## **Introduction**

**There are 3 basic steps (2 if you are using a Novell 3.x Server) to setting up your Novell server and connecting from the IBM Network Color Printer.** Each of these steps is described in more detail below.

The following is a summary of the steps, and of the section titles that include detailed instructions for each step.

- I. **If you are using a Novell 4.x server, make sure the server is in bindery context.** This process is described in the section titled 'Novell 4.x Bindery Context Setup'.
- II. Set up the Novell Servers and Queues (called *Queue Servers and Print Queues* if you're using Novell 3.x, and *Print Servers and Print Queues* if you're using Novell 4.x). This process is described in the section titled 'Novell 3.x and 4.x Setup'.
- III. Set up the printer. This process is described in the section titled '*Printer Setup*'.
  - 1. **Select the Novell File Server for the connection** (this process is described in the section titled 'Selecting The Novell File Server From The Printer').
  - 2. Log in to the Novell File Server that was selected for connection (this process is described in the section titled 'Logging In To The Novell File Server From The Printer').
  - 3. **Select the Novell Print Queue** to which you want to connect (this process is described in the section titled 'Selecting The Novell Print Server For Connection').
  - 4. **Configure the printer for the connection to the Novell Print Queue** (this process is described in the section titled 'Connecting The Printer To The Novell Print Server').

## I - Novell 4.x Bindery Context Setup:

The IBM Network Color Printer must be set up in a <u>bindery</u> context on Novell 4.x. To verify or create a bindery context, do the following at the Novell server console:

- 1. Type: *Load install*
- 2. Select: *NCF File Options*
- 3. Edit: AUTOEXEC.NCF
- 4. Verify a bindery context by looking for the statement *set bindery context = [your context name]* in the AUTOEXEC.NCF file. If you see this statement, there is a bindery context. If a bindery context is set, skip to the **Novell 3.x & 4.x Print Server and Print Queue** section. If no such statement exists, add: *set bindery context = [your context name]* to the AUTOEXEC.NCF file, and go to step 5.
- 5. Activate the newly created bindery context using one of the following methods:
  - Reboot the server:
    - a. Make sure there are no users with files open.
    - b. First, type: *down* at the prompt. This will shut down the server. When the server is finished with the shutdown procedure, you will see a DOS prompt. At the DOS prompt, type: *load server*. This will restart the server.
  - Load the bindery context without rebooting by typing *set bindery context* = [your context name] at the server prompt.

**Note:** Because you added the *set bindery context...* statement to AUTOEXEC.NCF in step 4 above, the set bindery context command will automatically be loaded at the next Novell server boot cycle, and therefore doesn't need to be keyed in each time.

## II - Novell 3.x and 4.x Setup

At this point, you have verified or created a bindery context if you're using a Novell 4.x server, and you are ready to create the Novell server and queue for the IBM Network Color Printer.

All of the following information is entered from a Novell NetWare client. You must be logged into the Novell server as "Supervisor" ("Administrator" on Novell 4.x) or as a user with equivalent or higher authority.

### **Queue Server and Print Queue setup on Novell 3.x**

- 1. After logging in to a NetWare client, get to a DOS prompt, and type: *pconsole*. The *Available Options* menu will be displayed.
- 2. Choose Change Current File Server.
- 3. From the list displayed, select the name of the file server on which you would like to create the new print server, and press Enter.
- 4. From the Available Options menu, choose Print Server Information.
- 5. Press the INSERT key and type a name for the new print server, and press Enter. You may enter any name as long as it does not exceed 8 characters and does not contain spaces in the name. Press the ESC key to return to the *Available Options* menu.
- 6. From the Available Options menu, choose Print Queue Information.
- 7. Press the INSERT key, type a name for the new print queue, and press the Enter key. The print queue name you entered will be highlighted in the *Print Queues* list. Press Enter.
- 8. In the *Print Queue Information* menu, choose *Queue Servers* and press the Enter key. A blank *Queue Servers* list will be displayed.
- 9. Press the INSERT key. The *Queue Server Candidates* list is displayed. Select the print server you created in Step 5 above. You have now associated the print queue with a print server that will service that queue.
- 10. When you have finished, press the ESC key to exit all pconsole windows. Choose 'YES' to exit, and press Enter to save changes to pconsole if prompted.

