



Tech Info Library

A/UX: Printing And Shared Spooling Without AppleTalk (8/95)

Article Created: 14 February 1989

Article Reviewed/Updated: 23 August 1995

TOPIC -----

You can serially connect any of the following printers to any Macintosh on the network and set up an A/UX spooler on that system even without AppleTalk and LaserShare:

- LaserWriter
- LaserWriter Plus
- LaserWriter IINT
- LaserWriter IINTX
- ImageWriter
- ImageWriter II
- ImageWriter LQ

Other A/UX Macintosh computers will then have access to the printer via remote commands.

DISCUSSION -----

Making the Connection

1. Connect an Apple IIe Modem-8 cable to the DB-25 port on the printer. The ImageWriter II and ImageWriter LQ require an Apple System/Peripheral 8 Cable. (Search the Technical Info DataBase on "A/UX and printer and cable" for more information on the various cables you can use.)
2. Connect the mini-circular 8 end to the printer port on the Macintosh (tty1) only.
3. Adjust LaserWriters to Serial Settings (ImageWriter LQ may also need to be reset from default):
 - a. LaserWriter and LaserWriter Plus:

When hooking up serially, the switch in the back of the LaserWriter or LaserWriter Plus MUST be turned to 9600 baud (as opposed to AppleBus). Without special serial drivers that can communicate PostScript, files cannot be printed from within the Macintosh Operating System without switching the Baud to AppleBus and the cable to AppleTalk.

(For additional information, see the A/UX Local System Administration manual chapter on "Managing Printers, Terminals and Modems".)

b. LaserWriter IINTX:

Set the dip switches on the back to:

1, 2 down (1:up and 2:down will also work)

4-6 up

On powerup, the test page should indicate Postscript at 9600 Baud

NOTE: On some NTX prototypes, the settings should be reversed: down instead of up. Reverse the switch directions if the test page reflects a difference. (For additional information, consult the LaserWriter II Owner's Guide.)

c. LaserWriter IINT:

Set the dip switches on the back to:

1 up

2 down

On powerup, the test page should indicate Postscript at RS-232 9600 Baud.

NOTE: On some NT prototypes, the settings are reversed; that is, down instead of up. Reverse the switch directions if the test page reflects a difference (for additional information, consult the LaserWriter II Owner's Guide).

d. ImageWriter LQ:

A/UX software additions must be made if you wish to use the 19200 Baud instead of 9600 Baud. (See Spooling below for 19.2K setup instructions) For 9600 Baud the dip switches are: set 2: 1,2 closed for 9600.

Spooling

The complicated and time-consuming chore of setting up a spooler is reduced to an invaluable shell script that will automatically set up the entire spooling system by simply naming the printer and the port to which it is attached.

"ADD_IW ImageWriter tty1" will set up an ImageWriter I or II (or 9600 Baud ImageWriter LQ, see *** below) spooler with the name "ImageWriter"

"ADD_LW LaserWriter tty1" will set up any LaserWriter spooler with the name "LaserWriter"

"RM_PR printername" will remove that spooler.

NOTE: If you have jobs in the queue destined for that printer, you will not be able to remove it until you remove the jobs ("cancel request_id(s)"). This will happen if you disconnect the printer while it still has jobs it hasn't printed yet, or is unable to print.

NOTE: A/UX Release 1.0 does not contain lp interface software for 19200 Baud printers. If you want to use the LQ at 19200 Baud follow the directions below:

1. Copy the ImageWriter model (located in "/usr/spool/lp/model") to iw19.2
2. Edit by adding 19200 to the "stty" command.
3. Save it.
4. Copy the file "/usr/spool/lp/ADD_IW19.2" to "/usr/spool/lp/ADD_IW19.2"
5. Substitute ImageWriter for iw19.2 in the /usr/spool/lp/ADD_IW19.2 by
":1,\$s/ImageWriter/iw19.2/".

You will now have a 19.2 interface. When you wish to use the LQ at 19200 Baud issue the command, "lp -diw19.2 filename"

If the dip switches are set to 9600 Baud issue the command, "lp -diw filename"
(If ImageWriter is your default, the -d option is unnecessary)

Remote Printing

If you are on an Ethernet system, issue the command:

```
"cat myfile | remsh PrinterNodeName lp printername"
```

where:

- "myfile" is the file you wish to print.
- "PrinterNodeName" is the hostname of the A/UX system that has the printer attached.
- "printername" is the name you have assigned to the printer (such as LaserWriter with the ADD_LaserWriter command).

Article Change History:

- 23 Aug 1995 - Made minor corrections.
- 23 Aug 1994 - Reviewed and updated.
- 31 Aug 1992 - Reviewed for technical accuracy.

Support Information Services

Copyright 1989-95, Apple Computer, Inc.

Keywords: <None>

=====

This information is from the Apple Technical Information Library.

19960215 11:05:19.00

Tech Info Library Article Number: 2851