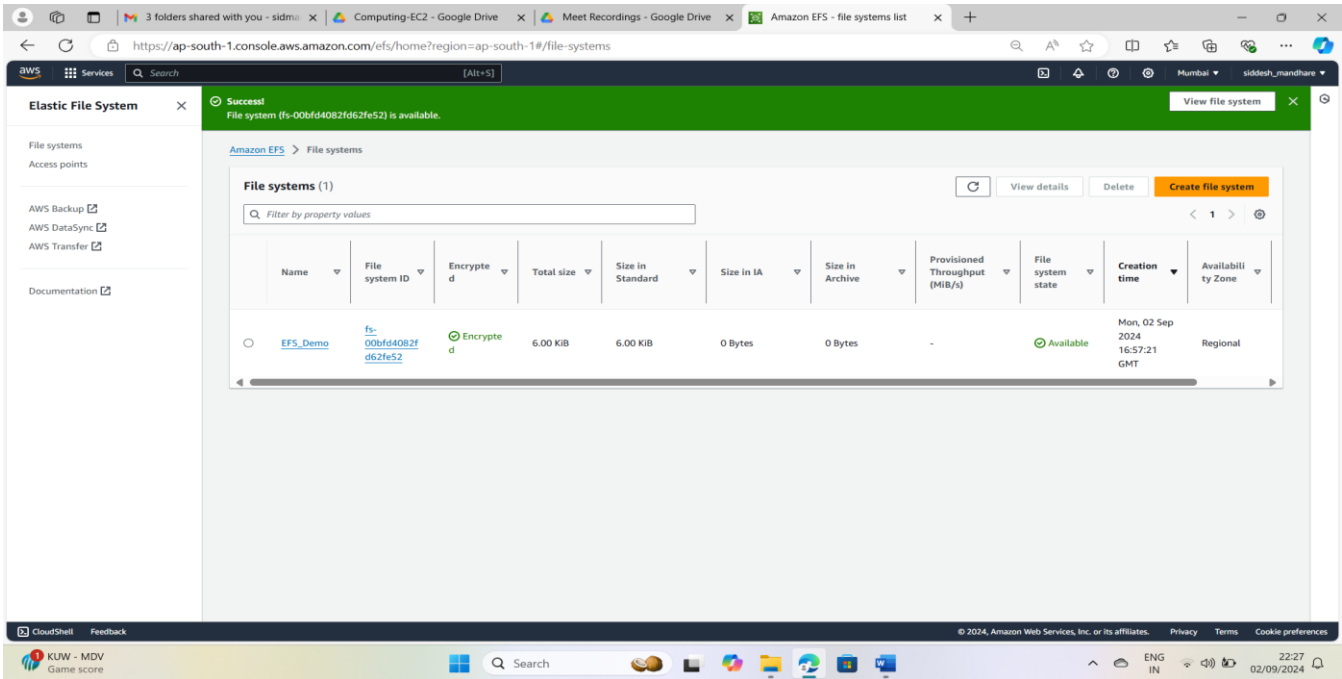


AWS- Elastic File System

Siddesh Mandhare || 27/08/24

Problem statement-

1) Create EFS File system



Success
File system (fs-00bfd4082fd62fe52) is available.

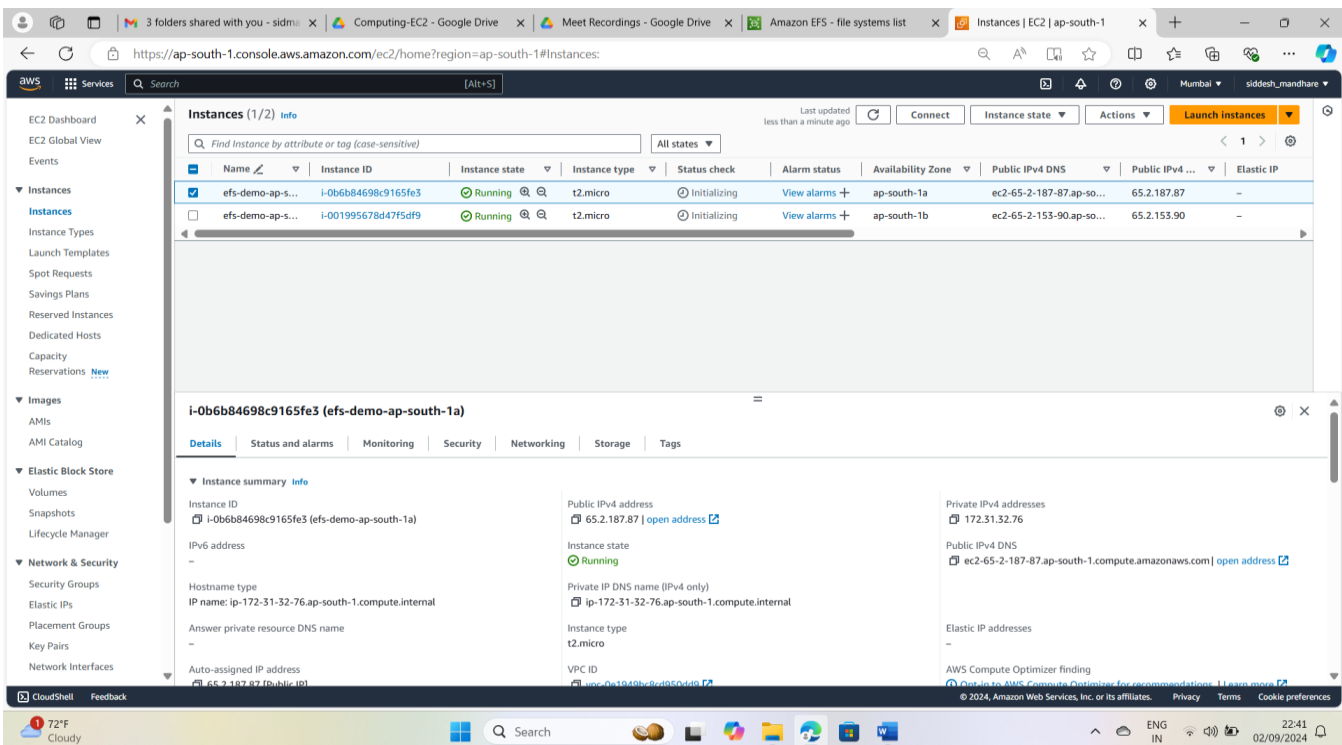
Amazon EFS > File systems

File systems (1)