## Print Server and Print Queue setup on Novell 4.x

- 1. After logging in to a NetWare client, get to a DOS prompt, and type: *pconsole*. The *Available Options* menu will be displayed. <u>Press F4 to switch to bindery context</u>.
- 2. Choose Change Current NetWare Server.
- 3. From the list displayed, select the name of the NetWare Server on which you would like to create the new print server, and press Enter.
- 4. From the Available Options menu, choose Print Servers.

**Note:** You will be given a message stating that you are attempting to configure a print server in bindery emulation. Press Enter to continue past this message.

- 5. Press the INSERT key and type a name for the new print server, and press Enter. You may enter any name as long as it does not exceed 8 characters and does not contain spaces in the name. Press the ESC key to return to the *Available Options* menu.
- 6. From the *Available Options* menu, choose *Print Queues*.
- 7. Press the INSERT key, type a name for the new Print Queue, and press the Enter key. The name you entered will be highlighted in the *Print Queues* list. Press Enter.
- 8. In the *Print Queue Information* menu, choose *Print Servers* and press the Enter key. A blank *Print Servers* list will be displayed.
- 9. Press the INSERT key. The *Print Server Candidates* list is displayed. Select the print server you created in Step 5 above. You have now associated the print queue with a print server that will service that queue.

## III - Printer Setup

### Leaving Printer setup

You can exit the printer setup at any time by doing the following:

1. Press the Menu button repeatedly until the display shows:

SETUP MENU EXIT SETUP

2. Press the Enter button. The display will show:

EXIT SETUP NO

- 3. Press the up or down arrow button until 'NO' is replaced by 'YES'.
- 4. Press the Enter button. The display will show:

SAVE SETTINGS YES

- 5. If you do not want to save settings, press the up or down arrow button until 'NO' replaces 'YES'.
- 6. Press the Enter button. The printer will reinitialize. When reinitialization is complete, the display will show:

OFFLINE

### **Selecting The Novell File Server From The Printer**

At this point, you have set up a connection for the IBM Network Color Printer at your Novell server. You are now ready to configure the printer for a connection to the Novell server. All of the following is done at the printer's operator panel.

Make sure the printer is powered on, that either a Token Ring or Ethernet cable is attached to the appropriate connector on the back of the printer, and that the printer is configured correctly to support the connection.

If you are using the Token Ring Feature, refer to the IBM Network Color Printer Token-Ring Guide (G544-5429-00) pages 2-1 through 2-10 for information on how to configure your Token-Ring feature.

If you are using the Ethernet feature, refer to the IBM Network Color Printer Administrator's Guide (S544-5364-01) pages 6-18 through 6-23 for information on how to configure your Ethernet connection.

To connect the printer to your Novell server, at the printer:

1. Press the Online button to take the printer offline. The operator display will show:

### OFFLINE

**Novell Quick Setup** 

2. Press the Menu button once to get to the setup menus. The display will show:

SELECT FUNCTION RUN SETUP

3. Press the Enter button. The display will show:

SETUP MENU PRINTER SETUP

4. Press the Up or Down arrow button until the display shows:

SETUP MENU NETWORK SETUP

5. Press the Enter button.

**Note:** <u>If you have the Network Color Printer Token Ring feature installed</u>, the display will show: NETWORK SETUP NETWORK TYPE

In this case, you should press the Up or Down arrow button until line 2 of the display shows NOVELL SETUP.

If you do not have the Token Ring feature installed, the display will show: NETWORK SETUP NOVELL SETUP

6. Press the Enter button. The display will show:

NOVELL SETUP ENABLE NOVELL

- 7. If line 2 of the display does not show 'ENABLE NOVELL', press the Up or Down arrow button until it does.
- 8. Press the Enter button. The display will show:

ENABLE NOVELL YES

- 9. If line 2 does not show 'YES', press the Up or Down arrow button until it does.
- 10. Press the Enter button. The display will show:

IPX FRAMETYPE 802.2

**Note:** If you have the Network Color Printer Token Ring feature installed, line 2 will show 'TOKEN RING'.

11. Press the Up or Down arrow button until line 2 shows the IPX frametype your Novell file server is using.

**Note:** <u>If you are unsure about which IPX frametype your Novell file server is using</u>, you should look in the AUTOEXEC.NCF file on your Novell server for this information.

