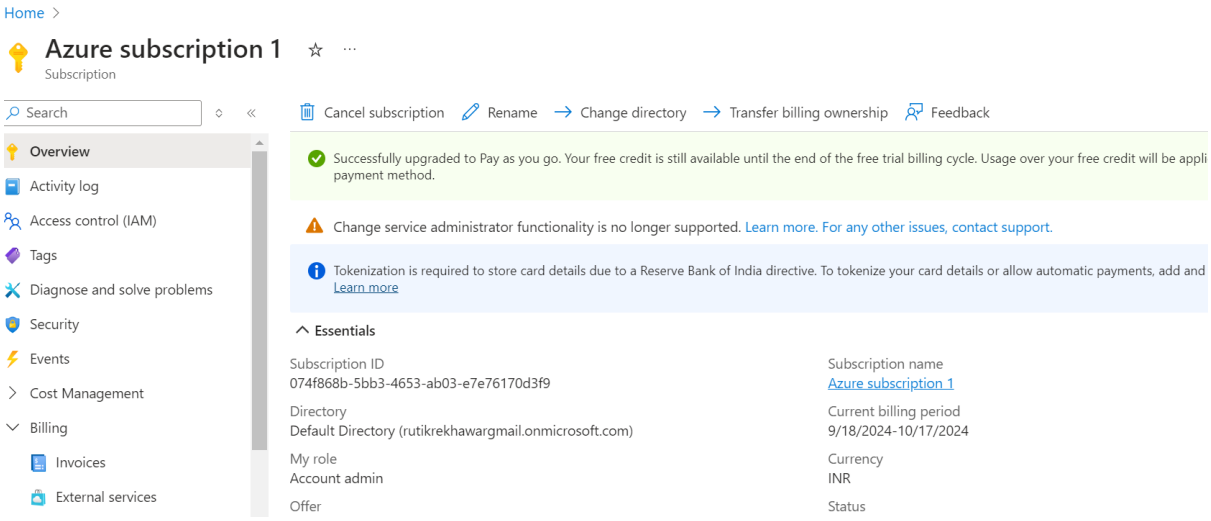
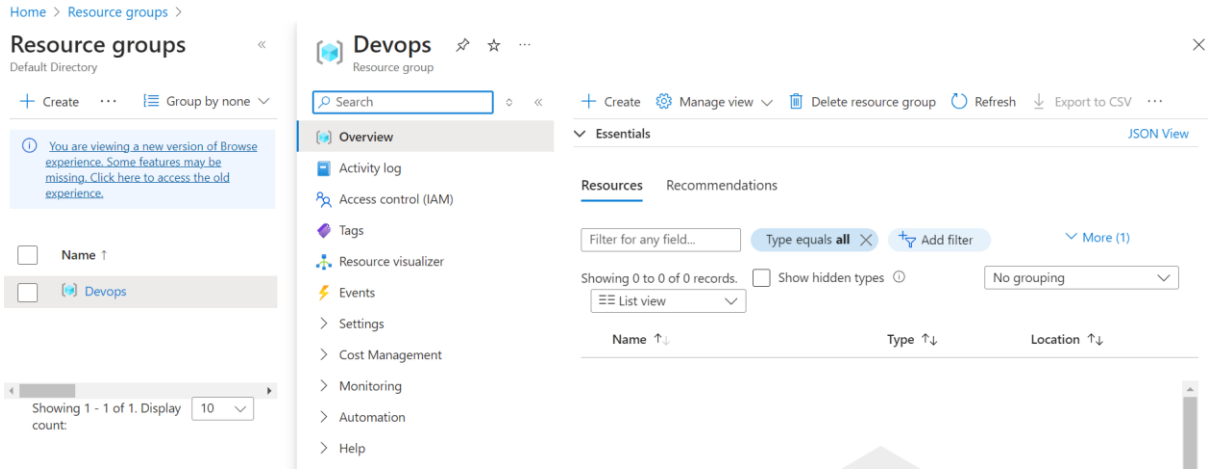
Q) Configure an azure storage account replication method should be LRS. And configure azure file share. And mount with Linux Virtual machine.

