

Appendix **D** Getting SLIP to Work

Overview

This appendix describes the actions necessary to get SLIP up and running with NCSA Telnet. It is the step by step procedure that was used to set up SLIP on an ULTRIX workstation. This is intended to be done **ONLY** by the system administrator, since it involves some changes in the system's configuration.

Setting Up SLIP

You can establish connections from NCSA Telnet to a DecStation 5000 after configuring the DecStation for SLIP. To do this, the following procedures must be followed.

NOTE: This procedure involves changing some configuration parameters on the host machine's system, and is therefore only intended to be followed by the system administrator.

1. You must reconfigure the Ultrix kernel to include the SLIP driver.
2. Create an entry in "/etc/hosts" for the host slip1 to give it an IP number -- this provides static IP assignment since Telnet does not currently handle bootp dynamic addressing. Add a line similar to the following:

128.187.2.221 slip1

3. Make two entries in "/etc/sliphosts" for "slip1" which is used by "slattach" and specifies some ifconfig parameters for the slip connection. These lines can be as follows:

**jim jim.cs.byu.edu 128.187.9.50 255.255.0.0. any /dev/tty
slip slip1.cs.byu.edu dbms 255.255.0.0 any /dev/tty**

4. Create an account called "slip1", but do not specify the standard "/bin/csh" login shell. Instead, you need to specify the SLIP interface "/usr/new/slattach." You will need to have a password entry similar to the following:

slip1:password:105:10:Logan:/usr/staff/loganj:/usr/new/slattach

5. Finally, you need to create the proper network routing for the "slip1" host, so that network traffic intended for "slip1" would

be directed to the ethernet address of the DecStation 5000. This can probably done on your system in your "etc/rc.local" file with the "arp" command.

`/usr/etc/arp -s 128.187.2.221 8:0:2b:1d:2a:f8 pub`

That is all for the Ultrix setup. At this point it is possible to establish a serial connection using NCSA Telnet to the Ultrix host, and login as slip1.

For more information on how to open SLIP and serial connections, please see Chapter 9, "Serial Communications."