You can also find your IPX frametype by getting to the Novell Server prompt, and doing the following:

- a. Type "LOAD MONITOR".
- b. Press the Down arrow key on the keyboard until the highlight bar is on "LAN INFORMATION" (Netware 3.x), or "LAN/WAN INFORMATION (Netware4.x).

- **C.** Press the Enter key. The "LAN DRIVER INFORMATION" window (Netware 3.x) or "AVAILABLE LAN DRIVERS" window (Netware 4.x) will be displayed.
- d. Look for the field labeled "frame=xxx". 'xxx' will be one of the following values: Token Ring

ETHERNETII ETHERNET SNAP 802.2 802.3

- e. The value of this field is your IPX Frametype. Write it down.
- f. After you have viewed the IPX Frametype, press the Escape key until you are prompted with the message: "EXIT MONITOR, YES OR NO". Select YES to exit the monitor.
- 12. When line 2 shows the IPX frametype your Novell server is using, press the Enter button. The display will show:

### IPX SETTINGS VIEW

13. Press the Up or Down arrow button until the display shows:

### IPX SETTINGS CHANGE

**Note:** With 32M of memory or more, the IBM Network Color Printer can be configured to connect to up to 3 Novell servers.

If you have ANY previously defined connections, executing the next step removes all those connections. If you choose to continue, you will have to redefine <u>ALL</u> previously configured connections.

14. Press the Enter button. The printer will query the network for available Novell servers, and will produce a list of those that responded. The display will show:

## AVAILABLE SERVRS [fserver1]

Where [fservername1] is the first NetWare server found.

**Note:** If no NetWare servers were found, or if none responded to the printer's query, the display will show:

#### NO NOVELL NETWORK FOUND

You might receive this message if you selected an incorrect IPX frametype in step 11 above. Verify that you selected the correct frametype, and repeat step 8 if the frametype was set incorrectly.

You might also receive this message if your Novell Server is on a different ring segment than your printer, and you haven't enabled IPX routing on your routers.

There are many other reasons you might receive this message. See your Novell network administrator for help.

You can back out of the printer setup by pressing the Enter button. The display will show:

IPX SETTINGS CHANGE

When you see the "IPX SETTINGS" message, follow steps 1 through 6 in the section titled "*Leaving Printer Setup*" (page 5).

- 15. Press the Up or Down arrow button until line 2 of the operator display shows the file server on which you created the user account, print server, and print queue.
- 16. Press the Enter button and proceed to the next section (*"Logging In To The Novell File Server From The Printer"*).

## **Logging In To The Novell File Server From The Printer**

At this point, you have selected a Novell server for your connection, and you are ready to log in to the Novell server from the printer. After you press the Enter button in step 16 above, the printer will try to log in to the file server you selected.

By default, the printer will try to log in under the GUEST ID with no password, and the display will show one of the following messages:

FS LOGIN - or - IPX POLL INTERVAL - or - PRINT SERVER \*SUPERVISOR 15 [pserver1]

If the display shows either the "IPX POLL INTERVAL" or "PRINT SERVER" messages, you can skip to the section titled *"Selecting The Novell Print Server For Connection"* (page 10).

If the display shows the "FS LOGIN" message, you will need to log in to the Novell server with an ID and password. When you have an authorized ID and password, proceed to steps 1 through 3 below.

1. First, give the ID with which you want to log in to the Novell server. At this point, the display will show:

FS LOGIN \*SUPERVISOR

If you want to log in as Supervisor or Administrator:

- a. press the Up or Down arrow button until line 2 of the display shows "SUPERVISOR" or "ADMINISTRATOR".
- b. Press the Enter button, and skip to step 2 below.

If you want to log in as a user other than Supervisor or Administrator:

a. press the Up or Down arrow button until the display shows:

FS LOGIN LOGIN NAME

b. Press the Enter button. The display will show:

ENTER NAME

Line 2 of the display will be blank, and the cursor will be in the first data entry position. To enter the ID:

- c. Press the Up or Down arrow button until you see the first character of the ID with which you want to log in. Novell IDs and passwords are case-sensitive, so you will need to enter the ID in the exact case in which it is defined.
- d. When you see the desired character, press the right arrow button to move to the next position.
- e. Repeat steps c and d until you have spelled out the complete login ID. You can use the left arrow button to backspace and over-type errors if needed.
- f. When you have spelled out the desired ID, press the Enter button, and proceed to the next step (step 2).