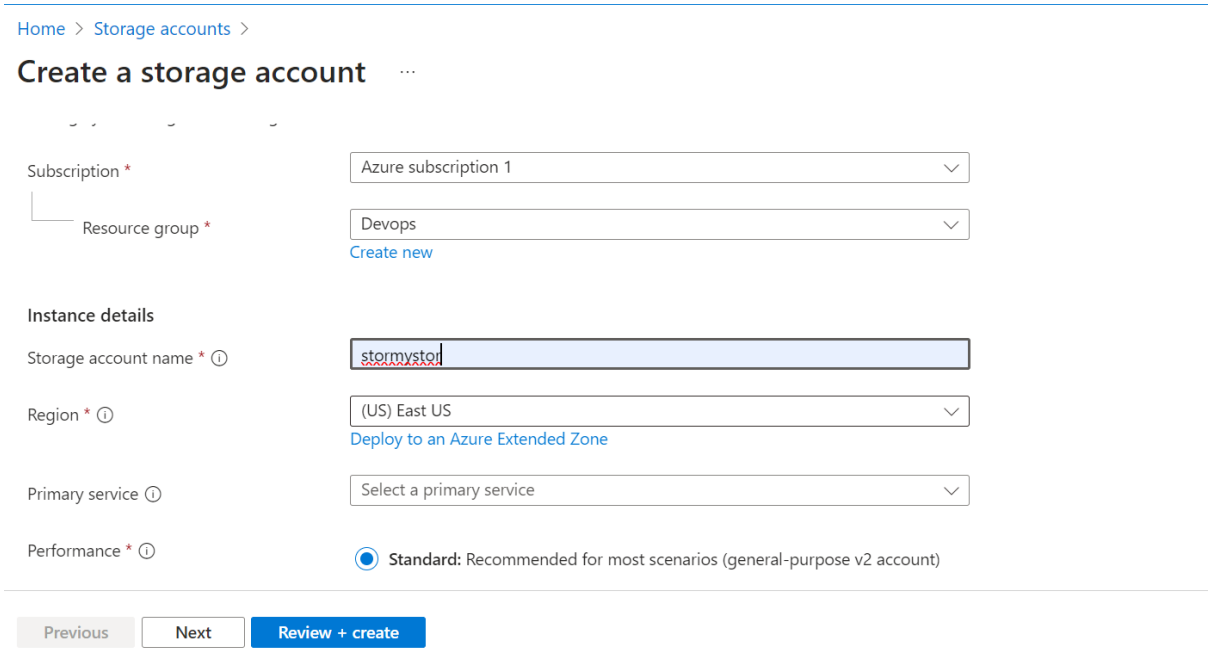
Create a subscription



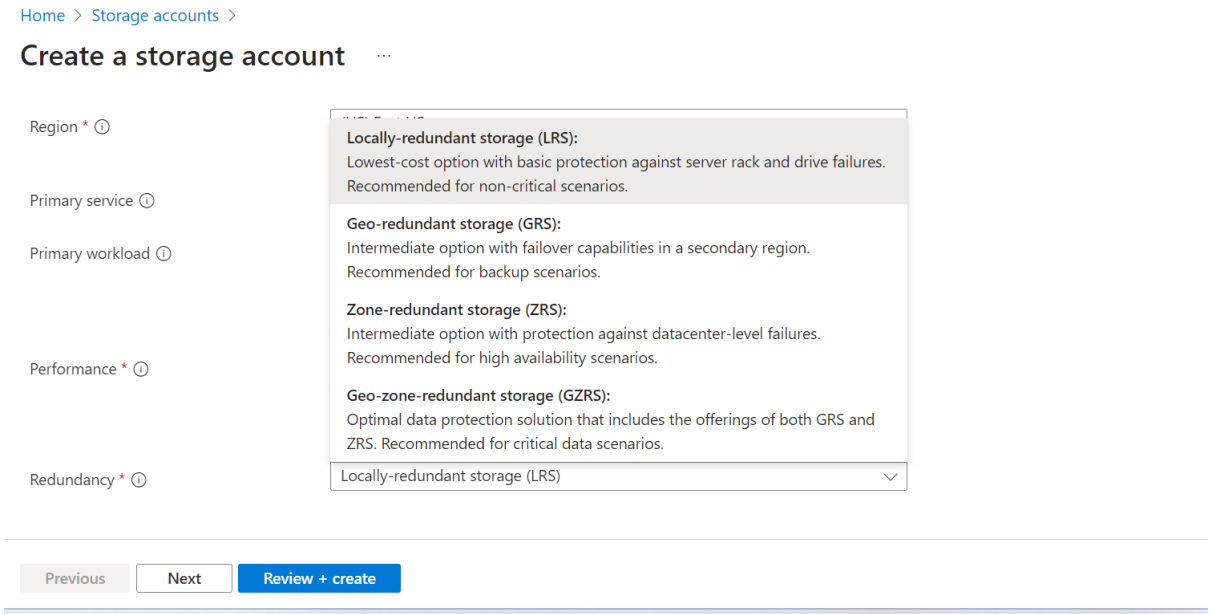
Created resource group to use it.



Created storage account.

