

# Linux

- [Disk / Space CMD](#)
- [Mount network share](#)
- [Vault 2 issues with Nginx Proxy not working](#)
- [☐ Sharing a Folder on Debian Linux via Samba](#)
- [☐ Mounting a Network Share for Docker on Debian](#)

# Disk / Space CMD

## Disk / Space CMD

Will give the usage of the user you are logged in as

```
sudo du -h --max-depth=1
```

```
root@vault2:/var/lib/docker/containers# sudo du -h --max-depth=1
168K    ./ccf87bf0d229ff0f69a906d8e9a933830319404ec04bdab1cb6db40baa7a6fdc
4.9M    ./dc21f95a5619c7c33aa045c4e052f4a34e6ae55261a526f13dc03359b3247fe4
172K    ./587ac4ab022b0f283f1ecb66330bfaf23cbc7903c465e25c923f0032824b38dc
990M    ./1930b473be497ac7ba7d875eebefd06710a43ed1aeb8b62e9f1747052d2247e7
27M     ./4d31ed3860ccccfdac57c92f4194dd2c44279d66def849d97655822e3071958e0
1.1M    ./2acbc36f9d8da06897c5362a07e3345518a834972358f257be5194fad1fecdc3
120K    ./071272f8748e55980d31ec7158b6ab02f7f7b9330c9f96eb73acbd7fdd564516
4.1M    ./9c36a5b9377527c63a9b16377451140852cae50e2dlf11e5bb7d01934af588f6
1.6M    ./242cc05fld1c2fbc0e9aa698733381cf480bf4f8d49561a0c76edd317619d596
232M    ./55666fd931e7e45569f2a10f93761e92c8ac5910c3c9f3747825511a92ee80f5
256K    ./af2b045baf51eaelab2fdcf9f9ac115029546b9268563a877319ed3a1006f46d
4.7M    ./cad3419alc0292b6e18f09cdaeaf2a3e86c6024beb954af771ba13bc82bc6f95
68K     ./679051d9c4bc63440db764ecf3dc072ce91124ebb5d3fe5112e855666671ef65
43M     ./6ae8492e022392980574f7e2e5ddb1f15ff1c6226f86e3c271d20d7837fff1f2
56K     ./3b4c56c13e38816e58f3d7c49b68016e75a032ac6f7a73454d76553fb28713eb
56K     ./596099f0e768650837d00603283bde7c0ec634fdbd2c40cb51c767e2836fb55d
96K     ./8d8964be4256957f149dec60724d5c91998eb2albedf446b8f22e15ce67780f2
188K    ./b5a41470608f1206f09f2cc45290720ab3896f78051b979935ba61b79c2e68c6
13M     ./2c707b4691fd5ce64e8df2fdc95eff6fd824d544b6d96ec45dcf545a96e81804
40K     ./7f306a938elf9e129031ef11adee0fd012c2ac72d72c390add085c233f816b6b
4.9M    ./fc80f8f76ad113621c952cc11e4581efc05083ac06cddf969bb501d8376d8085
1.3G
```

The `df` command primarily checks disk usage on a mounted filesystem. If you don't include a file name, the output shows the space available on all currently mounted filesystems. Disk space is shown in 1K blocks by default:

```
df -h
```

```

root@vault2:/var/lib/docker/containers# df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            6.8G   0 6.8G   0% /dev
tmpfs           1.4G  4.2M  1.4G   1% /run
/dev/sdal       294G   37G  242G  14% /
tmpfs           6.9G   0 6.9G   0% /dev/shm
tmpfs           5.0M   0 5.0M   0% /run/lock
tmpfs           6.9G   0 6.9G   0% /tmp
/dev/sdb1       7.0T  6.1T  949G  87% /srv/dev-disk-by-uuid-2bb191d0-15da-4
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/f099437856c9
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/77019b2cf7da
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/b18c38072d36
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/7611c2eedffb
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/8986cce68347
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/b547157cff41
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/bb569b4df2e2
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/8e683b0cf25e
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/4d099d427617
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/b51bef5c2993
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/cbeb182e49d6
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/0cad57c062a9
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/beb11364d559
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/5e3a18a98185
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/42922fff423b
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/397a4784bc7b
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/509cb8f1d576
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/1a0c94fcec26
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/eba4949c04b0
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/98c292d34a42
overlay         294G   37G  242G  14% /var/lib/docker/overlay2/48adf765dc81
root@vault2:/var/lib/docker/containers#

```

## List All Block Devices in Linux

### lsblk

```
lsblk
```

```

root@vault2:/var/lib/docker/containers# lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda          8:0    0  350G  0 disk
├─sda1       8:1    0  299G  0 part /
├─sda2       8:2    0    1K  0 part
├─sda5       8:5    0  975M  0 part [SWAP]
sdb          8:16   0    7T   0 disk
├─sdb1       8:17   0    7T   0 part /srv/dev-disk-by-uuid-2bb191d0-15da-4ffe-8266-0d1b2133ec7c
sr0         11:0    1 1024M  0 rom

```

```
root@dbt3ch /home# ls
Docker  docker.zip
root@dbt3ch /home# ls
Docker  docker.zip
root@dbt3ch /home# scp docker.zip root@192.168.0.41:/home
```

# Mount network share

```
sudo mount.cifs //192.168.1.252/5tb /5TB -o user=USER,pass=PASS
```

## Install CIFS

```
sudo apt install cifs-utils
```

---

```
mount.cifs //192.168.1.251/hel /mnt/share/NAS/hydra -o user=USER,pass=PASS
```

