How do I add a new hard drive in Linux?

Important Notes:
0. This guide is for customers who have purchased an additional hard drive from us, and need help configuring it to work with their Linux Server.

Getting Started:
1. Check to see how many drives are installed: You can do this using the fdisk command.

```
[root@default # fdisk -l | grep '^Disk'
```

You should output similar to the following:

```
Disk /dev/sda: 251.0 GB, 251000193024 bytes
Disk /dev/sdb: 251.0 GB, 251000193024 bytes
```

A device name refers to the entire hard disk. For more information see Linux partition naming convention and IDE drive mappings.

2. To partition the disk - /dev/sdb, enter:

```
[root@default root # fdisk /dev/sdb
```

For help using the partitioner, use the “m” command:

```
Command (m for help): m
```

```
Command action
a   toggle a bootable flag   b   edit bsd disklabel
c   toggle the dos compatibility flag
d   delete a partition
l   list known partition types  m   print this menu
n   add a new partition
o   create a new empty DOS p
artition table   p   print the partition table
q   quit without saving changes
s   create a new empty Sun disklabe
```

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Command (m for help): p
Disk /dev/sdb: 50.0 GB, 50019202560 bytes
255 heads, 63 sectors/track, 6081 cylinders
Units = cylinders of 160
65 * 512 = 8225280 bytes
Device Boot Start End Blocks Id System

Command (m for help):
Command (m for help): n
Command action e extended
p primary partition (1-4)
p Partition number (1-4): 1
First cylinder (1-6081, default 1): 1
Last cylinder or +size or +sizeM or +sizeK (1-6081, default 6081): 6081
FTP

Command (m for help): w
The partition table has been altered!
Calling ioctl() to re-read partition table. Syncing disks.

[root@default root]#

3. Format the new disk using mkfs.ext3 command:

To format Linux partitions using ext2fs on the new disk, issue the following command:

[root@default #]# mkfs.ext3 /dev/sdb1

4. Mount the new disk using the mount command:

First, you’ll need to create a mount point. We’ll use /disk1. This is where we’ll mount /dev/sdb1. Enter the following commands:

[root@default #]# mkdir /disk1
[root@default #]# mount /dev/sdb1 /disk1
[root@default #]# df -H

5. Edit /etc/fstab so the new drive will automatically mount to /disk1 on reboot

This step can be complicated; if you need assistance at this step, please call Dedicated Server Support at: 877-999-2750

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