

# Install Guide to connect KX-P8420/KX-PS8100 with Netware ver5.0 server.

## Introduction

This guide is written for describing the procedure to connect KX-P8420/KX-PS8100 with Netware ver5.0 server and supplementing KX-P8420/KX-PS8000 Setup manual. Please read this manual in advance as it explains the basic settings related to Netware.

## The procedure.

The procedure consists of the following two major steps.

(1) Installing the Ethernet Card if not and setup TCP/IP and IPX/SPX setting on the front panel.

Install the Ethernet card (KX-PNBC5) if your KX-P8420/KX-PS8100 does not have it.

After installing the Ethernet card, you need to set up network protocol setting.

1. Setup IP Address/Subnet mask. This is required to use KX-P8420/KX-PS8100 Fiery WebSetup. Please refer to "Setting up TCP/IP printing" in KX-P8420/KX-PS8100 Setup manual.

2. Enable IPX/SPX protocol. After you enter Subnet mask and Gateway address, press Enter key to advance to Enable IPX/SPX? Screen. Press Enter key and press Continue/Forward to select Yes and then press Enter again.

3. Press Menu/Exit button. Printer become rebooting. After that, the printer will return to Ready mode and all above settings become effective.

(2) Setting up Server and Client.

Netware ver5.0 has the following features.

(a) Netware ver5.0 has two ways to manage Network resources such as server PC, Printer or User account.

NDS (Novell Directory Services) or Bindery

(b) Netware ver5.0 has introduced the new system to manage the printer called NDPS in addition to the conventional way which needs Print Queue, Print Server, Printer settings.

(c) Netware ver5.0 can let you choose the network protocol, TCP/IP or IPX/SPX.

Please refer to Netware or Novell documentation for more detail.

Please decide the setting for each item in advance of the setup as the procedure depends on the settings.

(1) NDS management

(1.1) If your network is using IPX/SPX protocol,

(1.1.1) Nprinter mode.

(1.1.2) NDPS mode with Nprinter mode.

(1.2) If you are using TCP/IP protocol,

(1.2.1) NDPS with lpr.

**NOTE:**

KX-P8420 does not support Pserver mode.

(2) Bindery management

(2.1) Nprinter mode. Please refer to KX-P8420 Setup manual.

(1.1.1) Use Netware ver5.0 with Nprinter mode, IPX/SPX protocol, NDS.

After installing the Ethernet card and setting up TCP/IP and IPX/SPX protocol, please follow the below three major setup procedures.

(1.1.1.1) Setting up the printer settings in Netware ver5.0 file Server.

(1.1.1.2) Setting up the connection between Netware ver5.0 file Server and KX-P8420 by using KX-P8420 Fiery WebTools.

(1.1.1.3) Setting up the Client Computer.

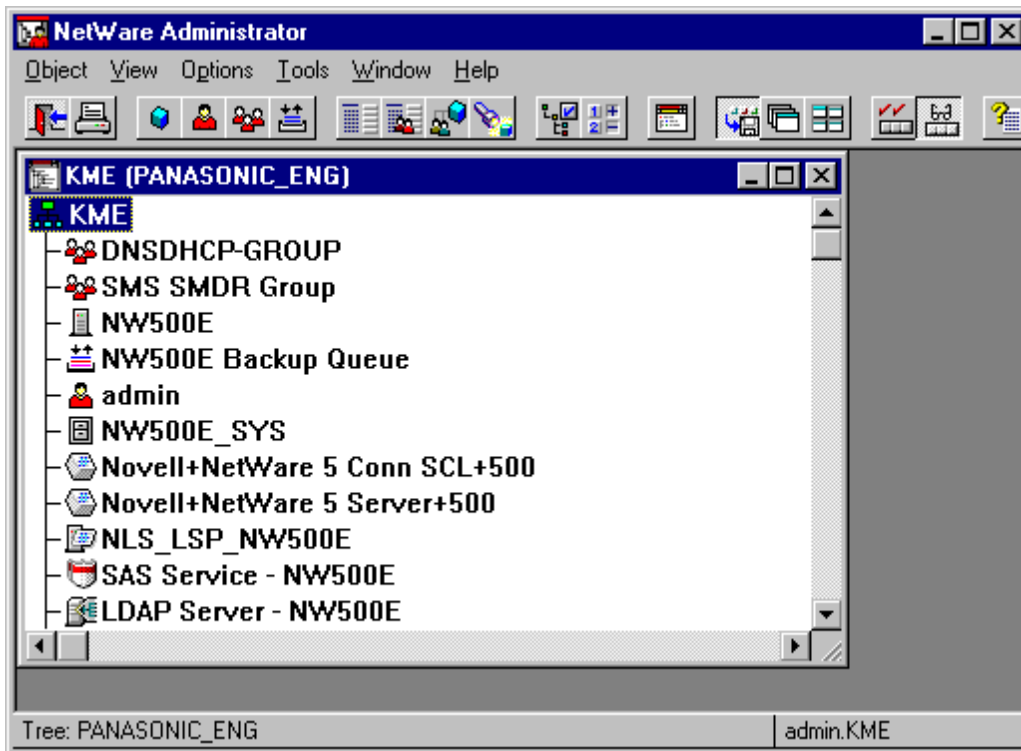
(1.1.1.1) Setting up the printer settings in Netware ver5.0 file Server.

Set up your Client PC in advance so that you can login the server in NDS mode as the printer settings is done mostly on the Client PC. Please refer to Netware online manual for more detail.

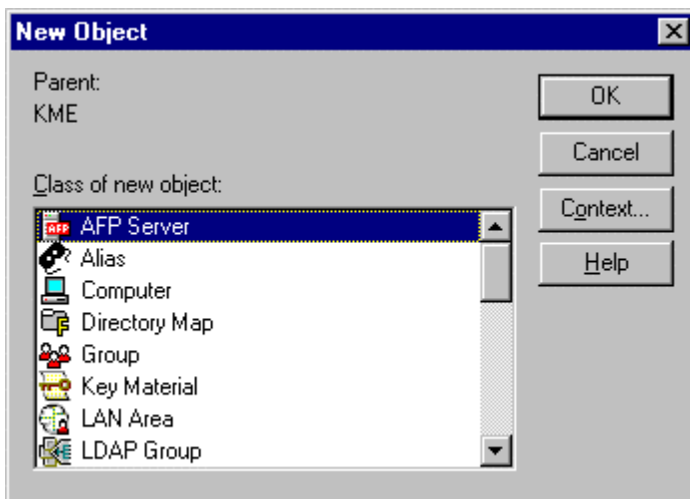
1. Start the Netware server.

