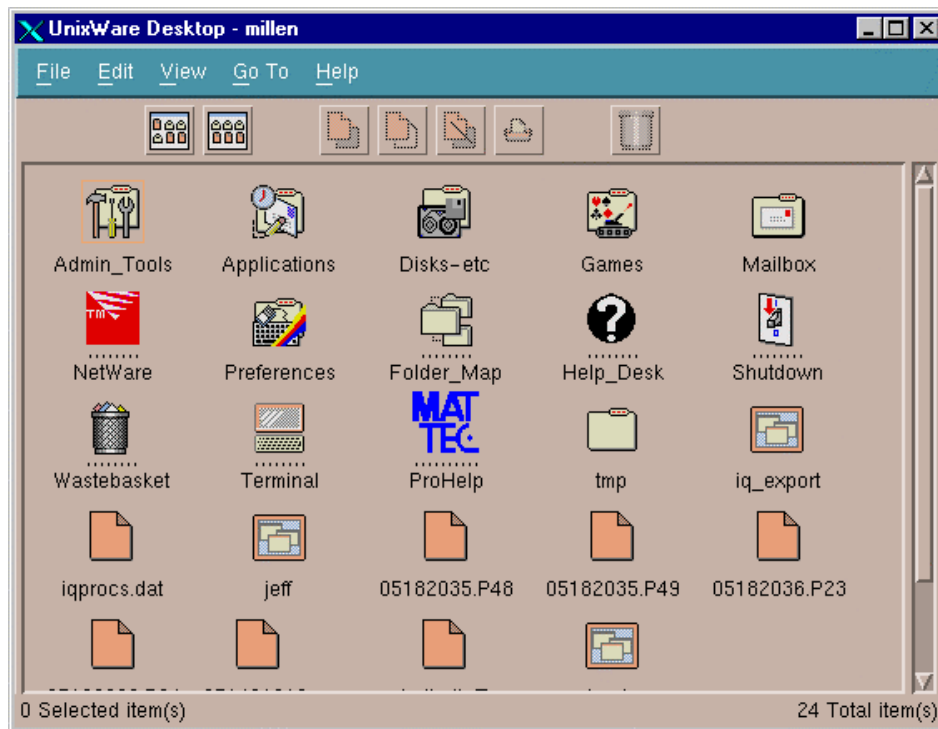


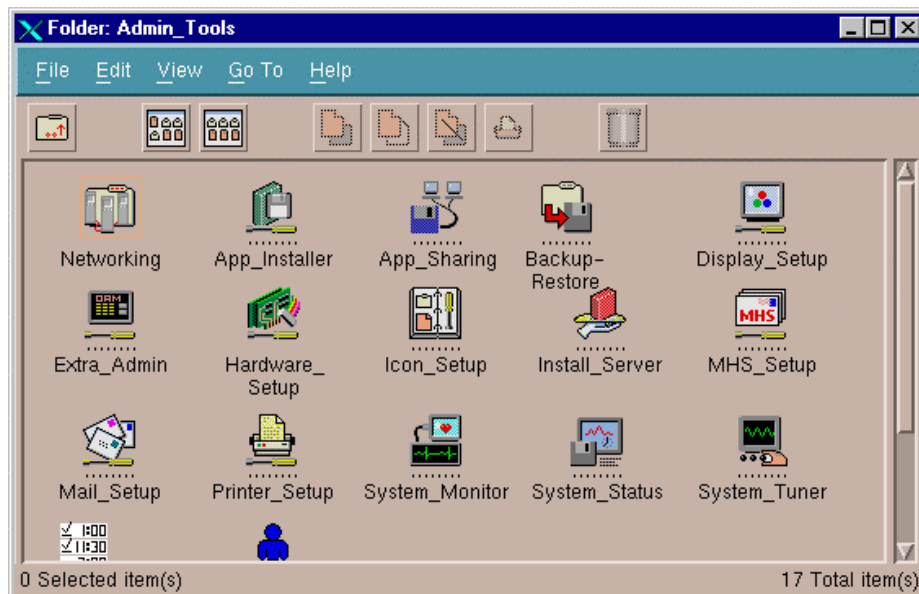
SETUP EXCEED WORKSTATION PRINTER IN SCO UNIXWARE

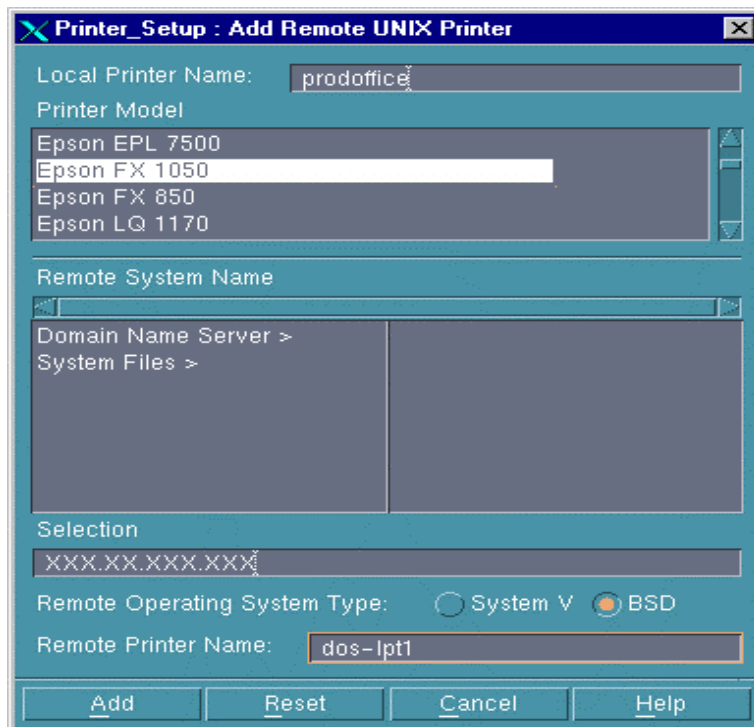
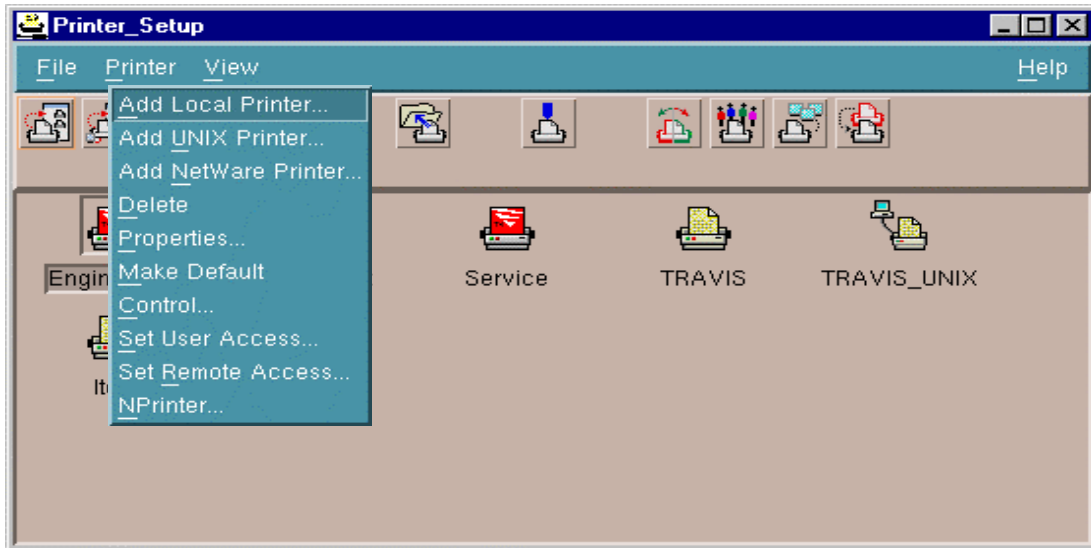
This technical document explains the three steps involved in adding an Exceed printer to the ProHelp Millennium system. The steps include setup of the printer in SCO UnixWare, edit of the **users.allow** file and verifying the Exceed lpd service is enabled. The end of the document describes ways of testing and troubleshooting printers.

Adding Exceed Printer to SCO UnixWare



Get to the UnixWare desktop screen above and click the **Admin_Tools** icon. You will get a window similar to below. Find and click the **Printer_Setup** icon as shown below.

