

How do create a file system on my VPS's additional mount?

Step 1

Login to your VPS with an SSH tool, in this example we are using [Bitwise SSH](#).

Once signed in, run the following command.

```
lsblk
```

```
root@yabs:~# lsblk
NAME MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
loop0  7:0    0 63.9M  1 loop /snap/core20/2318
loop1  7:1    0   87M  1 loop /snap/lxd/28373
loop2  7:2    0 38.8M  1 loop /snap/snapd/21759
loop3  7:3    0 79.9M  1 loop /snap/lxd/22923
loop4  7:4    0   62M  1 loop /snap/core20/1587
vda    252:0    0  10G   0 disk
├─vda1 252:1    0   9.7G   0 part /
└─vda2 252:2    0   255M   0 part [SWAP]
vdb    252:16   0  100G   0 disk
```

In the command, you will see two disk mounts, one is VDA which is your primary disk mount since it's mounted to /. Your additional disk mount is VDB with 100G in size.

/dev/vdb is our mount.

Step 2

Run the following command to create a file system on that disk.

```
mkfs.ext4 /dev/vdb
```

```
root@yabs:~# mkfs.ext4 /dev/vdb
mke2fs 1.46.5 (30-Dec-2021)
Discarding device blocks: done
Creating filesystem with 26214400 4k blocks and 6553600 inodes
Filesystem UUID: 83b532fe-8df2-4e04-b474-99d1f2fcf68a
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000, 7962624, 11239424, 20480000, 23887872

Allocating group tables: done
Writing inode tables: done
Creating journal (131072 blocks): done
Writing superblocks and filesystem accounting information: done

root@yabs:~#
```

As you see now there is a file system of mkfs.ext4 created on that mount.

Step 3

Run the following commands to mount the file system to the OS. You can change the value of data to whatever you'd like.

You can change the /mnt/data folder to /mount or /data or whatever folder you'd like. This is just an example.

```
mkdir /mnt/data
mount -t ext4 /dev/vdb /mnt/data
df -h
```

Line 1 makes the directory. Line 2 makes the mount, mounting the drive /dev/vdb to the folder /mnt/data. Line 3 returns what your system appears like with the new file system

Upon completion, you will see the new usable mount where you can store all your data now.

```
root@yabs:~# df -h
Filesystem      Size  Used Avail Use% Mounted on
tmpfs           97M  1016K   96M   2% /run
/dev/vda1       9.6G  3.8G  5.3G  42% /
tmpfs           485M     0  485M   0% /dev/shm
tmpfs           5.0M     0   5.0M   0% /run/lock
tmpfs           97M   4.0K   97M   1% /run/user/0
/dev/vdb        98G   24K   93G   1% /mnt/data
root@yabs:~#
```

Step 4

Add the details of the mount we completed earlier into the FSTAB file.

```
nano /etc/fstab
/dev/vdb /mnt/data ext4 defaults 0 0
```

After that, if you restart your server the file system will remain on there.

Failure to do this will cause your file system to unmount during system reboots. Its recommend that you complete this!

That's it! You now fully know how to create a file system on your VPS's new mount.

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