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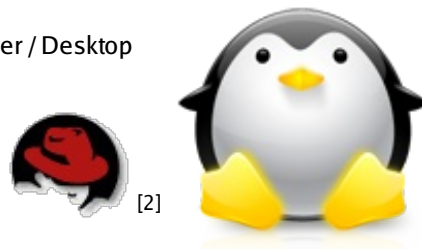
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Linux: How Do I Create a New ext3 File System If a Disk Was Added To The Server / Desktop?

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Q. How Do I Create a New ext3 File System If a Disk Was Added To The Server / Desktop Under Any Linux Operating Systems?

A.First, create the partition using the fdisk command line utility. To start fdisk, type the following command at a shell prompt. You need a device name refers to the entire hard disk.:

[2]

[1]

```
# fdisk /dev/device-name
# fdisk /dev/sdb
```

Where /dev/sdb is the device name [3] for the drive you want to configure and format with a new ext3 filesystem.

The Command (m for help): prompt is displayed as follows:

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

Type n then p, to create a new (n) primary (p) partition. You will then be asked to enter a partition number 1-4. You can only have a total of 4 primary partitions. If you need more than 4 partitions, then your 4th partition will become your extended partition. You will then enter the size of the partition that you want to create. The easiest way to do this is to select the defaulted start cylinder, then issue a size based on MB. Example: +10000MB to create a 10 GB partition.

Format hard disk

To format the partition with the ext3 file system use mke2fs command.

```
# mke2fs -j /path/to/partition
# mke2fs -j /dev/sdb1
```

Where /dev/sdb1 is the partition you want to format. If mke2fs does not recognize your partition, then you must reboot your system or run this command [4] so that the new partition table is recognized.

Update /etc/fstab

Create a mount point:

```
# mkdir /disk2
```

Edit the /etc/fstab to include the new partition

```
# vi /etc/fstab
```

Append the new line as follows:

```
/dev/sdb1 /disk2 ext3 defaults 1 2
```

To mount, enter:

```
# mount -a
# df -H
```

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[1] Image: **http://www.cyberciti.biz/faq/category/linux/**
[2] Image: **http://www.cyberciti.biz/faq/category/redhat-and-friends/**
[3] /dev/sdb is the device name: **http://www.cyberciti.biz/faq/linux-partition-naming-convention-and-ide-drive-mappings/**
[4] run this command: **http://www.cyberciti.biz/tips/re-read-the-partition-table-without-rebooting-linux-system.html**