2. Next, give the password for the ID with which you are trying to log in to the Novell server. At this point, the display will show:

FS PASSWORD

\_

Line 2 will be blank, and the cursor will be in the first data entry position. To enter the password:

- a. Press the Up or Down arrow button until you see the first character of the password with which you want to log in. Novell IDs and passwords are case sensitive, so you will need to enter the password in the exact case in which it is defined.
- b. When you see the desired character, press the right arrow button to move to the next position.
- c. Repeat steps a and b until you have spelled out the complete password. You can use the left arrow button to backspace and over-type errors if needed.
- 3. When you have spelled out the desired password, press the Enter button. the display will show one of the following messages:

IPX POLL INTERVAL- or -PRINT SERVER- or -PASSWORD15[pserver1]INCORRECT

If the "IPX POLL INTERVAL" or "PRINT SERVER" message is displayed, you have successfully logged in to the Novell server. Proceed to the section titled *"Selecting The Novell Print Server For Connection"* (page 10).

If the "PASSWORD INCORRECT" message is displayed, either the password or the ID you entered is incorrect. You can choose to verify the password and ID and try again, or you can give up and return the printer to the Ready state:

Press the Enter button. The display will show:

TRY AGAIN \*YES

If you want to try the **password** again:

a. Press the Enter button with 'YES' is shown on line 2 of the display. The display will show:

FS PASSWORD

- b. Line 2 will be blank with the cursor in the first data entry position.
- c. Go back and begin again with step 2, above

If you want to try the **ID** again:

 a. Press the Up or Down arrow button until 'NO' is shown on line 2 of the display. The display will show: TRY AGAIN NO

- b. Press the Enter button. The display will show: FSLOGIN
- c. Line 2 will be blank with the cursor in the first data entry position.
- d. Go back and begin again with step 1 above.

<u>If you want to give up and return the printer to the ready state</u>: Follow steps 1 through 6 outlined on page 5 in the section titled "*Leaving Printer Setup*".

## **Selecting The Novell Print Server For Connection**

At this point you have selected and logged in to the Novell File Server, and you are ready to select the Novell Print server to which you want to connect the printer. The printer display will show one of the following messages:

> IPX POLL INTERVAL - or - PRINT SERVER 15 [pserver1]

<u>If the display shows the "PRINT SERVER" message, more than one print server was found</u>. You'll need to select from a list of print servers for your connection. [pserver1] is the name of the first print server on the list. In this case you should:

- 1. Press the Up or Down arrow button until the print server to which you want to connect the printer is shown on line 2.
- 2. Press the Enter button. At this point, you have selected a print server for your connection, and the display will show:

IPX POLL INTERVAL 15

<u>When the display shows the "IPX POLL INTERVAL" message</u>, you'll need to give the interval in seconds at which the printer asks the Novell Print server for jobs. 15 seconds is the default.

If 15 seconds is satisfactory, press the Enter button and proceed to the next section titled *"Connecting The Printer To The Novell Print Server"*.

If you need an interval other than 15 seconds, press the up or down arrow button until you see a satisfactory value displayed on line 2, press the Enter button, and proceed to the next section titled *"Connecting The Printer To The Novell Print Server"*.

## **Connecting The Printer To The Novell Print Server**

At this point you have selected and logged in to your Novell file server, and you have selected the Novell Print Server for the connection. You are now ready to configure the printer for the connection. The display will show:

| IPX SETTINGS | - or - | SELECT QUEUE |
|--------------|--------|--------------|
| CHANGE       |        | *PRINT       |

<u>If your display shows the "IPX SETTINGS" message</u>, you will be able to connect to only 1 Novell Print Server, and only the DIRECT queue will be available for the connection. At this point, you can start over with the Novell setup by beginning again with step 14 in the section titled "*Selecting The Novell File Server From The Printer*" (page 5).

You can also exit Novell setup by following steps 1 through 6 in the section titled "*Leaving Printer Setup*" (page 5). Be sure to choose "YES" when the "SAVE SETTINGS" message is displayed so your configuration will be saved.

<u>If the display shows the "SELECT QUEUE" message</u>, you will be able to connect the printer to up to 3 Novell print servers through the 3 printer queues (PRINT, DIRECT, or HOLD). Any printer queue can be connected to up to 3 different Novell print servers, or each queue can be connected to a single server.