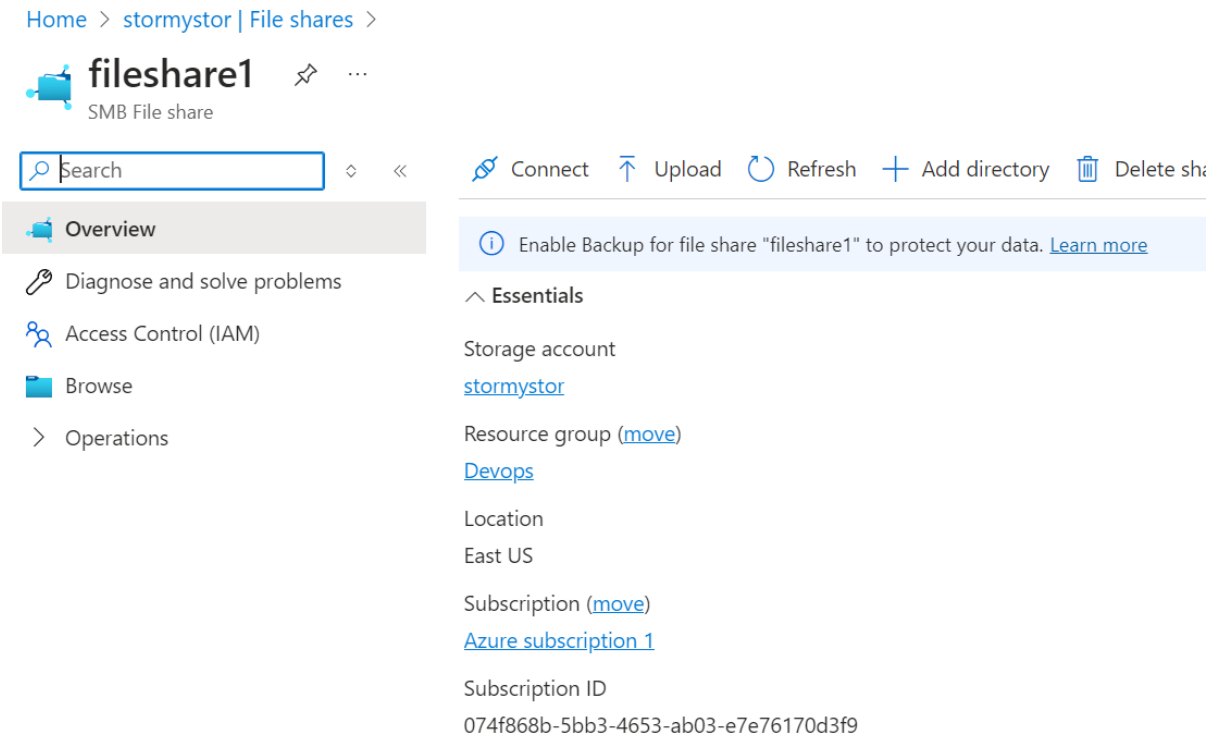


Created lrs replication method while creating storage account

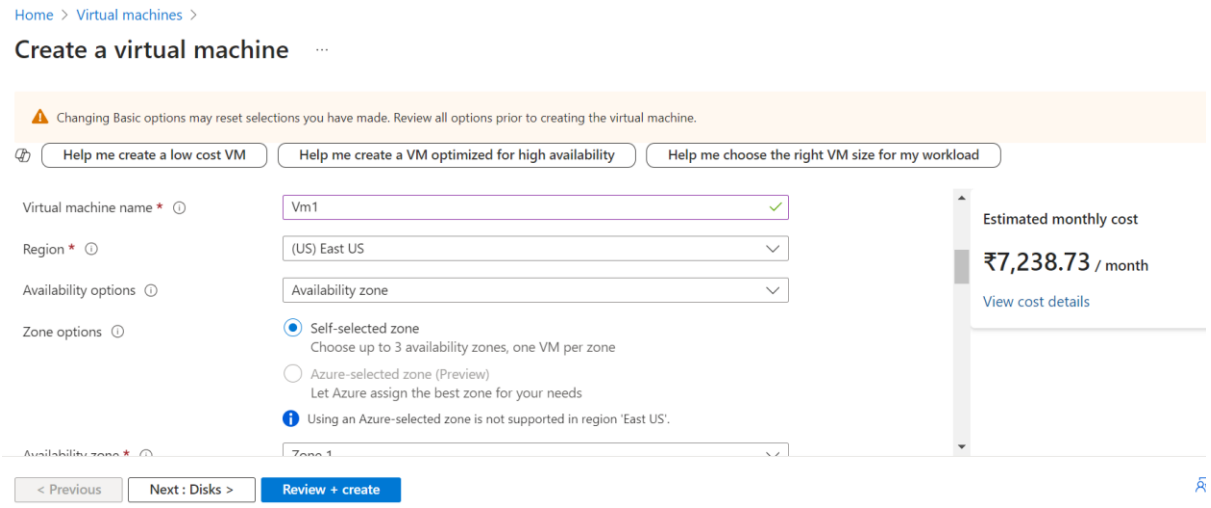


Created storage account with lrs as redundancy storage method.

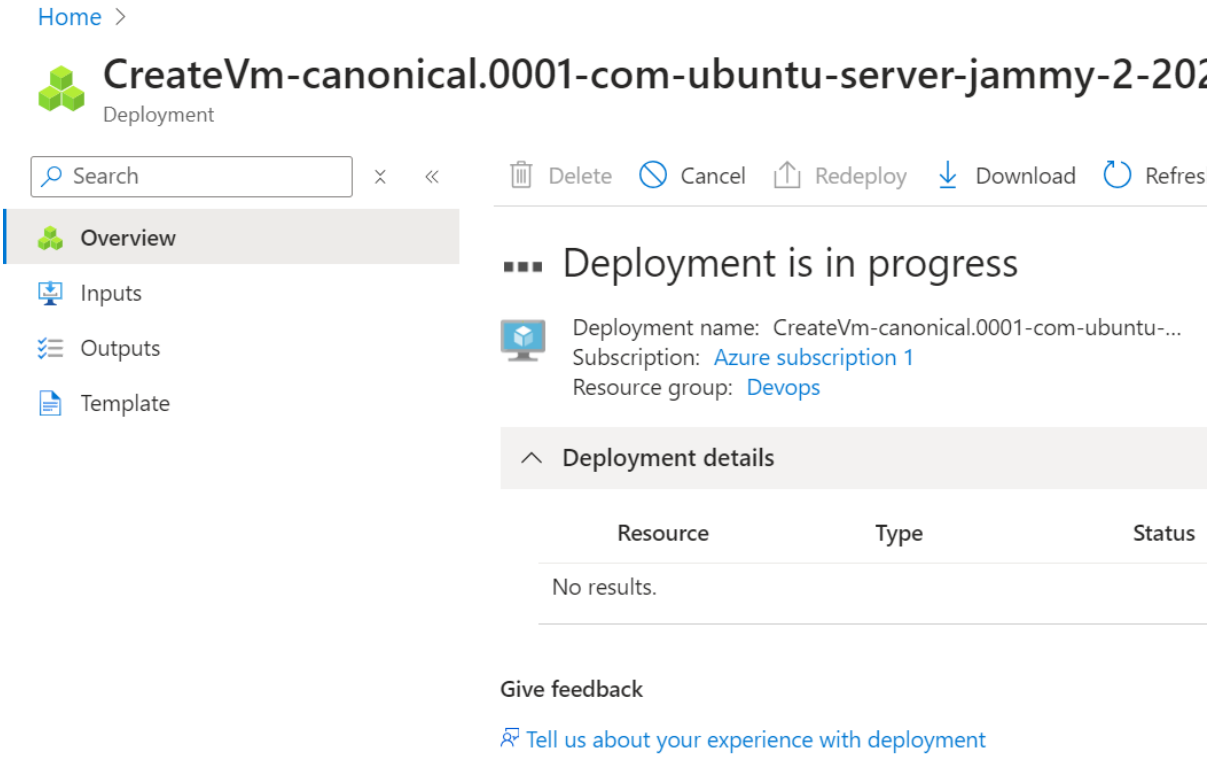
Created file share.



