How to Auto Mount Partitions On Boot in Linux Easily

In order to mount a particular partition automatically on boot up, you just have to add its entry into the **fstab** file. You can do this by directly writing to the file, or graphically using some tool like Gnome Disks.

Here, I am going to discuss about editing the **fstab** file directly. You won't need a "how to" on doing it graphically.

Let's get started

First, create a backup of your original **fstab** file. It can be removed later if file systems mount properly. The **fstab** file is present in */etc/* directory. To do this, open a terminal window and type:

```
sudo cp /etc/fstab /etc/fstab.original
```

The fstab file stores entries in the following format:

<UUID or Label> <Mount point> <File system type> <Mount options> <fs_freq> <fs_passno>

The fifth and sixth field are used by dump and fsck utility respectively. These determine which file system needs to be dumped, and the order of mounting of file systems. These are given a 0 value generally.

It is also recommended that you should use UUID to identify partition rather than label, as labels can mismatch.

Finding UUID of partition:

To get the UUID of desired partition, type:

```
sudo blkid
```

This would show a list of partitions with their labels and UUID. You can identify a partition by its Label. Or use **lsblk** to identify the partition by its size. Copy the UUID of desired partition.

Creating an entry in fstab:

Open the file */etc/fstab* in a text editor with root privileges. At the end of file, append a line representing the partition's details.

The mount point is generally a folder in */mnt/* directory, like */mnt/windows*. You need to create a folder there prior to mounting. The type of partition can be determined from the **blkid** command given above. A **default** should suffice in the mount option field. You can provide other mount options like uid, gid, umask etc in a comma separated list after **default**. After that, specify the <fs_freq> and <fs_passno> as 0 (or 1,2.., if you are sure to change dump or mount order options). You can use previous entries in the fstab file as a referance, or the image below.

```
# /dev/sda4 LABEL=WindowsOS_8
UUID=5EA04A11A049EFD7   /media/windows  ntfs    defaults,dmask=003,fmask=002,rw 0 0

# /dev/sda5 LABEL=Stuff
UUID="C8B43B7AB43B6A58" /media/stuff    ntfs    defaults,uid=1000,gid=1000,umask=003,rw 0 0
```

Note: After updating the fstab file, unmount manually mounted partitions and type `sudo mount -a` in the terminal. If you get unwanted results, like wrong permissions, you can update the file accordingly. So next time you boot up the system you'll get the desired results.

DO NOT MODIFY PREVIOUS ENTRIES IN THE FSTAB FILE. It may lead to an unbootable system. Then you'll have to replace the updated file with the **fstab.original** file created in first step.

A note for windows users

If you're dual booting with Microsoft Windows 8 (or above), you will have to disable fast startup first, otherwise your Linux might display an error on startup. There is an option in the **control panel > power options**, to disable fast startup.

Try this out and if you find some difficulty, comment down your queries.

Recommended for you: Linux Windows Dual Boot and More: Multi-booting Up to Five OS