

Adding a Linux Hard Drive

by Dirk Hart

I was asked to configure a second IDE hard drive for a RedHat 7 Linux system.

I was at a loss as to how to describe this new drive to Linux and after half an hour I realized that the drive had been autodetected at the time of the last boot. A little research showed how IDE drives are named:

- * Primary Controller First Drive: /dev/hda
- * Primary Controller Second Drive: /dev/hdb
- * Secondary Controller First Drive: /dev/hdc
- * Secondary Controller Second Drive: /dev/hdd

Then fdisk was used to partition the drive: `fdisk /dev/hdc`. I selected the old partitions and added a single linux partition, making sure the partition type was 83 (Linux).

When that was done I used mkfs to make a filesystem. Since there was just one partition it was named /dev/hdc1: `mkfs /dev/hdc1`.

I made a mount point: `mkdir /usr0` and mounted the new filesystem: `mount /dev/hdc1 /usr0`. The filesystem can be unmounted using `umount /usr0`.

Lastly, I made an entry in /etc/fstab describing the new filesystem so it would be mounted automatically mounted at boot time. This was tested using `mount all` and observing that the new filesystem was indeed mounted.