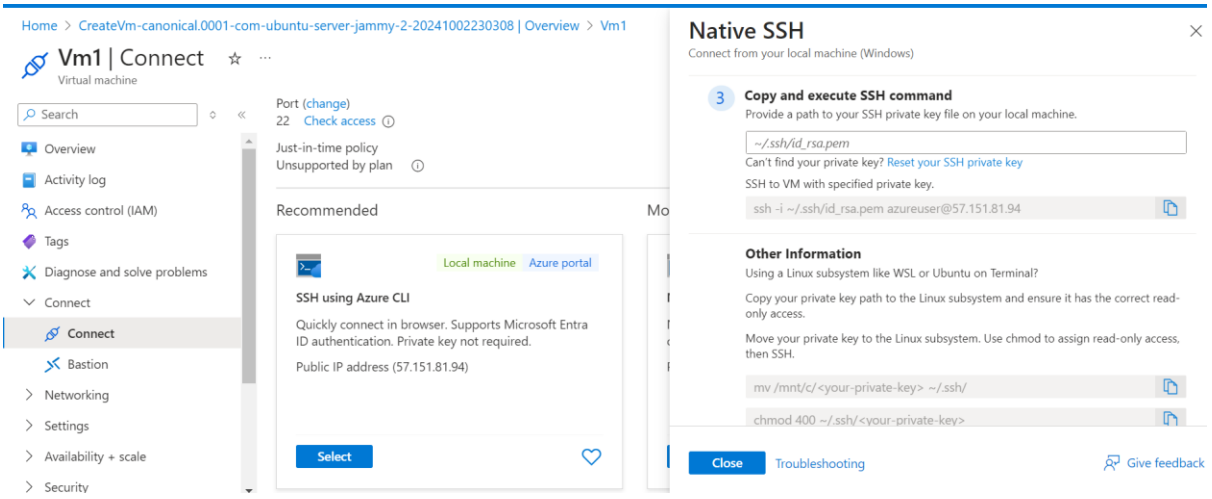
Creating one virtual machine to access it.



Created vm to access it.



Accessing vm creating



```
 * Support:        https://ubuntu.com/pro

 System information as of Wed Oct  2 17:39:58 UTC 2024

  System load:  0.29              Processes:             134
  Usage of /:   5.2% of 28.89GB   Users logged in:       0
  Memory usage: 4%                IPv4 address for eth0: 10.0.0.4
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status



The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

azureuser@Vm1:~$ sudo su -
root@Vm1:~#
```

Installing blobfuse package which is required.

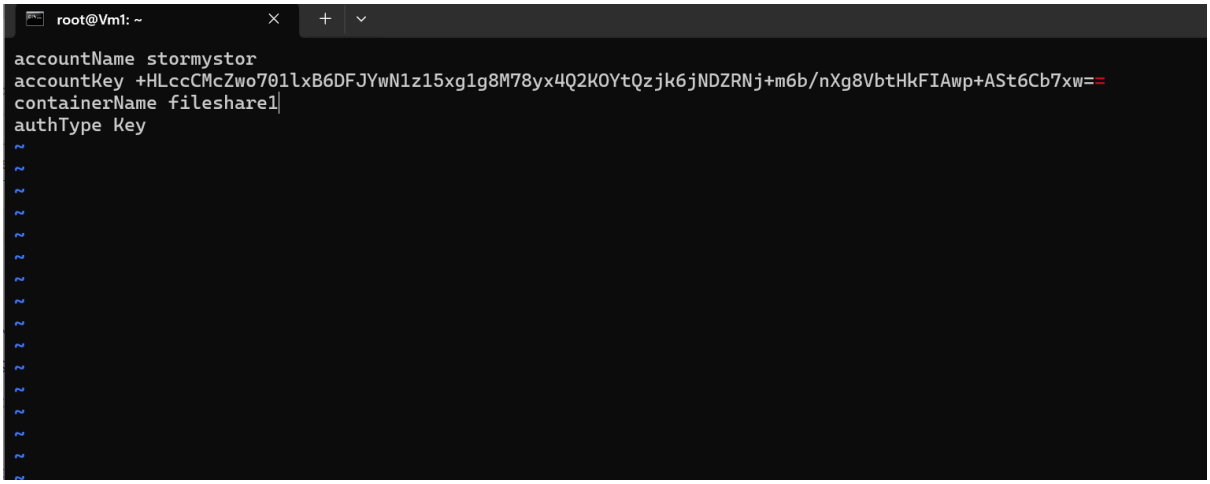
```
Get:15 http://azure.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1130 kB]
Get:16 http://azure.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [264 kB]
Get:17 http://azure.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [26.3 kB]
Get:18 http://azure.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [43.3 kB]
Get:19 http://azure.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [10.8 kB]
Get:20 http://azure.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [444 B]
Get:21 http://azure.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [67.7 kB]
Get:22 http://azure.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.1 kB]
Get:23 http://azure.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:24 http://azure.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:25 http://azure.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.8 kB]
Get:26 http://azure.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.5 kB]
Get:27 http://azure.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [672 B]
Get:28 http://azure.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:29 http://azure.archive.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1848 kB]
Get:30 http://azure.archive.ubuntu.com/ubuntu jammy-security/main Translation-en [299 kB]
Get:31 http://azure.archive.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [13.3 kB]
Get:32 http://azure.archive.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [909 kB]
Get:33 http://azure.archive.ubuntu.com/ubuntu jammy-security/universe Translation-en [179 kB]
Get:34 http://azure.archive.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [19.4 kB]
Get:35 http://azure.archive.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [37.2 kB]
Get:36 http://azure.archive.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7588 B]
Get:37 http://azure.archive.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [228 B]
Get:38 https://packages.microsoft.com/ubuntu/20.04/prod focal/main arm64 Packages [66.6 kB]
Get:39 https://packages.microsoft.com/ubuntu/20.04/prod focal/main all Packages [2942 B]
Get:40 https://packages.microsoft.com/ubuntu/20.04/prod focal/main amd64 Packages [315 kB]
Get:41 https://packages.microsoft.com/ubuntu/20.04/prod focal/main armhf Packages [23.1 kB]
Fetched 28.5 MB in 5s (6335 kB/s)
Reading package lists... Done
root@Vm1:~# sudo apt-get install blobfuse
```

