

Configuring the IsiJet 2870 Printer for Multiple Networks

Introduction

These instructions are for adding a second network interface to the IsiJet 2870 printer control computer. This allows the printer to coexist on the same network with multiple printers and also speed up the transfer time between the RIP and the printer. This is accomplished by using one network interface card exclusively for communication with the carriage and the other network interface exclusively for communication with the RIP network.

Before Starting

Note : This modification should only be attempted by qualified service personnel that have attended technical training on the Arizona 1100 or IsiJet 2870 printers. Anyone attempting this modification other than qualified service personnel will void the warranty of the printer.

This modification requires an additional Netgear FA310TX network interface card. Do not substitute another model as the software configuration and driver is for this card only.

Procedure

Before any additional hardware is added, the alternate bootup initialization file should be edited so that any mistakes will not disable the computer. To edit this file, change directories to `/etc/config` by bringing up a console window and typing:

```
cd /etc/config
```

Now edit `altsysinit`:

```
vedit altsysinit
```

Cursor down in the file and add `#` signs in front of the lines which start as shown below (on some systems, these lines may already be commented out or may not exist) :

```
#Net.tulip  
#/bin/automap  
#netstart
```

This treats the rest of the line as a comment, thus when the alternate bootup is used, the network interfaces will not be initialized and the network will not be started.

The alternate bootup sequence is entered upon startup by quickly pressing the ESC key when the message, **Press ESC for alternate boot...** appears. This will execute the `altsysinit` file versus the normal `sysinit.1` file. This boot sequence is useful as a “safe” mode when problems occur with normal operation.

Configuring the IsiJet 2870 Printer for Multiple Networks

After editing this file and saving it, make sure the computer successfully reboots and uses the **altsysinit** configuration file. Press the ESC key at the appropriate moment as described in the previous paragraph. After it boots up and you logon, you can check which processes are running by typing **sin** in a console window. In the list that is presented you should NOT see **Net.tulip** or **automap** or **Socketlet**.

Now you can edit the **sysinit.1** configuration file for normal bootup. Change directories to **/etc/config** by bringing up a console window and typing:

```
cd /etc/config
```

Edit the **sysinit.1** file by typing:

```
vedit sysinit.1
```

Cursor down in the file and edit the lines as shown below. EVERYTHING IS CASE SENSITIVE.

```
Net &  
sleep 2  
Net.tulip -H5 -l1 -I0 &  
sleep 2  
Net.tulip -H5 -l2 -I1 &  
sleep 2  
/bin/automap -l2 &  
sleep 2  
.  
.  
netstart &  
sleep 2  
SMBfsys &
```

Save the file and exit vedit. Now change directories to the **/etc** directory and edit the **hosts** file by typing:

```
cd /etc
```

```
vedit hosts
```

Make the following additions to this file:

```
192.168.0.55    QNXNODES  
192.168.2.2    ISIPRINTER
```

Save the file and exit vedit. Now edit the **netstart** file in **/etc** :

Configuring the IsiJet 2870 Printer for Multiple Networks

```
vedit netstart
```

Make the following changes:

```
/usr/ucb/Socklet ISIPRINTER &  
.  
.  
/usr/ucb/ifconfig en1 QNXNODES up  
/usr/ucb/ifconfig en2 ISIPRINTER up  
.  
.  
/usr/ucb/inetd
```

The final files to be edited are the scripts that do the mounting of the various shares. Change directories to `/bin` and edit `mt_rip` (or whatever it is called).

```
cd /bin  
vedit mt_rip
```

Now add as many `user_smb` and `mount_smb` lines as needed to connect to the rips. For example:

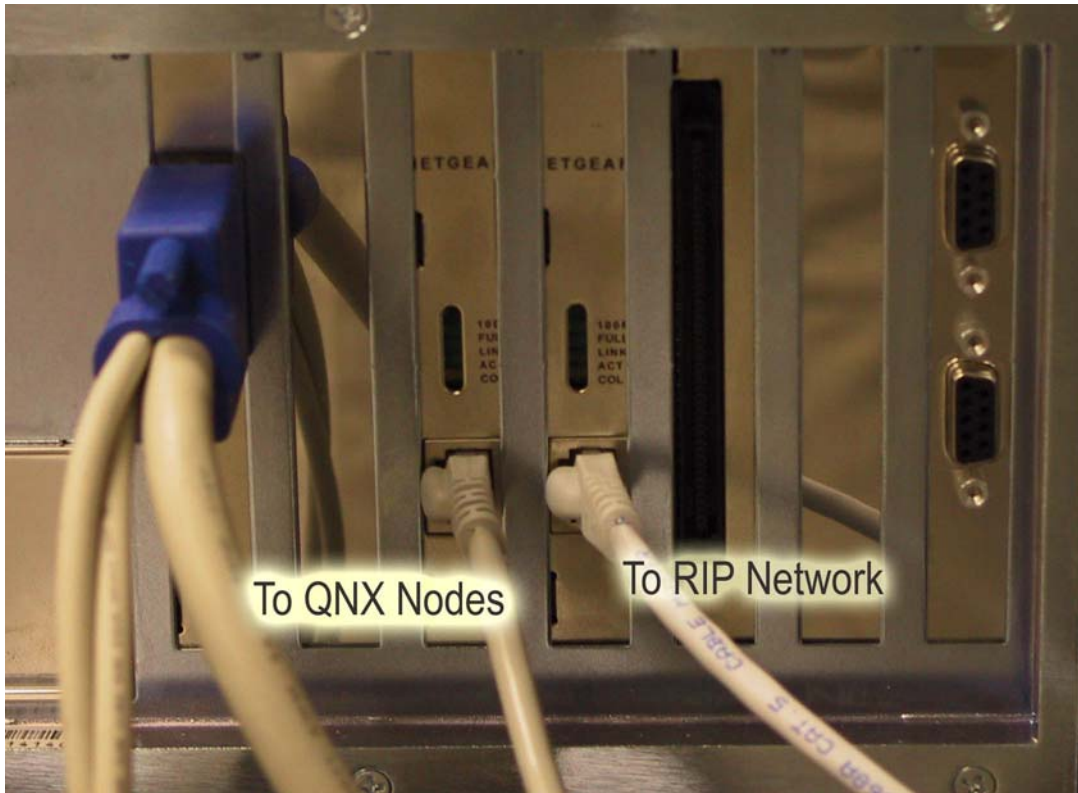
```
user_smb RIP_logon_username RIP_logon_password  
mount_smb //RIP_Computer_Name:RIP_Computer_IP/ISIFiles /rip
```

etc, etc. You can also make other scripts to connect to them individually if needed. You can also add this to your startup script (`sysinit.1`) to mount all of the shares on bootup if desired.

This should be all of the software changes to make this work. Now, shutdown the computer and install the hardware.

The I/O cards should be installed as shown in the following picture. Install the second card in the position shown as TO RIP Network. The original card will still communicate with the carriage and the additional card will communicate with the RIP network. The position of these cards is critical, as this determines which network each driver will communicate on. Some customers prefer to use a crossover cable directly between the RIP and the printer computer to effectively bypass any other network traffic which may slow file transfers down.

Configuring the IsiJet 2870 Printer for Multiple Networks



After all the network cables are reinstalled and the RIP is booted up and running, you should be able to restart the QNX box and connect to all of your shares on your RIP network. If any problems are encountered that cannot be resolved, contact Innovative Solutions via email at support@goisi.com or you may enter a trouble report by browsing to <http://www.goisi.com> and clicking on [Support](#) at the bottom of the page.