QRG: LW Pro 810 Installation on UNIX Based Hosts (5/94)

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TOPIC ---

This article is the LaserWriter Pro 810 Quick Reference Guide, Installation on
UNIX Based Hosts.

DISCUSSION --

Who should read this guide: This Quick Reference Guide is designed to assist
the person responsible for installing the LaserWriter Pro 810 and configuring it
to work on a customer's network. This guide assumes a high level of knowledge
in the areas of Unix administration and TCP/IP network administration. This
guide is designed to act as a pointer to the "LaserWriter Pro 810 Printer Server
Installation and Configuration Guide," it is not meant to replace it.

1) Due to the additional networking protocols supported by the LaserWriter
   Pro 810, this printer is different than any other Apple LaserWriter you
   have seen before, we highly recommend that you become thoroughly
   familiar with the printer before attempting to install it at a customer
   site. If you are installing the LaserWriter Pro 810 on a network that
   you do not normally administer you should familiarize yourself with the
   target environment and have answers to questions such as:

   • What OS is being used?
   • Will the connection be 10 base 2 (BNC) or 10 base T (RJ-45)?
   • What is the configuration of the host CPU?

   You WILL need a C compiler and linker on at least one host for each type
   of system on which the utilities will be installed.

2) The LaserWriter Pro 810 does NOT have an IP address in firmware when it
   is shipped from the factory, it must be assigned as part of the
   installation procedure. There are two ways to set the IP address of the
   printer, Remote Address Resolution Protocol (RARP) and Remote Console
   Facility (RCF).

   a) Using the RARP protocol. Many network administrators will not allow
      RARP to work as a permanent solution to assign an IP address. They
      may allow you to use it temporarily to set the printer's IP address.
      You can use the existing network to assign the IP address for the
      first time using RARP and then go in to the RCF and make the address

permanent. If you are unable to run RARP on the network you will
need to set up a separate two node network. (See Part 1, Section
2.3.3).
NOTE: A/UX does not include RARP. You must either use method a)
above or find a public domain RARP that can be used with A/UX.

b) Accessing the Remote Console Facility (RCF) by using the RJ-12
maintenance port, (see Part 1, Section 2.3.2). The default Super
User password is SYSTEM, (you need this when you use "su" to get into
Super User mode). This password is needed when using the maintenance
port and Telnet. This option requires a unique RJ-12 to mini DIN-8
cable.

Cable information is located in Part 1, Appendix A of the LaserWriter
Pro 810 Printer Server Installation and Configuration Guide; to save you
time, the pin assignments for a LaserWriter Pro 810 to Macintosh cable
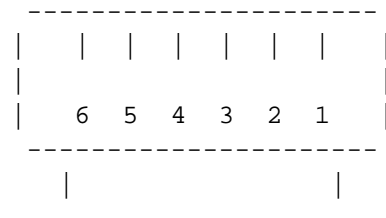are shown later in this document.

Pin 1 is the pin on the far right of the male RJ-12 connector on the
cable and on the far left side of the female RJ-12 connector on the
printer. The numbering scheme for the male 8 pin Macintosh connector is
also shown below:

Connector Reference:
RJ-12 is the LaserWriter Pro 810 Maintenance Port, Mini DIN-8 is the
Macintosh Serial Port

```
RJ-12 Connector              DIN-8 Connector
------------------           --------------------
Signal                                       Signal
name            Pin      Pin        name
------          ---      ---        ------
TxD-             2    <-> 5         RxD-
RxD-             5    <-> 3         TxD-
GND           3 & 4   <-> 4, 6 & 8  GND
DTR              1    <-> 2         CTS
CTS              6    <-> 1         DTR


RJ-12 Plug Connector                    DIN-8 Plug Connector


 ----------------------
|  |  |  |  |  |  |  |                   6  7  8
|                     |                   3  4    5
|  6  5  4  3  2  1   |                    1  2
 ----------------------
   |              |
    ----------------


Note:                           Notes:
Pin 1 is on the right side of the    Shown looking at pin side of
connector.                      connector.  Note Space between
                                pins 4 and 5.
```
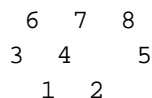
3) The bootp protocol can be used to load upgraded printer server firmware. This requires a binary image of the ROMs which Apple is not providing at this time since the firmware in ROM is the latest version available. As a result of this you can disregard all references to using bootp in the "LaserWriter Pro 810 Printer Server Installation and Configuration Guide" at this time.

4) Copy the utility software onto the host and run the install program (see Part 3, Section 2.2). You will be presented with a startup screen informing you that in order to use one of the three options (-b, -m, -u) you must quit and restart the program. The first time you run install you should run it without any of the options selected. You will use the -m option to modify virtual printers after the initial installation. The -b option will be used if the utilities were compiled on another system. At this time there is no software upgrade so the -u option is not needed.

5) If you plan on compiling the utilities on a system other than the host where the utilities will actually be used See Part 3, Section 2.4.

6) For the initial installation use the default values presented by the install program. These can be modified at a later time if necessary.

7) The Remote Console Facility (RCF) can also be accessed via Telnet once the printer's IP address has been set. The default password for the RCF over Telnet is access, See Part 3, Section 4.2, 5.2 or 6.2.

8) If you plan on using the RCF extensively you should order the "Apple LaserWriter Pro 810 TCP/IP - LAT Protocol and Command Reference."

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