2. Start your client PC (Windows95 or Windows98). Login to the server in NDS mode as the Supervisor(Admin).

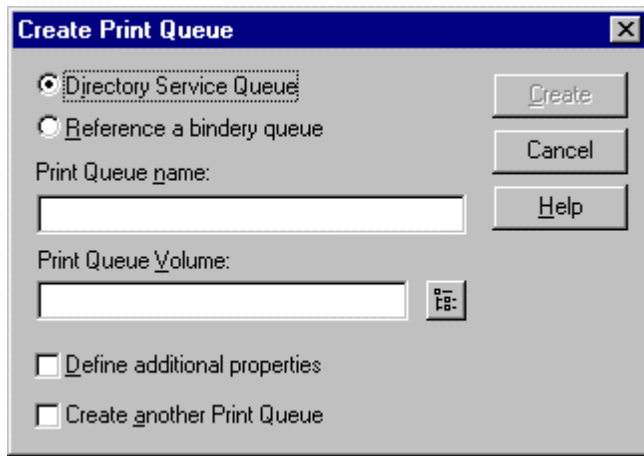
3. Launch Netware Administrator. You can do so by clicking on **NWADMIN** icon in the Netware Tools group in Windows.



4.Highlight the Context where you want to create the Queue object.. Select the **Object** from **Main** menu and Choose **Create**.



5.Select **Print Queue** when **New Object** windows appears and click **OK**.



6. Specify a Print Queue name in the **Printer Queue Name** box.

It is recommended to specify the Printer model name.

Ex) P8420q

**NOTE:**

If you want to specifically use one of the queues (direct, print, hold) that KX-P8420 has if HDD option is installed, add the queue name at the end of Print Queue name.

Ex) P8420q\_direct, P8420q\_print, P8420q\_hold. Please refer to "Setting up IPX(Novell) printing for more detail.

**About KX-P8420 internal queue support**

KX-P8420 supports the following queues, If HDD and 32MRAM is installed. (Only direct queue is available without HDD) The jobs on all queues except direct queue are stored on HDD and can be manipulated by WebSpooler. Of these queues, 3 queues(direct,print,hold) can be used for N/W printing.

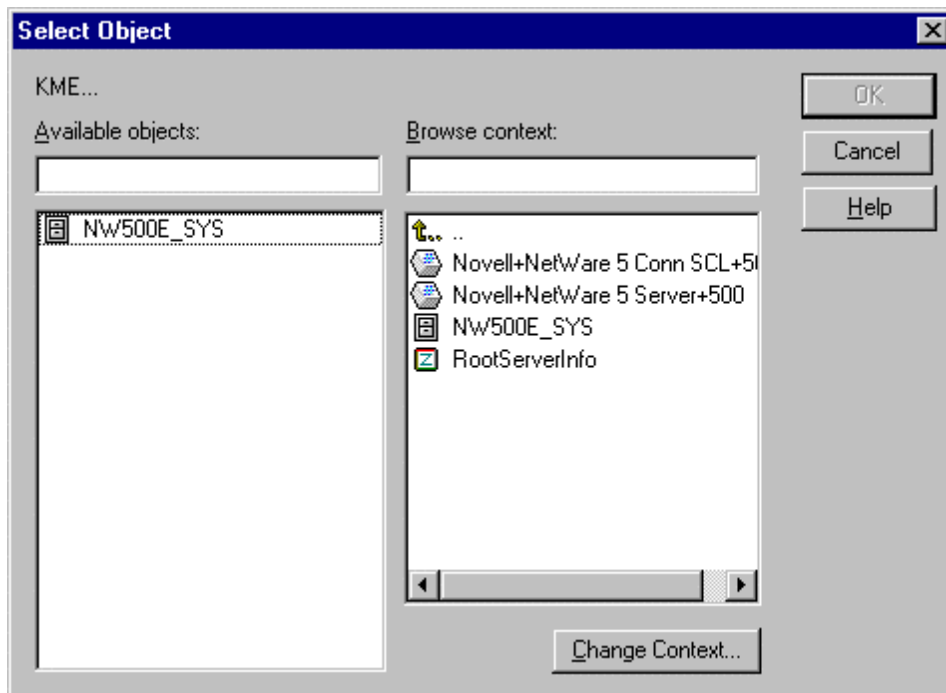
**Direct:** Incoming jobs to this queue are temporarily stored in RAM. The jobs sent to this queue are not stored in Printed queue. Files that sent to this queue are printed as soon as the printer become free to accept a print job.

**Print:** Incoming jobs to this queue are spooled to the print queue on HDD and then processed and printed on FIFO base. You can move and manipulate the jobs on this queue using WebSpooler. This is the most recommended queue for N/W printing if HDD and 32MB RAM is installed.

**Hold:** Incoming jobs remain in the Hold queue until they are moved to the Print queue or deleted by using WebSpooler If you need to print the same document frequently, you can send it to the Hold queue and move a copy of the job to the Print queue every time you need to print it.

**Printed:** The jobs most recently sent to the KX-P8420 are saved in the Printed queue. You can drag these jobs back to the Print queue to print additional copies. By default the maximum number of jobs that can be saved in the Printed queue is 10. This number can be changed up to 99 or the use of this queue can be disabled by using Fiery WebSetup.