Previously there were no mounting

```
root@Vm1:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
/dev/root        29G  1.8G   28G   7% /
tmpfs           3.9G     0  3.9G   0% /dev/shm
tmpfs           1.6G  996K  1.6G   1% /run
tmpfs           5.0M     0  5.0M   0% /run/lock
efivarfs        128K   37K   87K  30% /sys/firmware/efi/efivars
/dev/sda15      105M  6.1M   99M   6% /boot/efi
/dev/sdb1        16G   28K   15G   1% /mnt
tmpfs           788M  4.0K  788M   1% /run/user/1000
root@Vm1:~# lsblk
NAME    MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0     7:0    0   64M  1 loop /snap/core20/2379
loop1     7:1    0   87M  1 loop /snap/lxd/29351
loop2     7:2    0 38.8M  1 loop /snap/snapd/21759
sda       8:0    0   30G  0 disk
├─sda1    8:1    0 29.9G  0 part /
├─sda14   8:14   0    4M  0 part
└─sda15   8:15   0  106M  0 part /boot/efi
sdb       8:16   0   16G  0 disk
└─sdb1    8:17   0   16G  0 part /mnt
sr0      11:0    1  628K  0 rom
root@Vm1:~#
```

Copy the access key

Paste in the cfg file



Changing permission of created file to read write access to only owner.

```
sr0       11:0    1  628K  0 rom
root@Vm1:~# sudo touch fuse_connection.cfg
root@Vm1:~# vim fuse_connection.cfg
root@Vm1:~# chmod 600 fuse_connection.cfg
```

Installing package libfuse 2

```
root@Vm1:~# apt install libfuse2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  libfuse2
0 upgraded, 1 newly installed, 0 to remove and 7 not upgraded.
Need to get 90.3 kB of archives.
After this operation, 330 kB of additional disk space will be used.
Get:1 http://azure.archive.ubuntu.com/ubuntu jammy/universe amd64 libfuse2 amd64 2.9.9-5ubuntu3 [90.3 kB
```

Installed packages and mounted using below command.

```
root@Vm1:~# sudo apt update
sudo apt install cifs-utils
Hit:1 http://azure.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://azure.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://azure.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://azure.archive.ubuntu.com/ubuntu jammy-security InRelease
Hit:5 https://packages.microsoft.com/ubuntu/20.04/prod focal InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
7 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
cifs-utils is already the newest version (2:6.14-1ubuntu0.1).
0 upgraded, 0 newly installed, 0 to remove and 7 not upgraded.
root@Vm1:~# sudo mount -t cifs //stormystor.file.core.windows.net/fileshare1 mydata -o vers=3.0,username=stormystor,pass
word=+HLccCMcZwo701lxB6DFJYwN1z15xg1g8M78yx4Q2KOYtQzjk6jNDZRNj+m6b/nXg8VbtHkFIAwp+ASt6Cb7xw==,dir_mode=0777,file_mode=07
77,serverino
```

Mounted successfully.

