**Mount the file share to the Linux machine using azure services**

* In Azure, a file share, specifically within the Azure Files service, offers a fully managed cloud-based file storage solution.
* It's a way to store files in the cloud, eliminating the need for on-premises file servers.
* Azure file shares can be accessed from various operating systems (Windows, Linux, macOS) using standard protocols like SMB (Server Message Block) and NFS (Network File System) by mount to them.

Let’s mount the azure file share to a Linux machine, do it in practically.

**Step1:** Create a Storage account (myfirststorageaccount978).

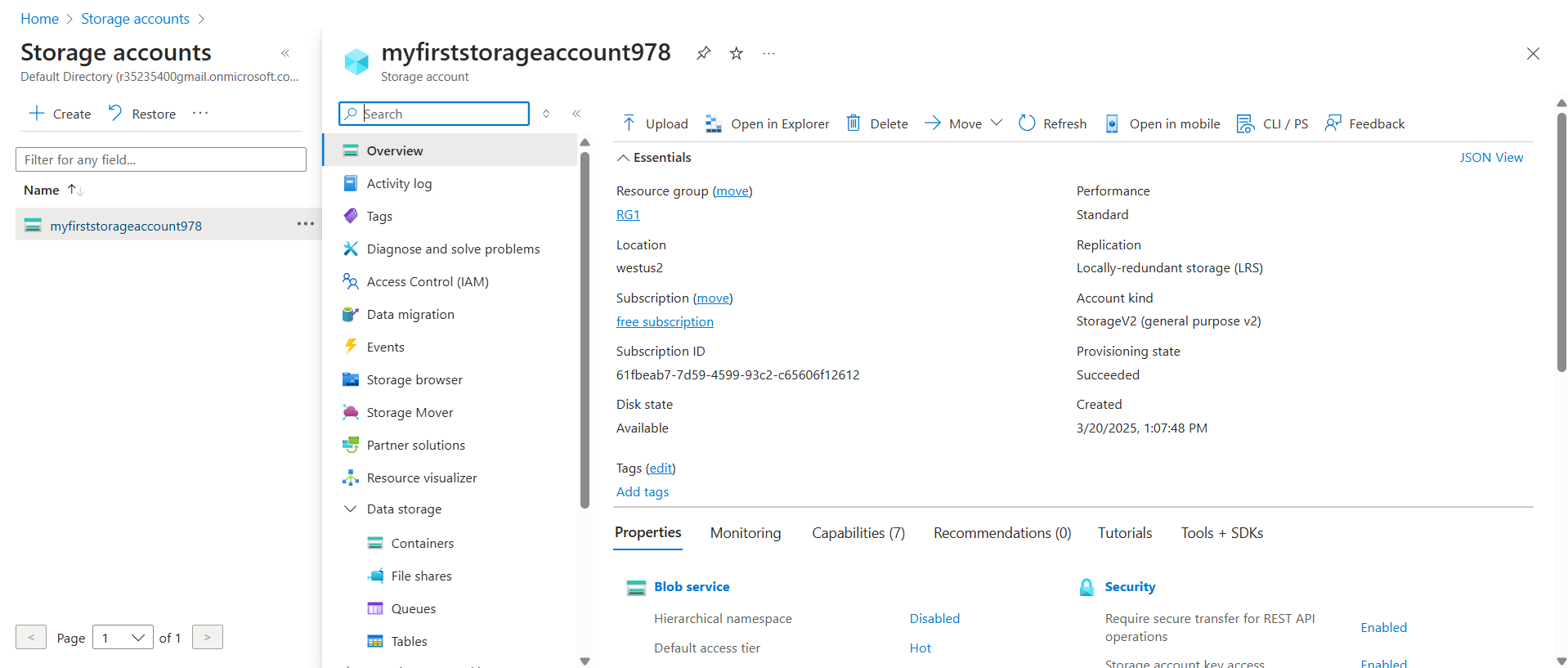
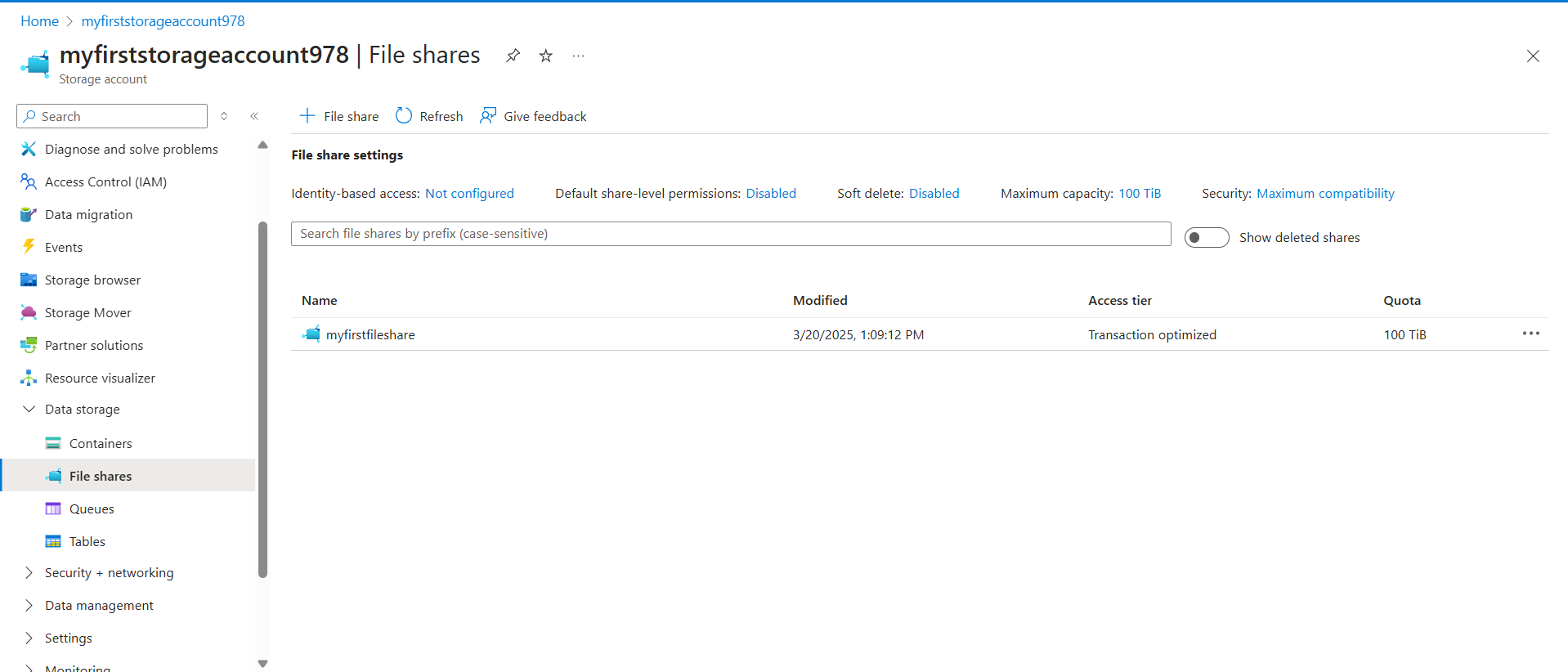


