How to Install Fedora

The install process is nearly self-explanatory except for a few minor exceptions.

First you need to make sure that your system will boot from the CD. One way to do that is to try to boot and see if it checks the CD. The other way is to enter the BIOS when the system boots and check the *Advanced BIOS Features* and make the CD the first boot device (or the second boot device if the floppy is first). If you try to enter the BIOS and it asks for a password, go to the section named *BIOS Password Removal* first.

Preliminaries

Now put the CD in the CD_ROM drive and boot your system. You will see a Fedora splashscreen and a prompt for boot. Press *Enter* and you are on your way if you are going to install completely from CD. There are other ways to install, including from a USB device and over the network via FTP, HTTP or NSF.

If you intend to use a network install method, watch for the splashscreen and the *boot:* prompt. You have to be ready, because it only waits a few seconds. When you see it, enter **linux askmethod**:

boot: linux askmethod

and press *Enter*. The system will boot the Linux image on the CD and do device detection. Eventually, you will be presented with a screen that asks what method you want to use:

- CD
- NFS
- HTTP
- FTP
- Special FTP

For this class, choose HTTP and then go on. You will be asked to provide the basic network information for the node you are on as described below under **Network Configuration**. Then you will be asked to choose the HTTP server and path. The server is **esus.cs.montana.edu** and the path is /harkin/net-install. From this point, the installation will proceed normally starting at **Security**, except that you won't be asked to provide additional CD's.

Initial Configuration

A series of things will happen on the screen.

• You don't need to test the CD's.

- Make reasonable selections for language, keyboard and mouse.
- Indicate you want to install the Fedora Core (not an upgrade).
- The installation type to choose is custom.
- You can select automatic partitioning. When you proceed it may ask if you want to remove existing partitions and you can do so.
- It will show you the partitions selected, and it is usually a minimal set which is OK.
- Allow the boot loader to be GRUB (the default).

Network Configuration

- For network configuration, select the *Edit* next to the *Network Device*; then deselect *Configure Using DHCP* and type in your IP address and netmask.
- The IP address is 153.90.199.xxx, where xxx is 102 for cs25901 through 121 for cs25920.
- The netmask is 255.255.248.0.
- The domain name is cs259xx.cs.montana.edu, where xx is 01 through 20.
- The Gateway is 153.90.192.254.
- The Primary DNS is 153.90.192.10.
- The Secondary DNS is 153.90.2.15.
- The Tertiary DNS is 153.90.2.1.

Security

- Make sure that the firewall in enabled and you can specify that you want the SSH service running, but not any of the others (yet).
- DO NOT ALLOW ALL TRAFFIC THROUGH eth0.
- There are a couple of easy questions.
- And then you pick an root password. Make it good at least 9 characters and something hard to guess.

Package Installation

- Now its ready to install and you have to pick the packages you want installed. You
 will notice that when you select a category, the number to the left indicates how
 many of the packages in that category are automatically installed. If you want to see
 what you are missing, click *Details*.
 - You need X and either GNOME or KDE.
 - You need to select *Editors*.
 - You can deselect *Text Internet*.
 - You can deselect Office/Productivity.
 - You can deselect Sound and Video.
 - You can deselect Graphics.
 - You need to select *Server Configuration Tools* and all of the subitems.
 - You need to select Web Server.
 - You need to select *Mail Server*.
 - You need to select DNS Server.
 - You need to select *Development Tools*.
 - You need to select Kernel Development.
 - You need to select Administration Tools.
 - You need to select System Tools.
 - You need to select *Printing Support*.
- When you go forward, it will ask you a few simple questions and then start installing. Go for a walk.

Completing the Installation

- Create a boot floppy when it asks.
- The system reboots and you have to accept the license agreement and set the time/date.
- You can now add an account for yourself; skip the sound test and additional software additions for now.
- If your Karma is good, you see the login screen. Login and you see the GNOME desktop.

Network Install

To install over the network, you need a local site where the Fedora distribution resides and the two-disk network install floppy set. Put the *bootdisk.img* floppy in the system and boot it. You will see an information screen and a *boot:* prompt. Press *Enter* and the linux kernel will load from the floppy. You will be asked to specify the type of install you want and you should choose *HTTP*. Then you will be asked to specify the network parameters for you system. Use the following:

- IP address for your system
- Network mask is 255.255.248.0
- Gateway address is 153.90.192.254
- DNS server address is 153.90.192.10

Next you will be asked to specify the site for the Fedora respository and the path to the install data. Use the following:

- img.cs.montana.edu
- fedora/linux/core/1/i386/os

At some point, you will be asked to provide the network interface driver and that's when you use the other floppy disk. After this, the install proceeds just as it did above.

Post Install

There are a number of things you normally due immediately after the installation and that will be handled in the next assignment.