Installing Linux Using the Kickstart Disks

1 Background

This procedure assumes that your hard disk is installed with the Windows images from Alex's class, and that you have a large *empty* FAT partition at the end of your hard disk. If this is not the case, then please let me know.

To demonstrate your second assignment in class, and to be able to work on your assignment in the College, you will need to have installed Linux on your removable hard disk.

For this purpose, I have prepared a *Kickstart* installation boot disk. Installation using this disk is quite straightforward, and only requires your involvement at one point in the process.

Kickstart is a very useful technology. You can read all about it in the *Red hat Customisation Guide*, at `http://nicku.org/doc/rhl-cg-en-8.0/part-install-info.html`.

1.1 Minor complication

There is one minor complication in the process: you will need to delete one partition from your hard disk before performing the installation.

This is because we were unable to persuade Ghost to copy a partition with the partition label 83_{16}; instead, Ghost converted the label to that for a FAT partition. A bug. So you will have to delete the last FAT partition yourself first.

2 Procedure

2.1 Deleting the last FAT partition

To delete the extra empty FAT partition that resulted from `Ghost`ing Alex's disk to your removeable disk, you will need to boot your machine into *rescue* mode. You can do this from the kickstart installation disk. From what I remember, the rescue disk will boot automatically into *rescue mode* after step 4, but in case it requires you to manually enter the choices, I have given them here.

Here are the steps:

1. Obtain a kickstart disk from any of the laboratory technical staff.

2. insert your hard disk into the machine

3. insert the kickstart disk and boot the machine

4. at the `boot:` prompt, type:

   ```
   boot: linux rescue
   ```

5. accept defaults for language and keyboard

6. use DHCP to get network parameters

7. choose NFS rather than FTP or HTTP

8. if offered a choice whether to mount existing Linux partitions, select Skip

9. At the command prompt that should now appear, start `fdisk` on *your own hard disk* (not the internal one carefully installed by Henry Leung!)

   ```
   # fdisk /dev/hda
   ```

   - Now you will need to use these `fdisk` commands:

command	name	action
m	**m**enu	show a list of all the commands
p	**p**rint	display the partition table
d	**d**elete	delete a partition (useful if you make a mistake!)
q	**q**uit	exit *without saving* the table. Great if you really mess it up!
w	**w**rite	Write changes to the disk. After that, it's very hard to undo your changes, so think three times before pressing `w`.

   - Your partition table should look something like figure 1.

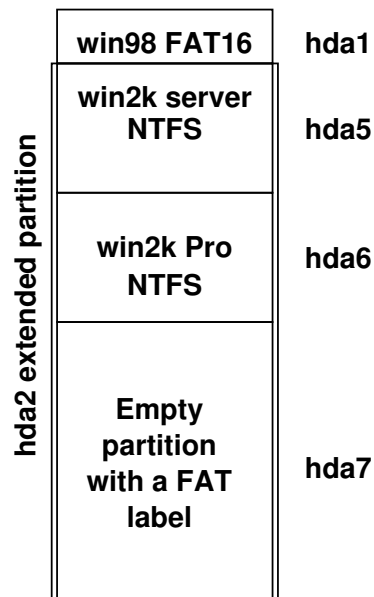|		
win98 FAT16		hda1
win2k server NTFS		hda5
win2k Pro NTFS		hda6
Empty partition with a FAT label		hda7

(labelled along the left: **hda2 extended partition**)

Figure 1: The partition table before deleting the unused FAT labelled partition, /dev/hda7.

10. Display your partition table, to make sure it looks something like figure 1 using the **p**rint command.

11. delete partition `/dev/hda7`:

    ```
    Command (m for help): d
    Partition number (1-7): 7
    ```

12. save your change to the parition table, and exit `fdisk`:

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

13. reboot your computer, leaving the floppy disk in the drive, and start the kickstart network installation process:

    ```
    # exit
    ```

2.2   The Kickstart Network Installation

The Kickstart network installation process is automatic, and needs no intervention from you, except at one point, as mentioned below.

1. The installation process will halt at the point of partitioning the hard disk with a warning, saying the hard disk partition table is inconsistent. Click on the Ignore button. You will see this two times, once for your hard disk `/dev/hda`, a second time for the internal hard disk *dev/hdc*.

2. The installation will eventually finish with a message telling you that it is complete.

3. Return the Kickstart boot disk to one of the technical staff in A204d.