Fig: Storage account.

**Step2:** Create a File share (myfirstfileshare) within this storage account (myfirststorageaccount978).



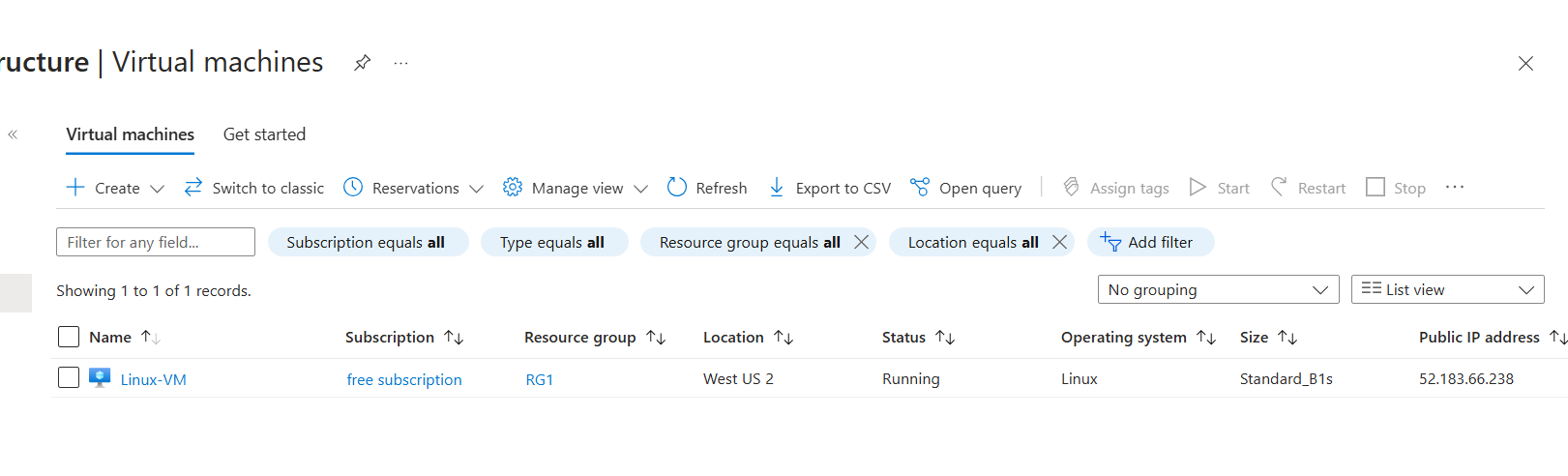
**Note:** Note down the **Storage account name, File share name**, and **Storage account key**.

**Storage account name:** myfirststorageaccount978

**File share name:** myfirstfileshare

**Storage account key:** **7Yc/AVhJtAjQVd7EHNAvXZyfnAmRZvAlLjq2x97iI43VMDmDCaTAZIAZtynQ96wyPqtFsYU+V+P0+ASt1gEqlw==**

**Step3: Create a Linux VM (virtual machine).**



**Step4:** Now connect to the Linux machine using putty & and update it.

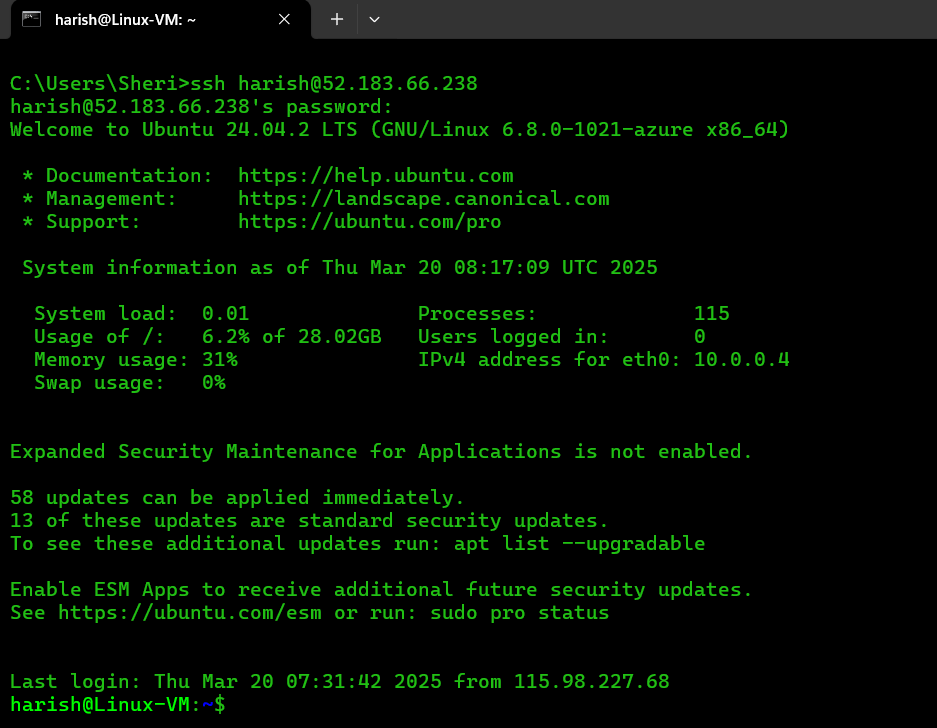


Fig: Connecting to Linux VM.