7. Click the button to the right of the **Print Queue Volume** box.

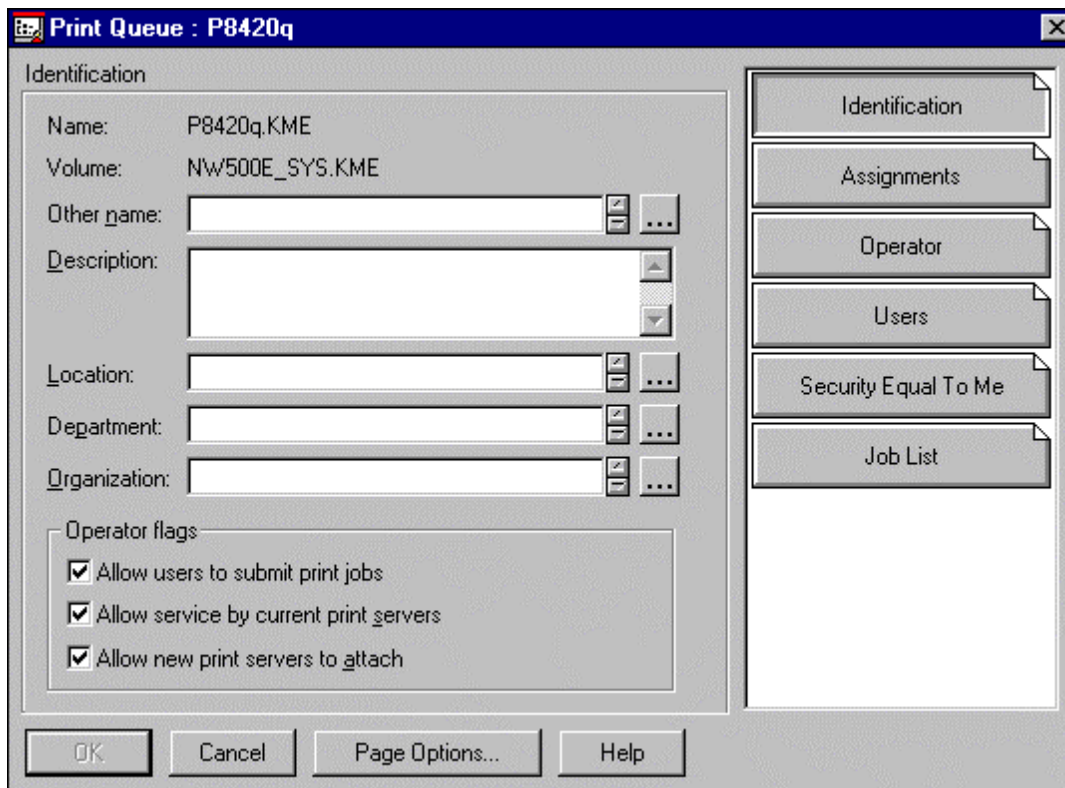


8. When the **Select Object** window appears, scroll the Directory Context items until you find the context where you want the queue to reside.

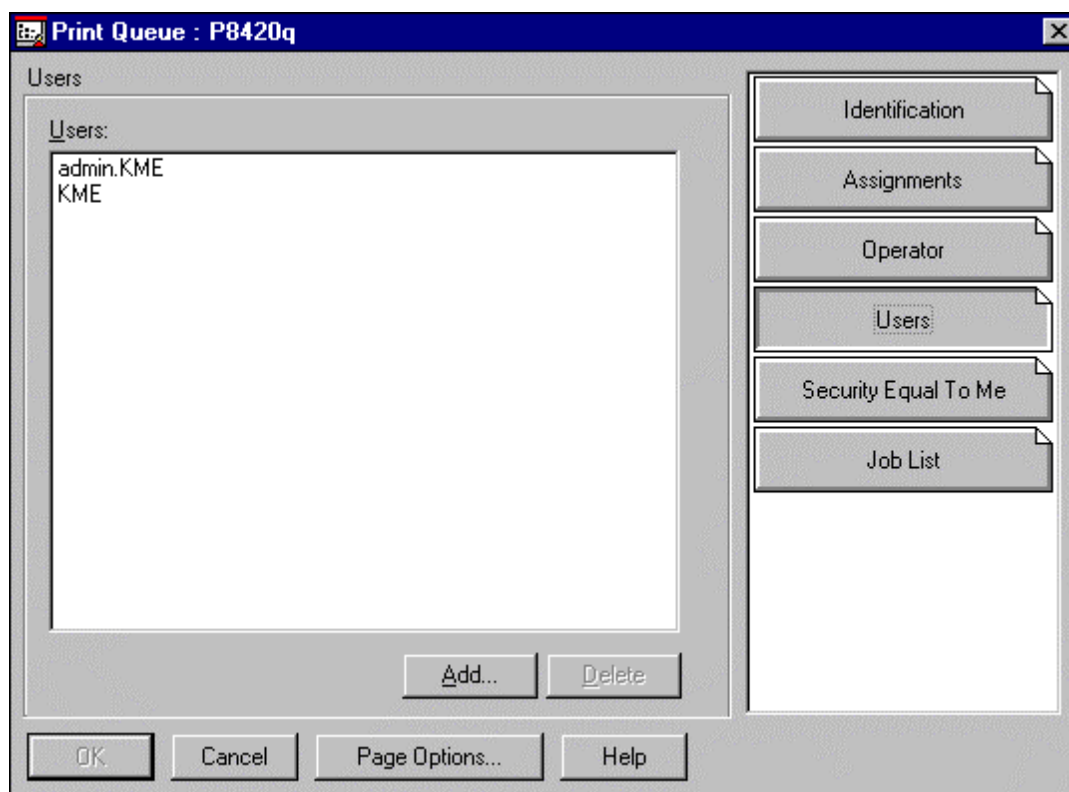
(You do not have to scroll if the queue is created on the current context.)

Click the value of your choice and then click **OK** button.

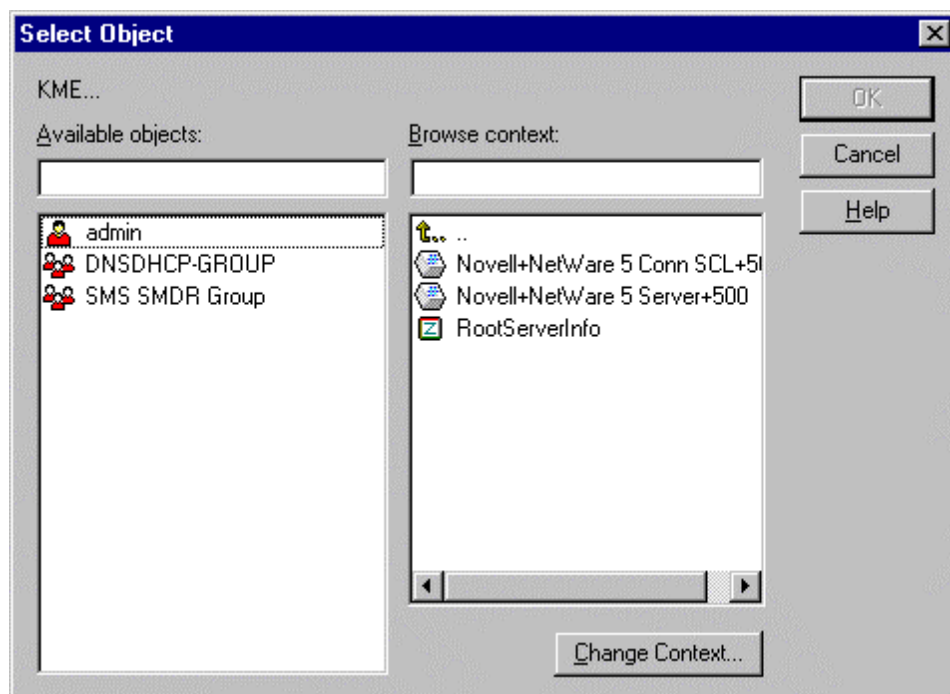
9. The **Create Print Queue** window appears again and this time shows the selected context. Click the check box labeled “**Define additional properties**” and click **Create** button.



10. Click **Users** button.



11. Click **Add...** button.



12. Scroll the Directory Context items until you find the context where you can find the user(s) to use the queue. (You do not have to scroll if you can find the user(s) on the current context.)

Select the user or the group who use the queue and click **OK** button.

The **Print Queue** windows appears again.