**NOTE:** Section 1-2 of the IBM Network Color Printer User's Guide (S544-5363-01) describes how the PRINT, DIRECT, and HOLD queues operate. You can use the guide to determine which queues to use for the Print Server connection.

To configure your printer when it can support multiple Novell connections, first select a printer queue for the Novell connection. PRINT is the first in a scrollable list of the enabled <u>printer</u> queues to which you can connect.

- 1. Press the Up or Down arrow button until you see the desired queue on line 2 of the display.
- 2. Press the Enter button. The display will show:

| SELECT FS | - or - | QUEUE ASSIGNED  |
|-----------|--------|-----------------|
| YES       |        | ENTER TO RETURN |

<u>If the "SELECT FS" message is displayed</u>, you are being prompted to confirm your printer queue selection. You can either confirm your selection, or cancel the configuration and start over:

<u>If you want to confirm your printer queue selection</u>, press the Enter button while "YES" is displayed on line 2. The display will show:

AVAILABLE SERVERS [fserver1]

At this point, you have configured at least one connection between the Novell print server and the printer.

If you want to configure another connection, begin again at step 15 in the section titled *"Selecting The Novell File Server From The Printer"* (page 5).

If you do not want to configure another connection, exit Novell setup by following steps 1 through 6 outlined on page 5 in the section titled "*Leaving Printer Setup*". Be sure to choose "YES" when the "SAVE SETTINGS" message is displayed so your configuration will be saved.

<u>If you want to cancel the configuration or start over</u>, press the up or down arrow button until you see "NO" displayed on line 2 and then press the Enter button. The display will show:

IPX SETTINGS CHANGE

When the "IPX SETTINGS" message is displayed, you can start over with the Novell setup by beginning again with step 13 in the section titled "*Selecting The Novell File Server From The Printer*" (page 5).

You can also cancel the configuration and exit Novell setup by following steps 1 through 6 outlined on page 5 in the section titled *"Leaving Printer Setup"*.

<u>If the "QUEUE ASSIGNED" message is displayed</u>, you are trying to assign a Print Server to a queue other than the one to which it was already assigned, and you are being asked to confirm the change.

To choose whether or not to reassign the link, press the Enter button. The display will show:

REASSIGN \*YES

*If you want to reassign the link*, press the enter button while 'YES' is shown on line 2. The display will show:

SELECT FS \*YES

The "SELECT FS" message is prompting you to confirm your printer queue selection once again. You can confirm your printer queue selection, or back out of your selection:

*If you want to confirm your printer queue selection*, press the Enter button while "YES" is displayed on line 2. The display will show:

AVAILABLE SERVERS [fserver1]

At this point, you have configured at least one connection between the Novell print server and the printer.

If you want to configure another connection, begin again at step 16 in the section titled "*Selecting The Novell File Server From The Printer*" (page 5).

If you do not want to configure another connection, exit Novell setup by following steps 1 through 6 outlined on page 5 in the section titled "*Leaving Printer Setup*". Be sure to choose "YES" when the "SAVE SETTINGS" message is displayed so your configuration will be saved.

*If you want to back out of your printer queue selection*, press the up or down arrow button until "NO" is shown on line 2 of the display, and press the Enter button.

The display will show:

IPX SETTINGS CHANGE

When the "IPX SETTINGS" message is displayed, you can start over with the Novell setup by beginning again with step 15 in the section titled "*Selecting The Novell File Server From The Printer*" (page 5).

You can also exit Novell setup by following steps 1 through 6 in the section titled "*Leaving Printer Setup*" (page 5).

<u>If you do not want to reassign the link</u>, press the up or down arrow button until you see "NO" displayed in line 2, and press the Enter button. The display will show:

### SELECT FS YES

When the "SELECT FS" message is displayed, press the up or down arrow button until "NO" is displayed on line 2, and then press the Enter button. The display will show:

### IPX SETTINGS CHANGE

When the "IPX SETTINGS" message is displayed, you can start over with the Novell setup by beginning again with step 15 in the section titled "*Selecting The Novell File Server From The Printer*" (page 5).

You can also exit Novell setup by following steps 1 through 6 in the section titled *"Leaving Printer Setup"* (page 5).

# AT THIS POINT, YOU HAVE COMPLETED CONFIGURATION OF YOUR NOVELL CONNECTION