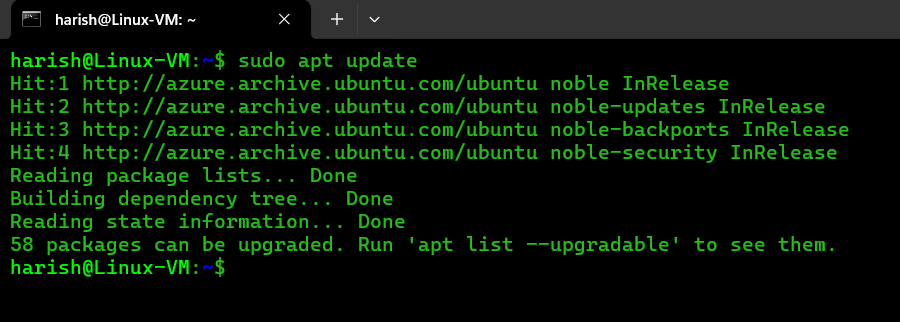


Fig: Updating the Linux VM.

**Step5:** Install CISF (common internet file system) in Linux machine if it does not have by default.

**Command:** sudo apt-get install cifs-utils –y

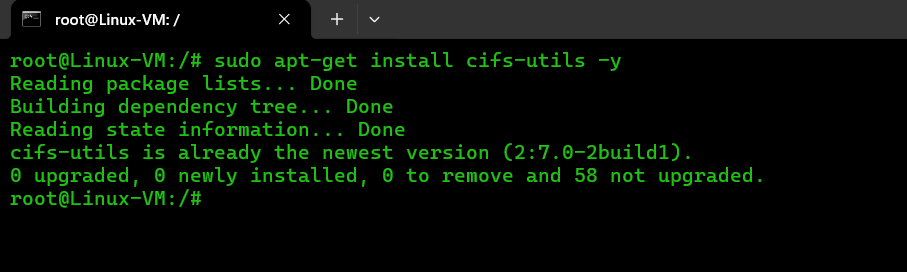


Fig: Installing of CIFS (common internet file system).

**CIFS:**

* **CIFS (Common Internet File System)** is a network file-sharing protocol that allows systems to access files and directories on remote servers as if they were local.
* It is an enhanced version of the **SMB (Server Message Block)** protocol.
* CIFS allows file sharing between different operating systems, such as Windows, Linux, and macOS.
* When you want to access files or directories stored on a remote server (e.g., a Windows file share or a NAS device) from a local machine (e.g., a Linux system), you need to **mount** the remote file system. CIFS is used as the protocol to facilitate this mounting process

**Step5:** Create a directory in “mnt” folder with the name of file share. (Create a mount point).

**Command:** sudo mkdir –p /mnt/myfirstfileshare.

That means we are going to munt the file share to the path **“/mnt/ myfirstfileshare”.**

**Note1:** The **-p** option tells mkdir to create parent directories as needed.

**Note2:** “**mnt”** folder/directory is already exist in the Linux machine.

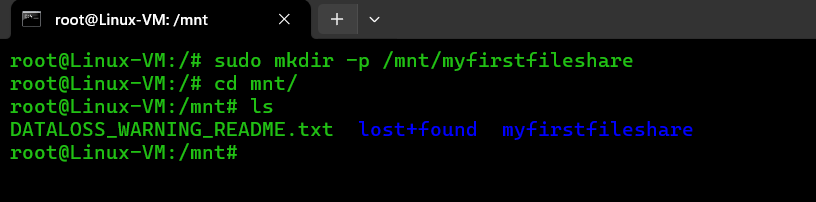


Fig: Mounting point is created.