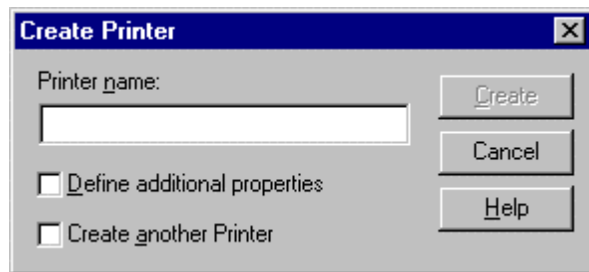
(The only registered users or groups can use the printer. Please register all the users or groups who will use the printer.)

13. Click **OK** button. (Click **Cancel** if you do not make any change.)

Netware administrator window appears again showing the created queue.

14. Highlight the Context where you want to create the Printer object.. Select the **Object** from **Main** menu and Choose **Create**.

15. Select **Printer (Non NDPS)** when **New Object** windows appears and click **OK**.

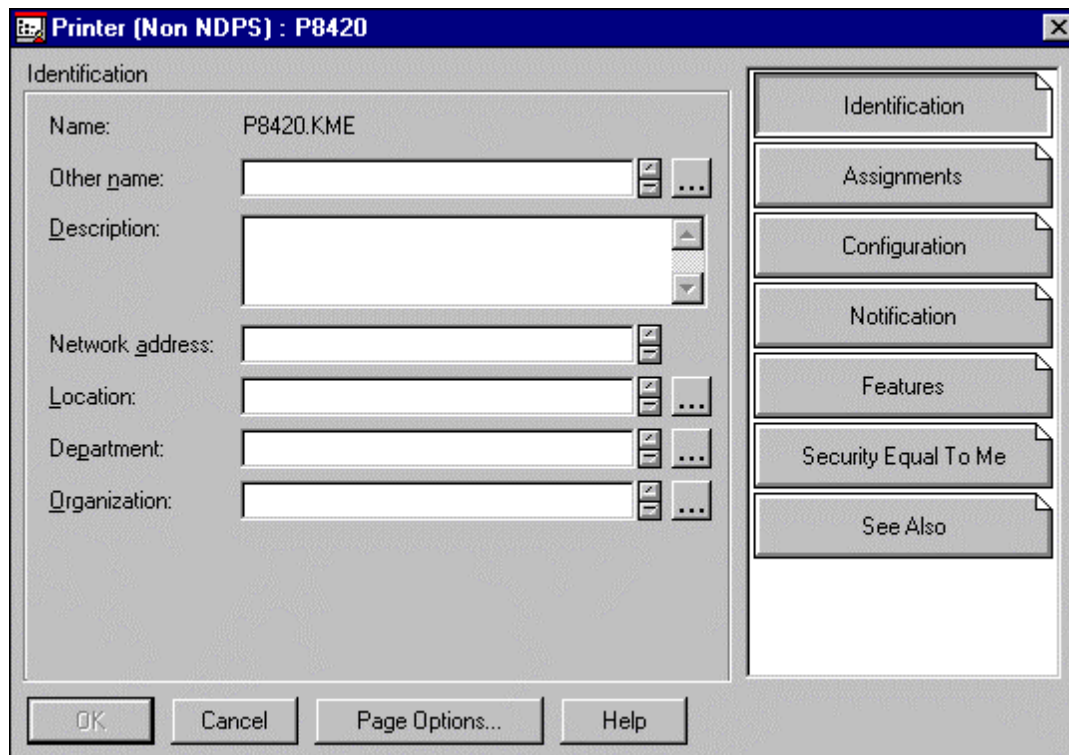


16. Enter the Printer name of the Ethernet card in **Printer name** box.

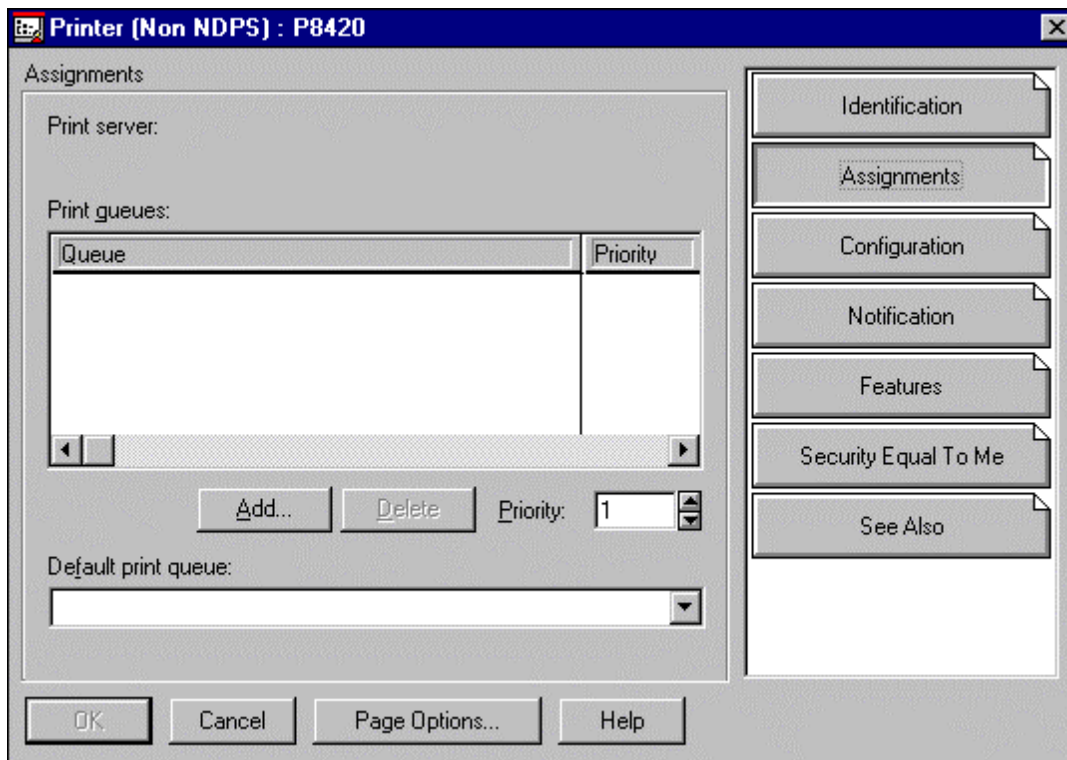
It is recommended to specify the Printer model name.