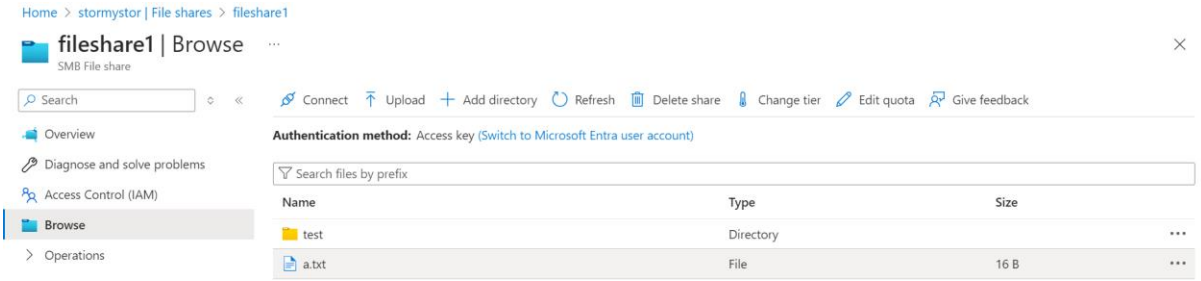
```
root@Vm1:~# df -h
Filesystem                                  Size  Used Avail Use% Mounted on
/dev/root                                    29G  1.8G   28G   7% /
tmpfs                                       3.9G     0  3.9G   0% /dev/shm
tmpfs                                       1.6G  996K  1.6G   1% /run
tmpfs                                       5.0M     0  5.0M   0% /run/lock
efivarfs                                    128K   37K   87K  30% /sys/firmware/efi/efivars
/dev/sda15                                  105M  6.1M   99M   6% /boot/efi
/dev/sdb1                                    16G   40K   15G   1% /mnt
tmpfs                                       788M  4.0K  788M   1% /run/user/1000
//stormystor.file.core.windows.net/fileshare1  5.0T     0  5.0T   0% /root/mydata
```

Created a.txt file

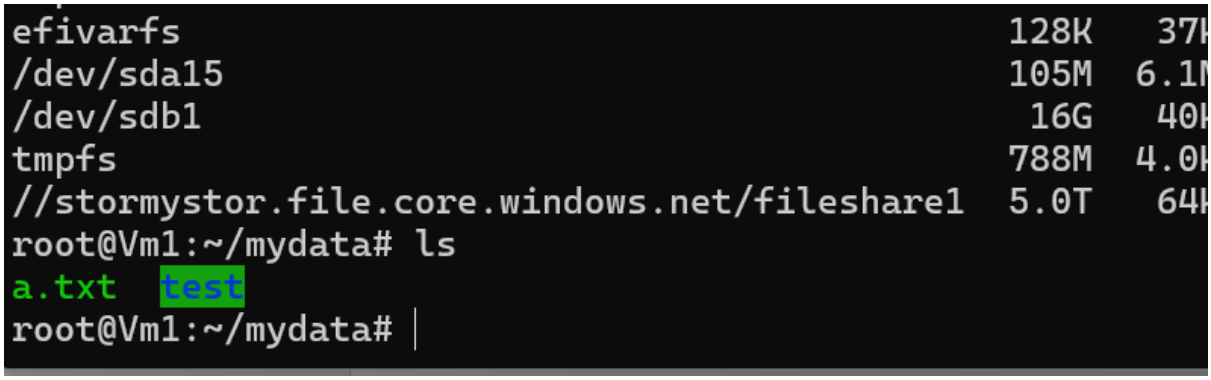
```
//stormystor.file.core.windows.net/fileshare1  5.0T     0
root@Vm1:~# cd mydata
root@Vm1:~/mydata# ls
root@Vm1:~/mydata# touch a.txt
root@Vm1:~/mydata# ls
a.txt
root@Vm1:~/mydata#
root@Vm1:~/mydata# cd ..
root@Vm1:~#
```

Lets check if it is there in azure storage account.

It is there on the account



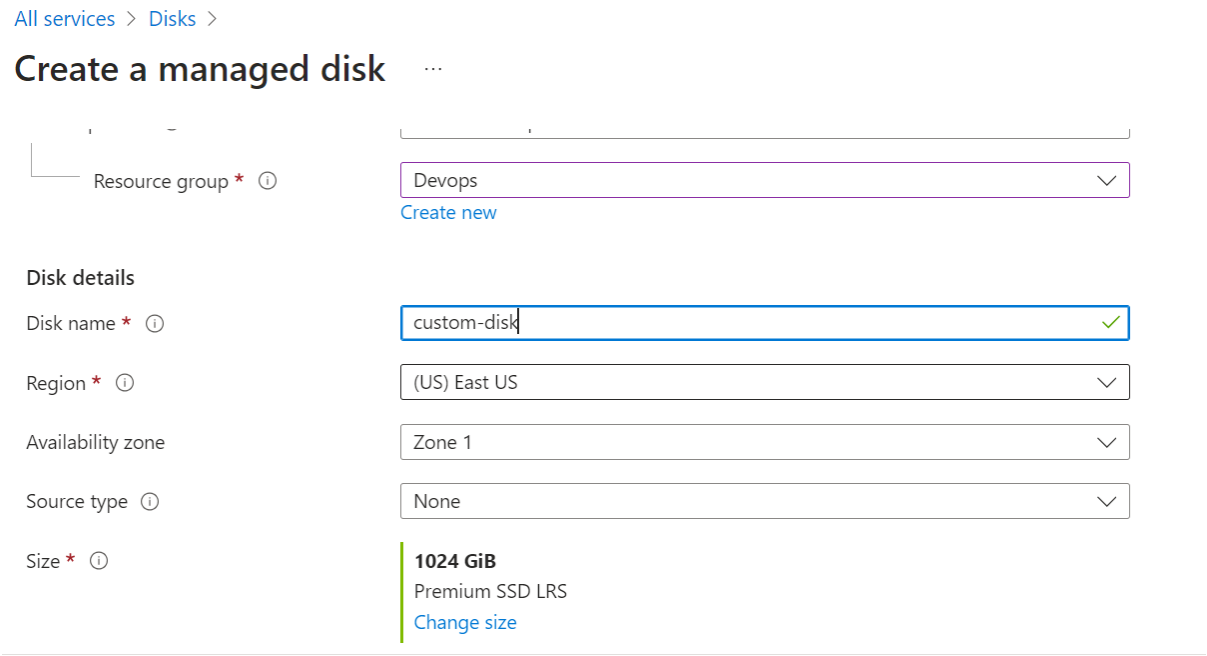
Same what will be created will be visible on vm.