# Vault 2 issues with Nginx Proxy not working

Check logs in Portainer - bind port already used (80)

```
lsof -i tcp:80
```

This will show whats running on that port

```
fuser -k 80/tcp
```

This should kill the process, but if not do the below (based on the COMMAND Name)

```
systemctl stop haproxy
```

# ? Sharing a Folder on Debian Linux via Samba

**Last Updated:** 2025-06-01

**Applies To:** Debian 10+, Ubuntu, other Debian-based distributions

**Use Case:** Share a local folder over the network for access from Windows, macOS, or Linux machines.

---

## ? Prerequisites

- Debian-based Linux system
  - `sudo` privileges
  - Network connectivity to target devices
- 

## ? Step 1: Install Samba

Update the system and install Samba:

```
bash
sudo apt update
sudo apt install samba
```

---

## ? Step 2: Create a Shared Directory

Choose or create the folder to share. Example:

```
bash
sudo mkdir -p /srv/share
sudo chown nobody:nogroup /srv/share
sudo chmod 0775 /srv/share
```

This creates a public share folder with loose permissions (for anonymous access).

---

## ?? Step 3: Configure Samba

Edit the Samba configuration file:

```
bash
```

```
sudo nano /etc/samba/smb.conf
```

Add the following to the bottom of the file:

```
ini
```

```
[PublicShare]
  path = /srv/share
  browseable = yes
  read only = no
  guest ok = yes
  force user = nobody
```

“ `Tip:` `force user = nobody` ensures files are written as the `nobody` user, preventing permission issues.

---

## ? Step 4: Restart Samba Services

```
bash
```

```
sudo systemctl restart smbd
```

---

## ? Step 5: Open Firewall (If Enabled)

For systems using `ufw` (Uncomplicated Firewall):

```
bash
```

```
sudo ufw allow 'Samba'
```

Or manually:

```
bash
```

```
sudo ufw allow 137,138/udp
sudo ufw allow 139,445/tcp
```

---

## ? Step 6: Access the Share

From a Windows or Linux machine:

- Open File Explorer or file manager.
- Go to: `\\<your-debian-ip>\PublicShare`

You should see the shared folder contents.

---

# ? Optional: Secure with Username/Password

To restrict access:

1. Disable guest access:

ini

```
guest ok = no
```

2. Create a Samba user:

bash

```
sudo smbpasswd -a <your-linux-user>
```

3. Restart Samba:

bash

```
sudo systemctl restart smb
```

You'll now need a username/password to access the share.

---

## ? Troubleshooting

Problem	Fix
Can't connect to share	Check firewall, Samba config syntax, and network IPs
Files not writable	Check folder permissions and <code>force user</code> setting
Authentication issues	Ensure Samba user exists and password is set via <code>smbpasswd</code>

---

## ? Related

- `/etc/samba/smb.conf`: Samba main configuration file
- `sudo testparm`: Validates Samba config
- `sudo smbstatus`: Shows active connections

# ? Mounting a Network Share for Docker on Debian

## ? Overview

This guide shows how to mount a CIFS/SMB network share on a Debian-based system and use it as a volume in Docker Compose. Useful when your Docker container needs access to shared files hosted on another machine (e.g., a NAS, Windows PC, or another Linux box).

---

## ?? Step 1: Install CIFS Utilities

```
sudo apt update
sudo apt install cifs-utils
```

---

## ? Step 2: Create a Mount Point

```
sudo mkdir -p /mnt/downloads
```

---

## ? Step 3: Mount the Share

```
sudo mount -t cifs //LORGAR/Downloads /mnt/downloads -o
username=slitzer,password=blink182,vers=3.0
```

### Replace:

- `//LORGAR/Downloads` — with the remote share path
  - `username` and `password` — with valid credentials
  - `vers=3.0` — adjust based on your SMB version (`2.0`, `3.1.1`, etc.)
-

# ? Optional: Persistent Mount via fstab

Edit `/etc/fstab`:

```
//LORGAR/Downloads /mnt/downloads cifs
username=slitzer,password=blink182,vers=3.0,uid=1000,gid=1000 0 0
```

## Using a secure credentials file:

```
# /root/.smbcredentials
username=slitzer
password=blink182
```

Then in `/etc/fstab`:

```
//LORGAR/Downloads /mnt/downloads cifs
credentials=/root/.smbcredentials,vers=3.0,uid=1000,gid=1000 0 0
```

Don't forget: `chmod 600 /root/.smbcredentials`

---

# ? Step 4: Use in Docker Compose

Update your `docker-compose.yml`:

```
version: '3'
services:
  myapp:
    image: myapp/image
    volumes:
      - /mnt/downloads:/app/shared
```

This maps the mounted network share inside the container.

---

# ? Troubleshooting

- Check if mounted: `mount | grep downloads` or `df -h`
  - Check permissions: `ls -la /mnt/downloads`
  - Logs: `dmesg`, `journalctl -xe`
-

# ? TL;DR

```
sudo apt install cifs-utils
sudo mkdir -p /mnt/downloads
sudo mount -t cifs //REMOTE_HOST/Share /mnt/downloads -o username=...,password=...,vers=3.0
```

Then reference `/mnt/downloads` in your Docker volumes.

---

📌 **Pro Tip:** Avoid hardcoding passwords by using credential files, especially for systems in production.