

Re: Naming harddisks (Linux)

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On Tue, 21 Aug 2007 11:32:25 +0200, Ravishankar S wrote:

Hello,

I would like to get some clarification on linux's naming convention for haddisks. What I knew was:

/dev/hda .. /dev/hd(x) for fixed hard disks interfaced by parallel ATA

/dev/sda.. /dev/sda(x) for fixed hard disks interfaced by either serial ATA or SCSI ATA. But I also see that for an USB drive it uses /dev/sd(x) as the device.

On my VAIO laptop with Ubuntu live dvd,

Harddisk is being recongnized as /dev/sda and USB drive as /dev/sdb. Does this mean I have a SCSI hard disk instead of normal ATA harddisk ? In Vista it shows normal ATA disk..

But..GRUB does not recognize the hard disk at all. It simply recognized (hd0) as the usb drive. Why is that happening.
Does GRUB recognize SCSI drives ?

If I install GRUB during installing, will it work or will I not be able to boot..?

Kind Regards,
Ravishankar

You may need just a bit more background knowledge. All of the remaining discussion requires some basic understanding of the hardware environment in the PC world and the rules for disk partitioning. This post explains the rules for disk partitioning:
<http://groups.google.com/group/comp.os.linux.misc/msg/d3544c061662cacf>

Back to your problem...

Re: Naming harddisks (Linux)

The naming convention you are seeing with respect to SATA and USB is normal. The first step in understanding the boot process is to understand which environment is active at that moment, and which naming convention is used by that respective environment. There can be various separate working environments as the bootstrap proceeds.

1. BIOS setup.
2. Bootloader
3. Linux (kernel -> initrd -> root filesystem)

When any of these environments are active, then you may need to give input using the naming convention that it expects. For example, you might need to specify which drive to boot first from within the environment of BIOS setup. All three environments (above) require proper input to proceed to the point where your system is "fully operational." I'll define "fully operational" as when your system ends bootstrap and offers a login prompt.

Even more background...

1. The BIOS

The BIOS uses its own naming convention for drives and allows for the boot priority to be adjusted. These programs vary by manufacturer, but are