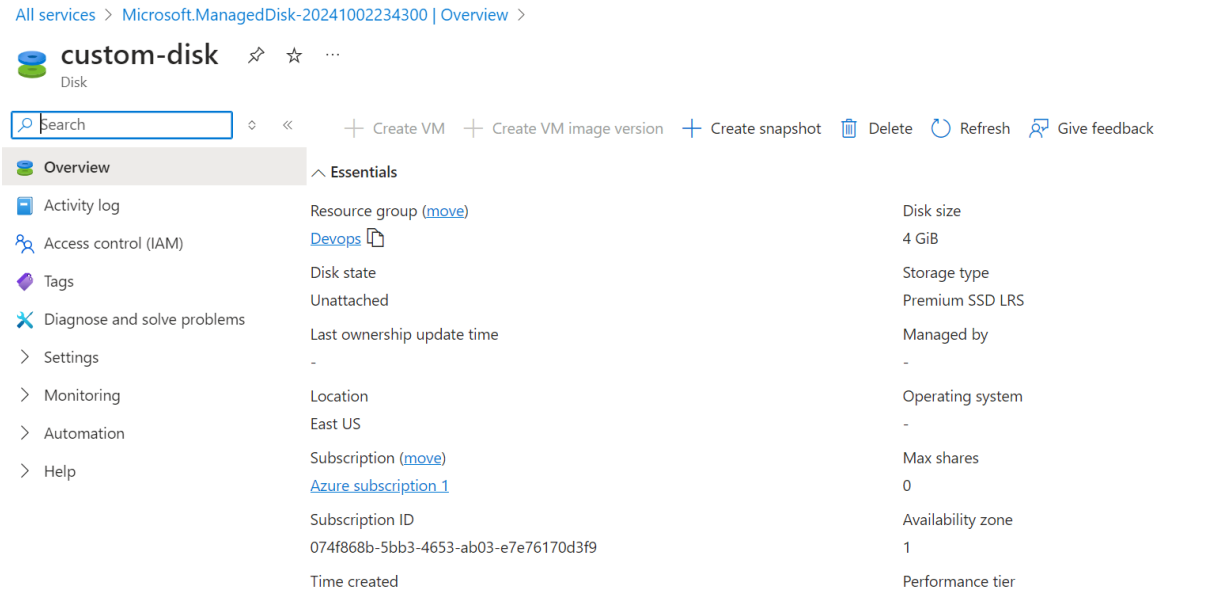


Hence the mount is successful.

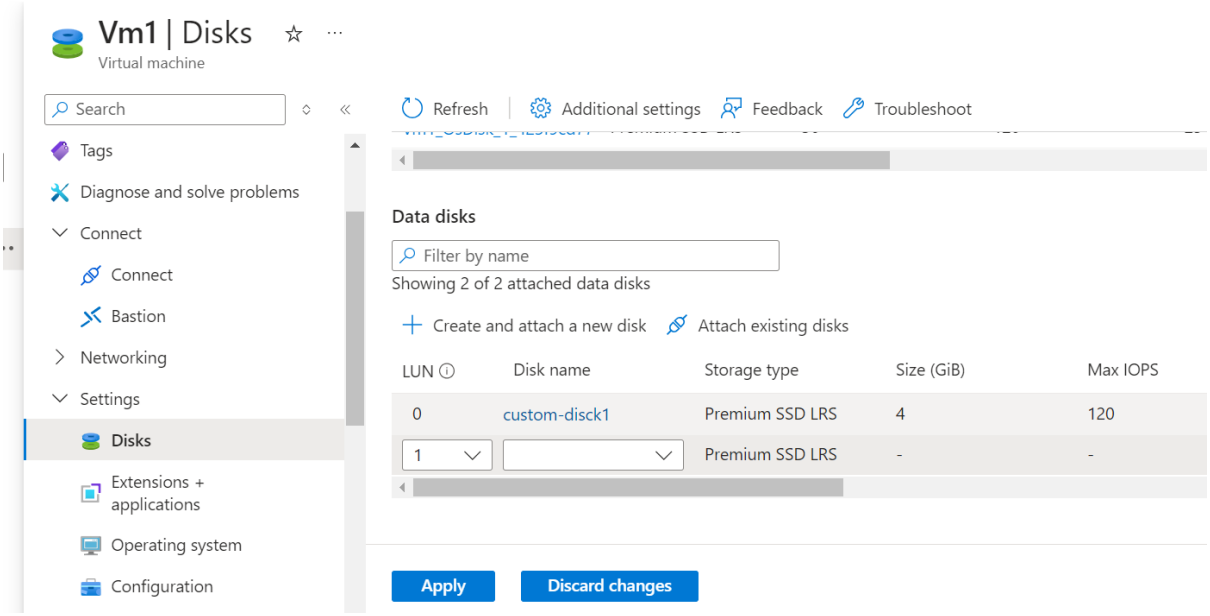
Q2) Create a disc volume and attach it to vm.

Creating disk volume.