Ex) P8420

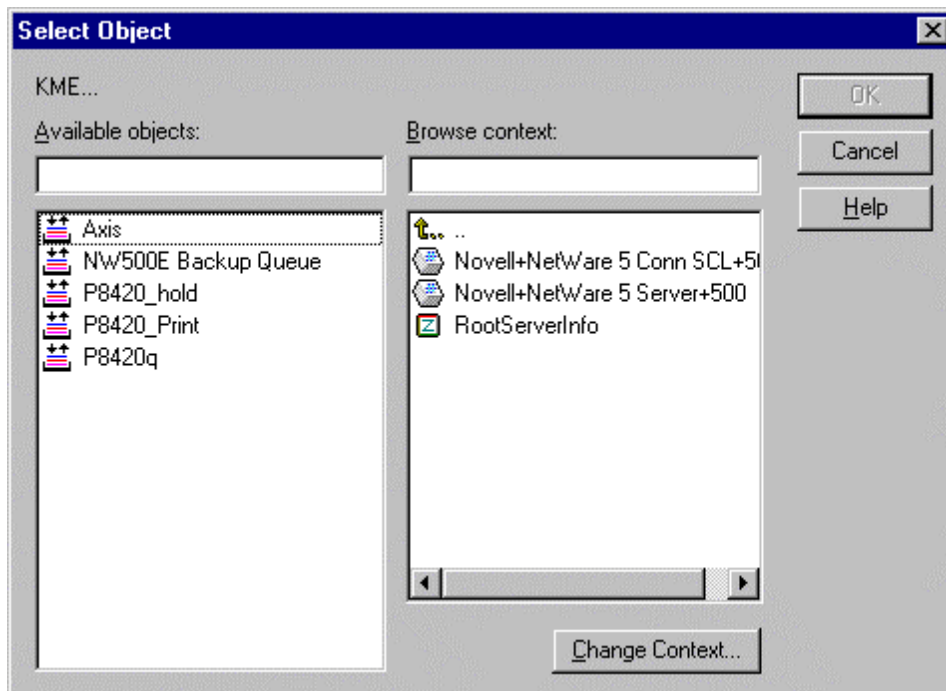
Click the check box labeled “**Define additional properties**” and click **Create** button.



17. Click **Assignments**.



18. Click **Add....**

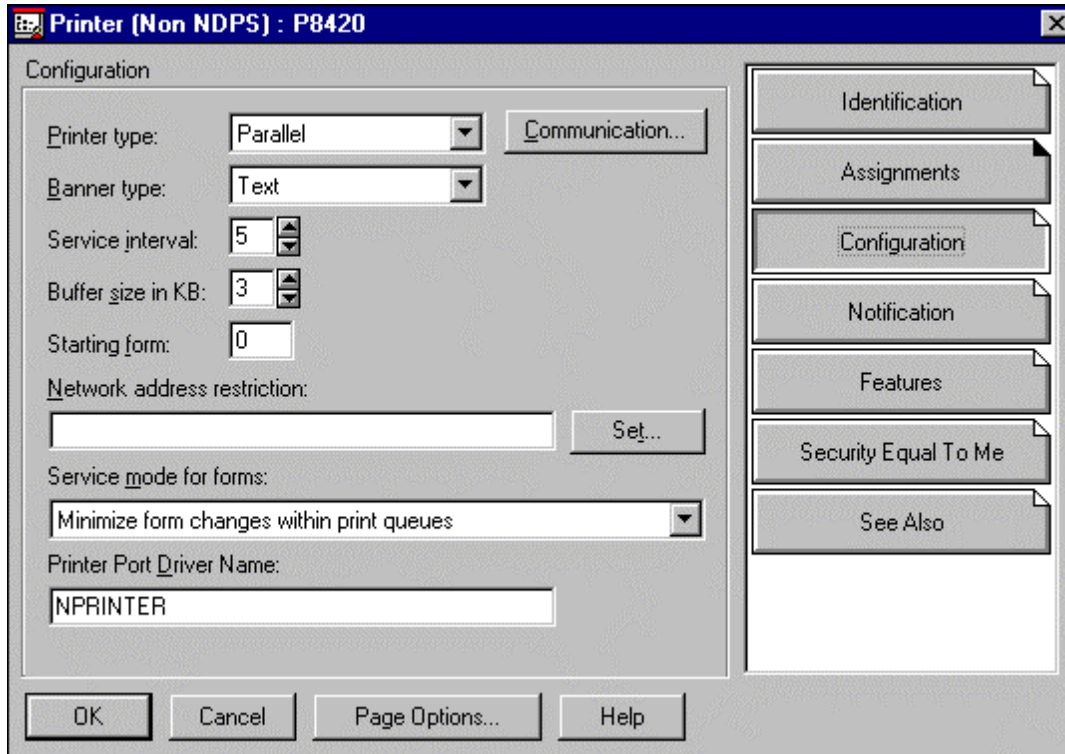


19. Scroll the Directory Context items until you find the context where you can find the queue created in the procedure 13. (You do not have to scroll if you can find the queue on the current context.)

Highlight the queue in the **Available objects** list box and click **OK** button.

The **Printer (non NDPS)** window appears again showing the selected queue.

20. Click **Configuration** button.

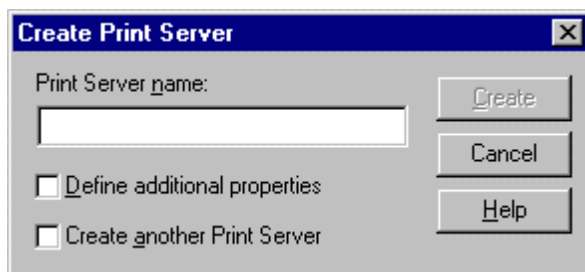


21. Select **Other/Unknown** as a **Printer type** setting and click **OK** button.

Netware administrator window appears again showing the created printer.

22. Highlight the Context where you want to create the Print Server object.. Select the **Object** from **Main** menu and Choose **Create**.

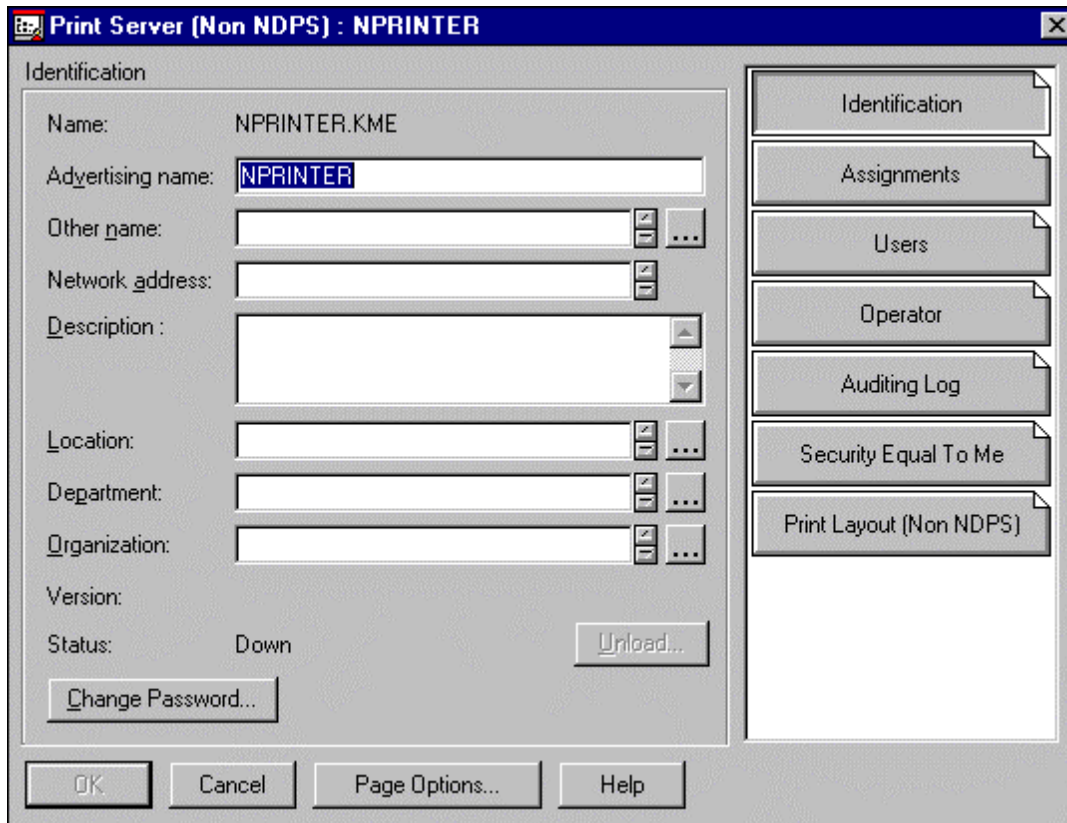
23. Select **Print Server (Non NDPS)** when **New Object** windows appears and click **OK**.