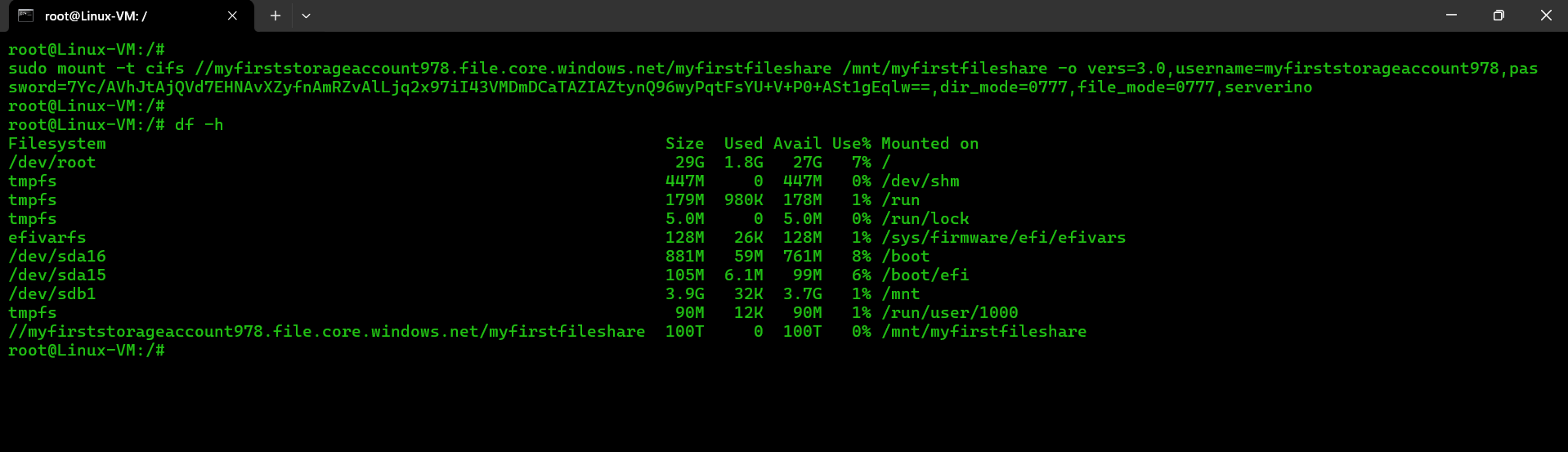
**Step6:** Mount the azure file share to the Linux machine of mount point “/mnt/myfirstfileshare”.

**Command:**

sudo mount -t cifs //<storage\_account>.file.core.windows.net/<file\_share> /mnt/azurefileshare -o vers=3.0,username=<storage\_account>,password=<storage\_key>,dir\_mode=0777,file\_mode=0777,serverino

**EX:**

sudo mount -t cifs //myfirststorageaccount978.file.core.windows.net/myfirstfileshare /mnt/myfirstfileshare -o vers=3.0,username=myfirststorageaccount978,password=7Yc/AVhJtAjQVd7EHNAvXZyfnAmRZvAlLjq2x97iI43VMDmDCaTAZIAZtynQ96wyPqtFsYU+V+P0+ASt1gEqlw==,dir\_mode=0777,file\_mode=0777,serverino



In above figure the file share (myfirstfileshare) is successfully mounted to the mounting directory/mounting point (/mnt/myfirstfileshare).

**Step7:** Now created any file or folder in the mount point/mount directory.

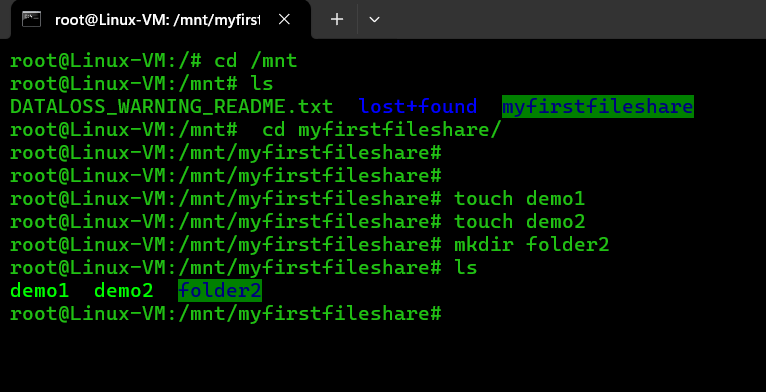


Fig: Terminal View.