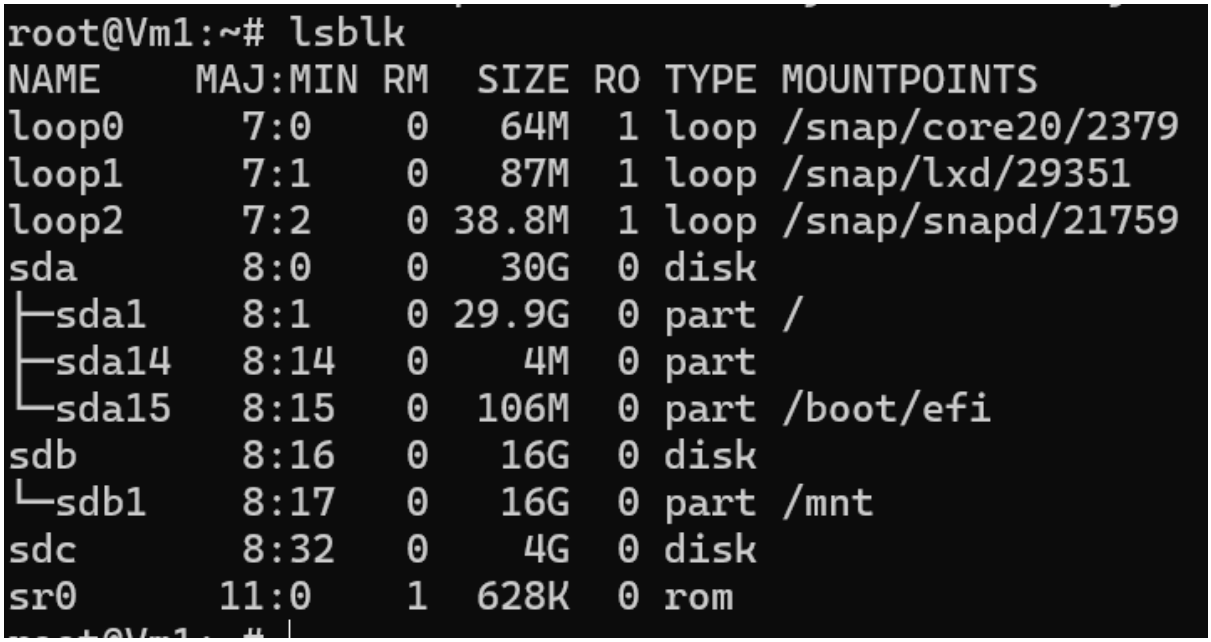




Go to vm setting and attach disk to vm



Attached disk is there .



It is not mounted yet.

```
root@Vm1:~# df  -h
Filesystem                                      Size  Used Avail Use% Mounted on
/dev/root                                        29G  1.8G   28G   7% /
tmpfs                                           3.9G     0  3.9G   0% /dev/shm
tmpfs                                           1.6G 1000K  1.6G   1% /run
tmpfs                                           5.0M     0  5.0M   0% /run/lock
efivarfs                                        128K   37K   87K  30% /sys/firmware/efi/efivars
/dev/sda15                                      105M  6.1M   99M   6% /boot/efi
/dev/sdb1                                        16G   40K   15G   1% /mnt
tmpfs                                           788M  4.0K  788M   1% /run/user/1000
//stormystor.file.core.windows.net/fileshare1  5.0T   64K  5.0T   1% /root/mydata
root@Vm1:~#
```

Created partiion to mount the disk on the existing disc. And made file system for the disc to be attached. As file system must be specified before attachin the disc

```
root@Vm1:~# sudo mkfs.ext4 /dev/sdc
mke2fs 1.46.5 (30-Dec-2021)
Discarding device blocks: done
Creating filesystem with 1048576 4k blocks and 262144 inodes
Filesystem UUID: bfc104ba-d0a9-4d6b-b52a-8b67db8b2392
Superblock backups stored on blocks:
        32768, 98304, 163840, 229376, 294912, 819200, 884736

Allocating group tables: done
Writing inode tables: done
Creating journal (16384 blocks): done
Writing superblocks and filesystem accounting information: done

root@Vm1:~# sudo mkdir /mnt/mydisk
root@Vm1:~# sudo mount /dev/sdc /mnt/mydisk
root@Vm1:~# df -h
Filesystem                                      Size  Used Avail Use% Mounted on
/dev/root                                        29G  1.8G   28G   7% /
tmpfs                                           3.9G     0  3.9G   0% /dev/shm
tmpfs                                           1.6G 1000K  1.6G   1% /run
tmpfs                                           5.0M     0  5.0M   0% /run/lock
efivarfs                                        128K   37K   87K  30% /sys/firmware/efi/efivars
/dev/sda15                                      105M  6.1M   99M   6% /boot/efi
/dev/sdb1                                        16G   44K   15G   1% /mnt
tmpfs                                           788M  4.0K  788M   1% /run/user/1000
//stormystor.file.core.windows.net/fileshare1  5.0T   64K  5.0T   1% /root/mydata
```

It is mounted to the created directory mnt/mydisk

```
root@Vm1:~# lsblk
NAME    MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0     7:0    0   64M  1 loop /snap/core20/2379
loop1     7:1    0   87M  1 loop /snap/lxd/29351
loop2     7:2    0 38.8M  1 loop /snap/snapd/21759
sda       8:0    0   30G  0 disk
├─sda1    8:1    0 29.9G  0 part /
├─sda14   8:14   0    4M  0 part
└─sda15   8:15   0  106M  0 part /boot/efi
sdb       8:16   0   16G  0 disk
└─sdb1    8:17   0   16G  0 part /mnt
sdc       8:32   0    4G  0 disk /mnt/mydisk
sr0      11:0    1  628K  0 rom
root@Vm1:~#
```