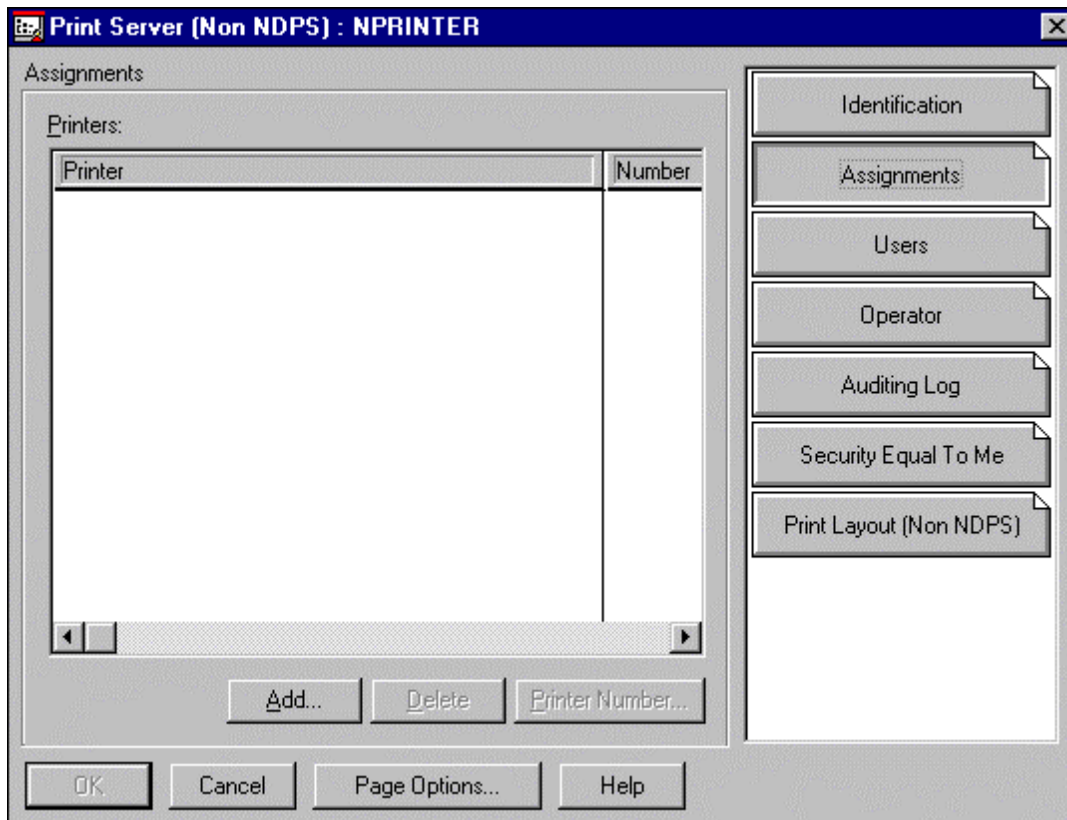
24. Enter the node name of the Ethernet card in **Print Server name** box.

Ex)Nprinter

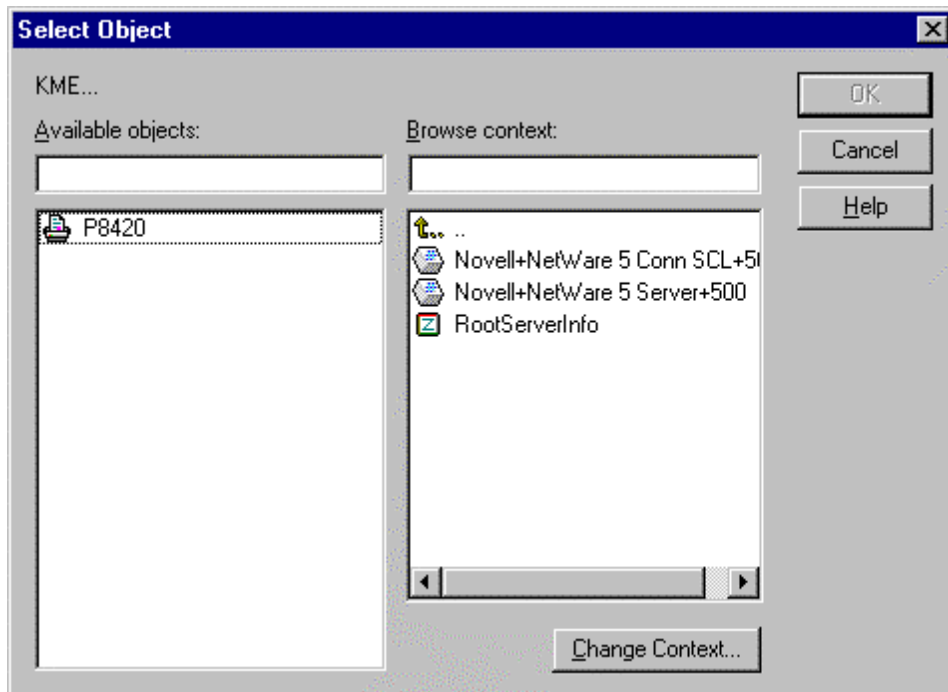
Click the check box labeled **“Define additional properties”** and click **Create** button.



25. Click **Assignments**.



26. Click **Add...** button.



27. Scroll the Directory Context items until you find the context where you can find the printer created in the procedure 21. (You do not have to scroll if you can find the printer on the current context.)

