Enabling RARP

RARP (Reverse Address Resolution Protocol) can be used to establish communications. The printer broadcasts its Ethernet address across the network, and receives its internet address from the first host to respond.

1. If the **rarpd** daemon is started within the */etc/rc.local* file or a similar startup file, it is always running and waiting for RARP broadcasts. If the **rarpd** command line does not exist in your */etc/rc.local* file, you need to add it. To verify that the **rarpd** startup command is in the file, type:

   grep rarpd /etc/rc.local

   If the **rarpd** startup command is in the file, this line is displayed:

   ```
   /usr/etc/rarpd -a ;echo -n ' rarpd'
   ```

2. Verify that **rarpd** resides where it is specified in */etc/rc.local*. For the preceding examples, **rarpd** would be located in */usr/etc*. If there is a mismatch between the actual location and the specified location, either move the **rarpd** binary or change the */etc/rc.local* file.

3. Edit the */etc/hosts* file to add the printer internet addresses and names. This example adds two Phaser 340 printers to the */etc/hosts* file:

   ```
   128.07.60.30    P340-mktg
   128.07.60.31    P340-sales
   ```

4. Edit the */etc/ethers* file to add the printer Ethernet addresses and names:

   ```
   08:00:11:01:00:45    P340-mktg
   08:00:11:01:00:46    P340-sales
   ```

5. Some hosts require an explicit update to the **arp** table to add new entries. This command is host-specific; check your host documentation for details. For example, the following command lines add the Ethernet addresses of two Phaser 340 printers to the **arp** table:

   arp -s ether P340-mktg 08:00:11:01:00:45
   arp -s ether P340-sales 08:00:11:01:00:46

The *ether* switch indicates an Ethernet address. The **arp** command can be run with a **-f** *filename* option, where *filename* is a file of the printer entries to set.

6. Restart the **rarpd** daemon without rebooting the system to put the changes you have made into effect. Use one of the following methods.

For BSD systems

a. Find out the process ID number for the **rarpd** daemon; type:

   ps -aux | grep rarpd

   This command produces the following output:

```
root   193  0.0  0.0  48   0   ?  IW  Oct 24
0:12  rarpd
root  12366  0.0  0.3  32  196  pb  S   11:55
0:00  grep rarpd
```

b. Restart the **rarpd** daemon, which is process ID number 193 in this example. Type:

   kill -HUP 193

For System V

a. Find out the process ID number for the **rarpd** daemon; type:

ps -ef | grep rarpd

This command produces the following output:

```
root  6206  3112   0   Nov 06      -  0:00
/etc/rarpd
root 13177 12135   2 06:36:22  pts/3  0:00 grep
rarpd
```

b. Restart the **rarpd** daemon, which is process ID number 6206 in this example. Type:

kill -HUP 6206

7. If **rarp** is not running, type:

/usr/etc/rarpd -a &