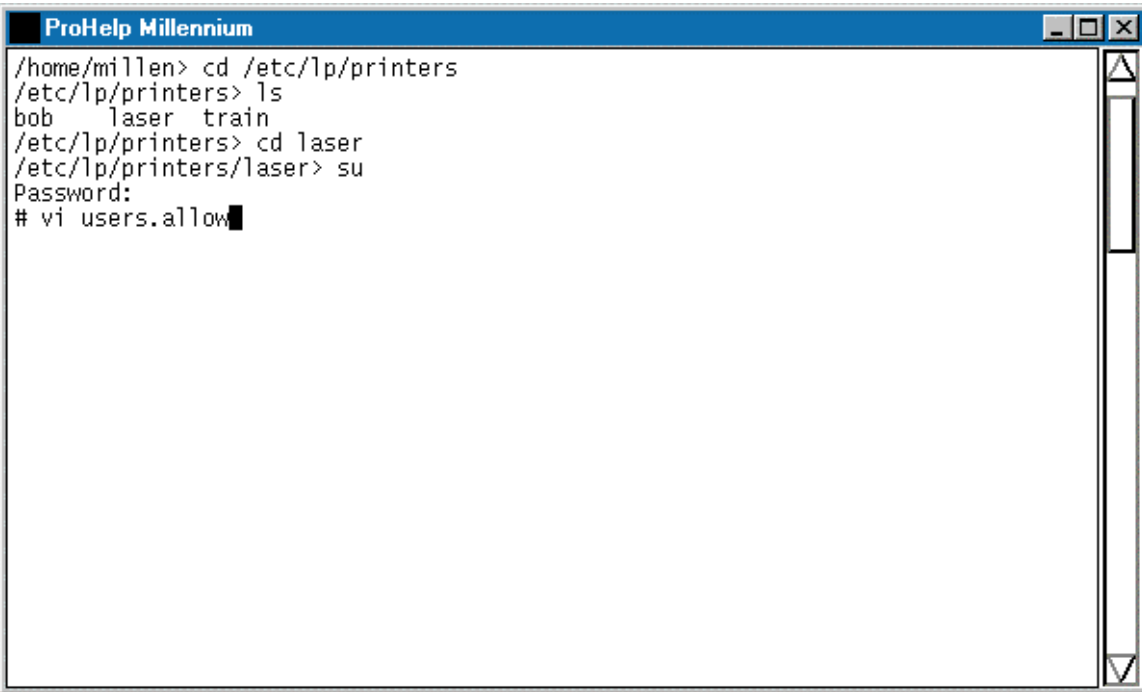




Select the **Printer** menu on the Printer_Setup window above and choose **Add Unix Printer**. Give the printer a name and select the Printer Model. Mattec currently supports the Epson FX 1050, Epson FX 850, HP LaserJet (PCL), HP LaserJet (Postscript), and HP DeskJet 500. Input the **IP address** of the Exceed workstation the printer is connected in the **Selection** field. Select **BSD** for Remote Operating System Type and enter **dos-lpt1** in the Remote Printer Name field. For Exceeds running Windows NT use 'unix-<shared name>' where the 'shared name' is the one listed under the Printer Properties Share tab on the Windows NT station. Click **Add** and your printer will appear on the Printer Setup Screen.

Modifying the users.allow File

To allow other users on the network to print from ProHelp Millennium to your Exceed printer, you need to modify the **users.allow** file from the terminal prompt at the host. The file only contains the word **all**. This needs to be modified using the Vi Editor to read **all!all**. Follow the commands demonstrated below to load the file into the Vi Editor. The “laser” printer name in the example below will be replaced with the name of the printer you have just created in UnixWare.



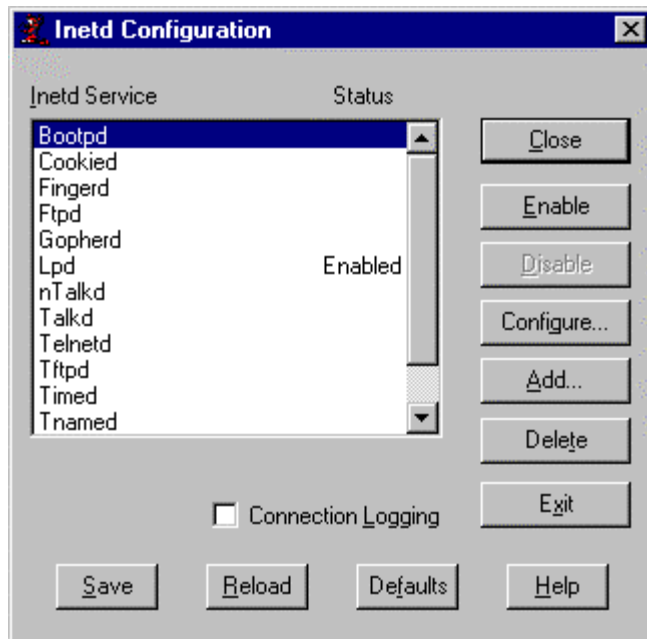
```
ProHelp Millennium
/home/millen> cd /etc/lp/printers
/etc/lp/printers> ls
bob laser train
/etc/lp/printers> cd laser
/etc/lp/printers/laser> su
Password:
# vi users.allow
```

