

E. Upgrading RedHat Linux

Overview

This appendix gives advise about how to upgrade the Linux on your IRIS system. Some of the comments may be applicable to other platforms. The recommended procedure is to back up important files, reinstall the OS, then restore the backups.

E.1 Before you start

E.1.1 Special instructions for RxNet7's

There is ongoing research at SIGMET into the problems upgrading the RxNet7. Please contact SIGMET before you do this.

The SIGMET RxNet7 uses a smc9194 ethernet interface. The driver for this interface was removed from the RedHat 7.X operating systems. SIGMET supplies the drivers for this on our ftp site. Please download this file and copy it to a permanent location on your RxNet7 before you upgrade. Otherwise you will be stuck without a way to get the file after upgrading. Here are the applicable files, depending on your target OS:

```
ftp://ftp.sigmet.com/outgoing/os_patches/linux/RH7.1/smc9194.o
ftp://ftp.sigmet.com/outgoing/os_patches/linux/RH7.2/smc9194.o
```

To install this, simply copy it to /lib/modules/2.4.7-10/kernel/driver/net/ for RH7.2, or to /lib/modules/2.4.2.2/kernel/driver/net/ for RH7.1. After copying, you can test that it is the correct file by typing “insmod ./smc9194.o” in that directory. If it works with no errors, then reboot.

E.1.2 Checking your bootable partitions

Type “fdisk -l”. The output will show all the disk partitions on your system. PC's can only reliably boot from partitions which have a starting cylinder number less than 1024. To check which partitions are bootable, check the /etc/lilo.conf file

E.2 Backing up important files

Before upgrading, examine you home directory, and your IRIS data directories and delete anything which is not needed. You should backup your whole system in case there is a problem, but is is convenient to backup the following directories on separate media because you will want to restore them: /usr/sigmet, /usr/iris_data, /home, /etc. We recommend using **sigbru** to do this. It is fastest to backup to a disk file on a partition which will be preserved, or to a neighboring computer.

E.3 Do the install

Do a full Linux install, following Appendix A. If you are keeping the same partitions, then you can preserve partitions such as /usr/iris_data.

E.4 Restoring from backup

Restore using sigbru the following directories: /home, /usr/sigmet, /usr/iris_data. Do not restore /etc. You can run **sigbru** from the IRIS cdrom as discussed in Appendix D.

E.5 Special files

Here are special files which you will need to manually consider and restore as appropriate:

```
/etc/hosts
/etc/rc.d/rc.local
/etc/ftpaccess
/etc/ftpusers
/etc/group
/etc/resolv.conf
/etc/initab
```

E.6 IRIS Special files

After upgrading, be sure to reinstall the IRIS app-defaults files with the following root commands:

```
# cd /usr/sigmet/install
# ./instiris -setown -root /usr/sigmet
```