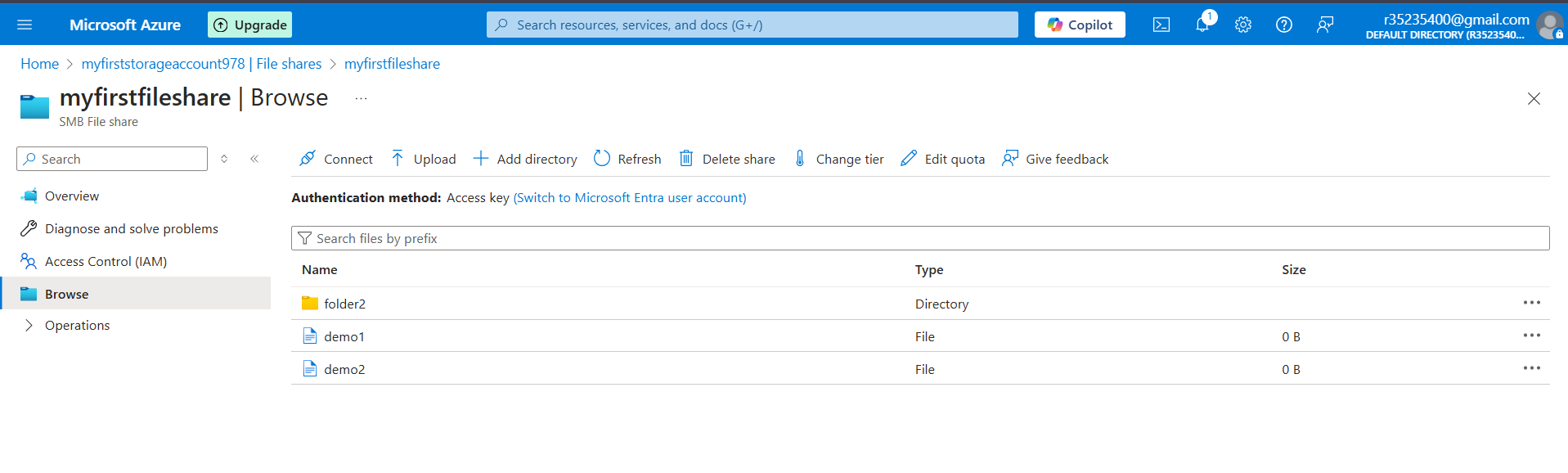


Fig: GUI view.

**Note:** Whatever you create or upload the files/folders in the mounting point (mounting directory) from local to remote Vis versa, it will stored the files/folders safely in the target file share which is mounted to a specific folder.

**Step8:** Let’s unmount the file share with the Linux machine.

**Command:** sudo unmount <mount point>

EX: sudo unmount /mnt/myfirstfileshare

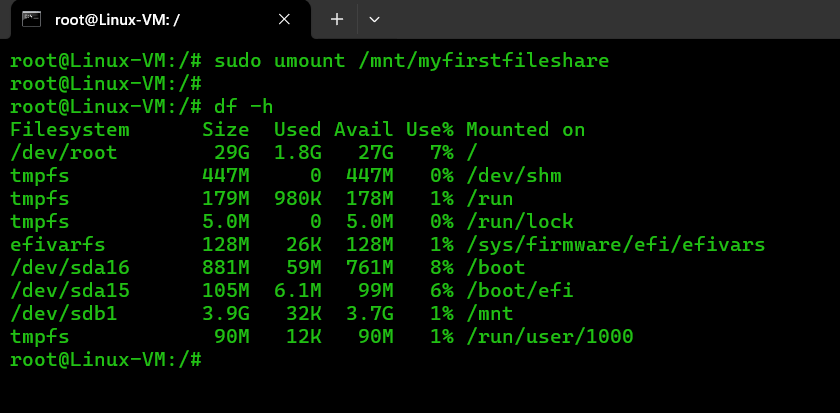


Fig: Unmounted the file share.