Highlight the printer in the **Available objects** list box and click **OK** button.

The **Print Server (non NDPS)** window appears again showing the selected printer.

28. Click **OK**.

NetWare administrator window appears again showing the created printer.

(Please do the following procedure on the server after procedure 6.)

7. Enter **LOAD PSERVER XXXXXX** on the console screen and press **Enter** key.

XXXXXX is the printer server name specified in the procedure 2.

8. Enter **NWCONFIG** on the console screen and press **Enter** key.

9. Select **NCF files options** from **Configuration options** and press **Enter** key.

**Available NCF Files Options** menu appears on the screen.

10. Select **Edit AUTOEXEC.NCF** and press **Enter**.

**File:AUTOEXEC.NCF** screen appears.

11. Enter **LOAD PSERVER XXXXXXXX** at the bottom of the edit screen.

XXXXXX is the printer server name specified in the procedure 2.

12. Press **ESC** button.

The message box **Save file AUTOEXEC.NCF?** appears on the screen.

13. Select **Yes** and press **Enter**.

**Available NCF Files Options** menu appears.

14. Press ESC button twice.

The message box **Exit nwconfig?** Appears on the screen.

15. Select **Yes** and press **Enter**.

### (1.1.1.2) Setting up the connection between Netware ver5.0 file Server and KX-P8420 by using KX-P8420 Fiery WebTools.

To setup Netware printing, you need to use WebSetup/Network Setup.

For more detail about KX-P8420 Fiery WebTools, refer to “Setting up Fiery WebTools” and “Completing setup from Fiery WebSetup” in KX-P8420 Setup manual.

1. Launch the Browser on your client PC.

2. Enter the valid P8420 URL address

3. When P8420 WebTools main GUI appears, click WebSetup button.

4. When WebSetup main Screen appears, click Network setup button.

5. When Network Setup appears, select Protocol setup.

In this tab, you have to select the frame.

**6. Select Frames**—Click the Select Frames button to specify Ethernet frames for IPX protocol used with NetWare. See your network administrator to verify which frame type to choose. In the IPX Frames dialog box, select frames and use the Add and Remove buttons to specify the selected frames.

Select the following frame type.

Ethernet 802.2 – for Netware 3.x, 4.x

Ethernet 802.3 – for Netware ver3.x

Ethernet II – for TCP/IP

Ethernet SNAP – for Appletalk protocol

TokenRing

TokenRing SNAP – for Appletalk protocol

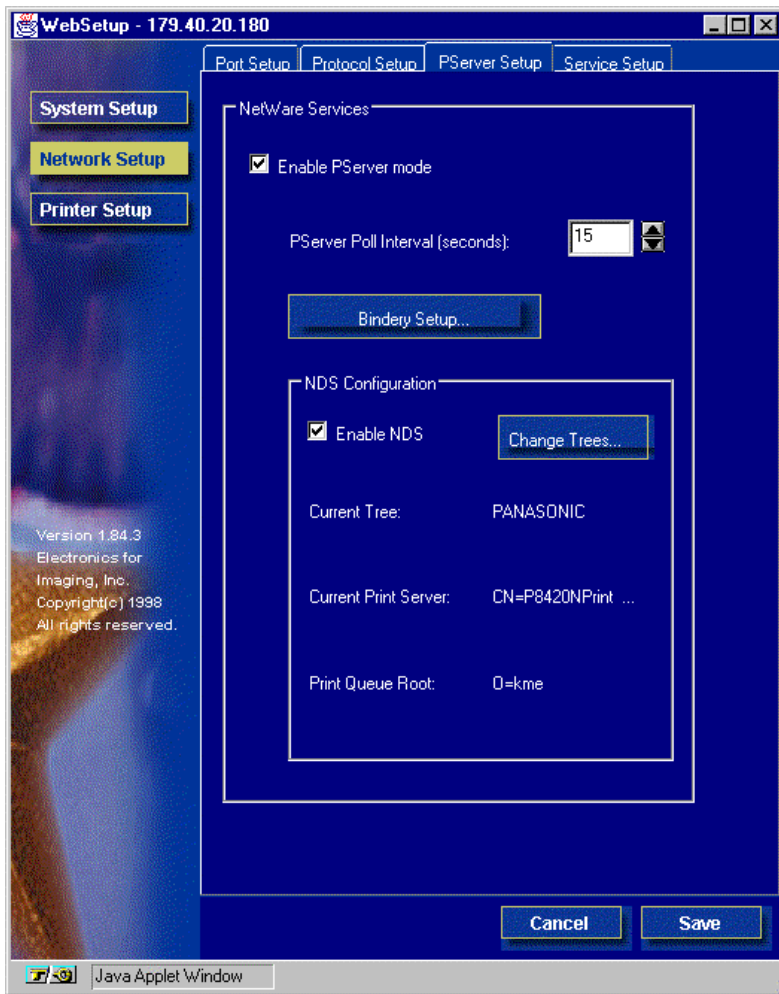
It is recommended to select all the available frame types. P8420 automatically selects the most appropriate frame type.

### **7. Select Pserver Setup tab**

8. Check “Enable PServer mode” check box.

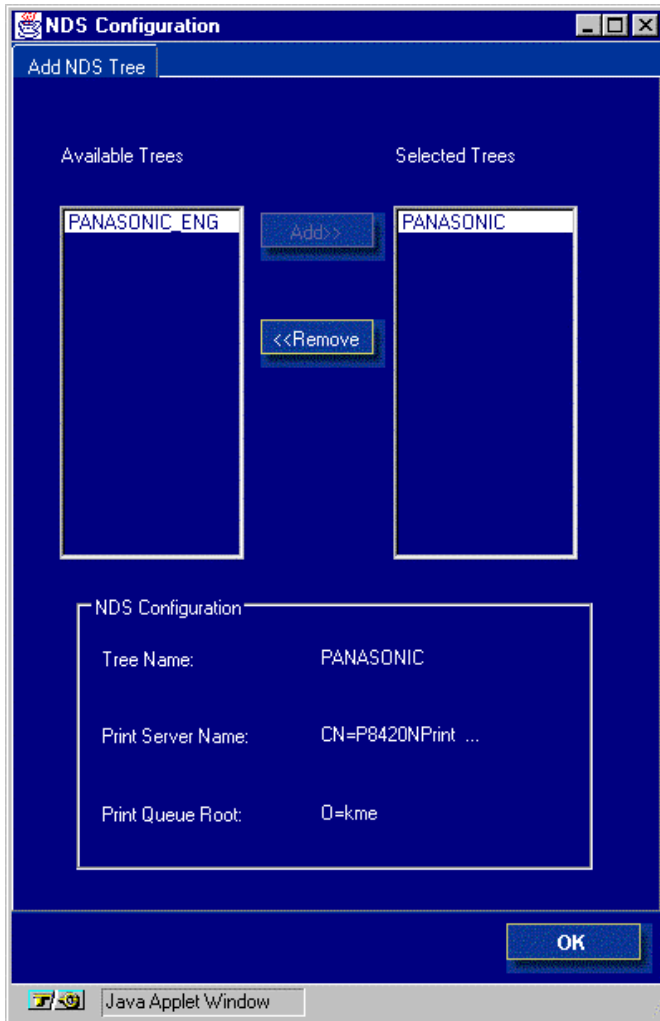
### **NOTE:**

-If your network uses **both** NDS and Bindery, set up NDS first. Setting up NDS after



Bindery will overwrite Bindery Setup. If your network uses both NDS and Bindery, including using NetWare 4.x servers in bindery emulation, the KX-P8420 cannot service NDS and bindery emulation servers on the same NDS tree.