To edit the contents of the file, execute the following keystrokes:

- Touch the **A** key to append to the end of the line
- Key in **!all**
- **Esc** key
- **Shift** key and **:** at the same time
- Key in **x!**
- key in **exit** to leave superuser
- key in **exit** to leave the terminal prompt
- the **users.allow** file should now contain **all!all** on the first line of the file

Verify the Exceed Lpd Service is Enabled

In addition to setting the Exceed printer up in SCO UnixWare, you also need to be sure the **Lpd** service is Enabled in the **Inetd Configuration** at the Exceed workstation. You can view the Inetd Configuration by clicking on the Exceed red daemon icon in the right bottom part of the Toolbar in Windows '95/'98. The following window will appear. Select the **Lpd** service and click the **Enable** button if it has not already been enabled. Click **Save**, then **OK**, then **Close** to exit the Inetd Configuration.



Ways of Testing Printers

- 1) Send an 80-column report such as the Schedule Summary.
- 2) Send a 130-column report such as the Daily Production Report.
- 3) From a real time screen hit **Ctrl-L** for a text print. On some older deskjets (HPDeskJet 694C) this report will not eject from the printer unless the form feed button is pushed. An amber light will usually flash indicating there is something in the print buffer.
- 4) From a real time screen hit **Ctrl-P** for a graphics dump. Make sure that the window is completely visible on the screen (nothing hanging off the edges.) If the dump is successful the computer will beep 3 times. If unsuccessful it will beep just once. Don't change the screen until after the beeps.
- 5) From a Gantt chart choose File and Print. Same rules apply as for test 4.

Troubleshooting Printers

When a printer is setup from the UnixWare desktop, under Admin Tools, Printer Setup a directory for that printer is created in **'/etc/lp/printers'**. The directory name is the same as the printer name and is case sensitive. In each printer subdirectory there are two files of interest **'configuration'** and **'users.allow'**. These files need to be edited under the following conditions:

- 1) Banner pages are being printed before each print job and this is not desirable. Edit the **'configuration'** file and change the **'Banner'** line to read **'Banner: off:Always'**.
- 2) Extra blank sheets are being printed after each job. Edit the **'configuration'** file and change the **'FormFeed'** line to read **'FormFeed: off'**.
- 3) A deskjet printer is attached to the Host computer and cannot print graphs. Edit the **'configuration'** file and edit the **'Content types'** line to read **'Content type: pcl'**.
- 4) Can print to printer from some workstations and not others. Edit the **'users.allow'** file changing it from **'all'** to **'all!all'**.

After editing these files it is necessary to restart the print services for the changes to take effect. Restarting the host computer or entering the following commands in a terminal window as superuser can do this:

```
lpshut
/usr/lib/lpsched
```

Sometimes a bad print job can clog the print queues. To list out all jobs in the queue use **'lpstat -o'**. To cancel the print jobs, as super-user type **'cancel <print job number>'** where **'print job number'** is obtained from the first column in the listing obtained from the **'lpstat -o'** command. To cancel all the jobs of a given user (millen, mattec, or root), as superuser type **'cancel -u <username>'**.

For Unix or NetWare printers look in the **lpNet log** in the **'/etc/lp/logs'** directory. Type **'tail -20 /etc/lp/logs/lpNet'** from a terminal window. Note any error messages and contact Mattec.

Sample error messages:

- 1) **<NetWare Server Name> NWCreateQueueFile2 failed.** – This means that the UnixWare user (millen or mattec) that initiated the print job was not logged into the NetWare server.
- 2) **<Node name or IP address> lpd retrying connection.** – This means that either the Exceed computer is inaccessible (e.g. turned off, has incompatible IP address, bad network cable, etc.) or that the Exceed's Line Printer Daemon is not activated.