Filter by property values

	Name	File system ID	Encrypt	Total size	Size in Standard	Size in IA	Size in Archive	Provisioned Throughput (MiB/s)	File system state	Creation time	Availability Zone
<input type="radio"/>	efs-Demo	fs-00bfd4082fd62fe52	Encrypt	6.00 KiB	6.00 KiB	0 Bytes	0 Bytes	-	Available	Mon, 02 Sep 2024 16:57:21 GMT	Regional

2) Create two instances in different zone(1a &1b), add one security group with 2049 (nfs) port



Instances (1/2) Info

Find Instance by attribute or tag (case-sensitive)

All states

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input checked="" type="checkbox"/>	efs-demo-ap-south-1a	i-0b6b84698c9165fe3	Running	t2.micro	Initializing	View alarms	ap-south-1a	ec2-65-2-187-87.ap-south-1.compute.amazonaws.com	65.2.187.87	-
<input type="checkbox"/>	efs-demo-ap-south-1b	i-001995678d47f5df9	Running	t2.micro	Initializing	View alarms	ap-south-1b	ec2-65-2-153-90.ap-south-1.compute.amazonaws.com	65.2.153.90	-

i-0b6b84698c9165fe3 (efs-demo-ap-south-1a)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

Instance summary Info

Instance ID i-0b6b84698c9165fe3 (efs-demo-ap-south-1a)	Public IPv4 address 65.2.187.87 open address	Private IPv4 addresses 172.31.32.76
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-65-2-187-87.ap-south-1.compute.amazonaws.com open address
Hostname type IP name: ip-172-31-32-76.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-172-31-32-76.ap-south-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Get up to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address 65.2.187.87 (Public IP)	VPC ID vpc-0a1940bc8d905d4d9	

3) Mount Security group on created EFS files

Availability zone (AZ-ID)	Mount target ID	Subnet ID	Mount target state	IP address	Network interface ID	Security groups
ap-south-1a (ap-s1-az1)	funt-08f5ed56b8993a3f	subnet-056a9af4162ae00f	Available	172.31.45.1	eni-04c3d1fe1211ed5f	sg-043f2357b484b9551 (default)
ap-south-1b (ap-s1-az3)	funt-024481357c460812d	subnet-069f4bdc34103fab9	Available	172.31.12.74	eni-07a8de16c94d16630	sg-043f2357b484b9551 (default)
ap-south-1c (ap-s1-az2)	funt-0eb4f81d9998f1b78	subnet-0b5c0b648687c1d7b	Available	172.31.16.111	eni-09f5b2f646cb511cc	sg-043f2357b484b9551 (default)

4) Mount EFS file system for both EC2 instances

```
root@ip-172-31-32-76:~# sudo mount -t nfs4 -o nfsvers=4.1,rsz=1048576,wsz=1048576,hard,timeo=600,retrans=2,noresvport fs-00bfd4082fd62fe52.efs.ap-south-1.amazonaws.com:/ sid-efs
mount.nfs4: Connection timed out
root@ip-172-31-32-76:~# sudo mount -t nfs4 -o nfsvers=4.1,rsz=1048576,wsz=1048576,hard,timeo=600,retrans=2,noresvport fs-00bfd4082fd62fe52.efs.ap-south-1.amazonaws.com:/ sid-efs
mount.nfs4: Connection timed out
root@ip-172-31-32-76:~# df -h
Filesystem              Size  Used Avail Use% Mounted on
/dev/xvda1               8.0G  1.6G  6.5G  20% /
tmpfs                    475M  0  475M   0% /tmp
/dev/xvda128             10M  1.3M  8.7M  13% /boot
efi                      95M  0  95M   0% /run/user/1000
fs-00bfd4082fd62fe52.efs.ap-south-1.amazonaws.com:/ 8.0E  0  8.0E   0% /root/sid-efs
```

5) EFS have been successfully mounted on VM

```
root@ip-172-31-32-76:~# df -h
Filesystem              Size  Used Avail Use% Mounted on
/dev/xvda1               8.0G  1.6G  6.5G  20% /
tmpfs                    475M  0  475M   0% /tmp
/dev/xvda128             10M  1.3M  8.7M  13% /boot
efi                      95M  0  95M   0% /run/user/1000
fs-00bfd4082fd62fe52.efs.ap-south-1.amazonaws.com:/ 8.0E  0  8.0E   0% /root/sid-efs
```

6) Both files can access at 2 different region

```
root@ip-172-31-32-76:~# df -h
Filesystem              Size  Used Avail Use% Mounted on
/dev/xvda1               8.0G  1.6G  6.5G  20% /
tmpfs                    475M  0  475M   0% /tmp
/dev/xvda128             10M  1.3M  8.7M  13% /boot
efi                      95M  0  95M   0% /run/user/1000
fs-00bfd4082fd62fe52.efs.ap-south-1.amazonaws.com:/ 8.0E  0  8.0E   0% /root/sid-efs
```