9. Check the **Enable NDS** check box if it's not.
10. Click **Change Trees** to open the **Add NDS Tree** window.



11. Select the current NDS tree and click **Remove** if NDS tree is already

You can have only one NDS tree, so this process is required if you want to change trees.

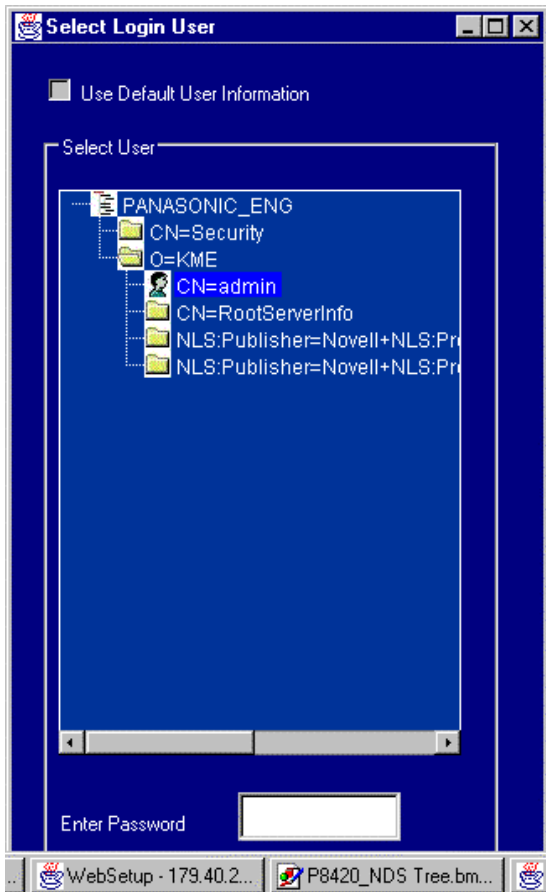
12. Select the new NDS tree and click **Add**.

Your new NDS tree selection automatically overwrites any previous tree selection. If you change the NDS tree selection and there are also current Bindery settings, you are alerted that they will be deleted. If you continue with NDS Setup, you can replace Bindery settings afterwards. To exit NDS Setup, choose Cancel.

13. Click **OK**.

The Select login user window appears.

14. Select the User Login object from the display in the **Select Login User** window.

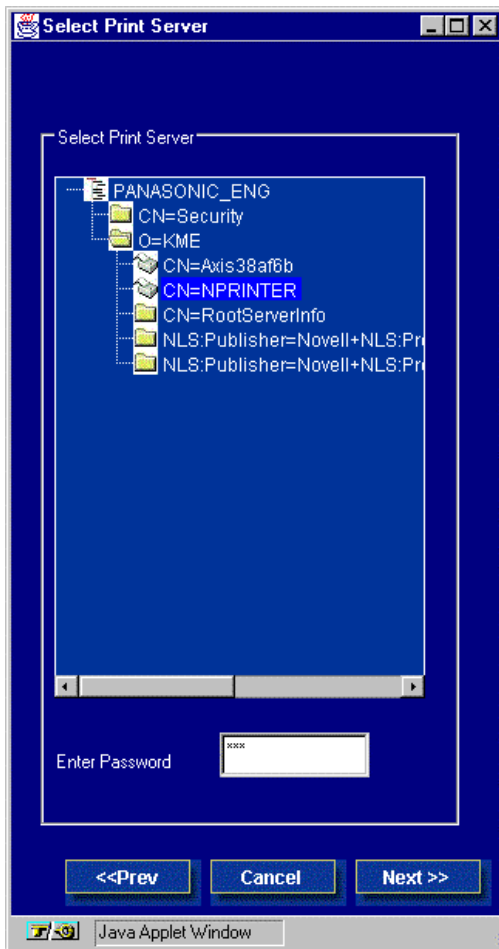


15. Enter a password if necessary.

To modify NDS Setup you may need permission to browse the NDS tree. If so, ask your network administrator for a login password.

16. Click **Next**. The Select Print Server window appears.

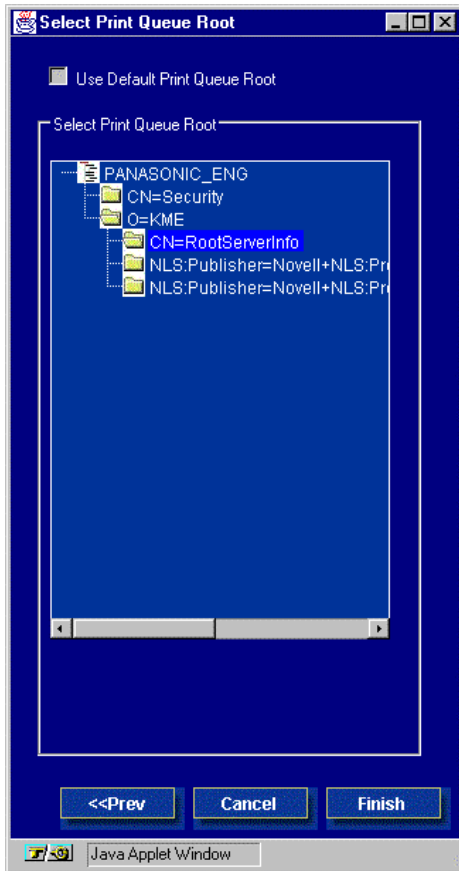
17. Select the print server from the display in the **Select Print Server** window.



18. Enter a password if necessary.

19. Click **Next**. The Select Print Queue root window appears.

20. Select the print queue root from the display in the **Select Print Queue Root** window.



21. Enter a password if necessary.
22. Click **Finish**. The NDS Configuration window reappears, showing the new settings.
23. Click **OK**. You return to WebSetup window.
24. Click **Save**.
25. Close WebSetup by clicking close button on the top right corner of the window
26. When “Server Requires a reboot. Do you want to reboot now?” message appears, select Yes to reboot the printer.
27. Wait for the printer to finish initializing for 3 to 5 minutes.

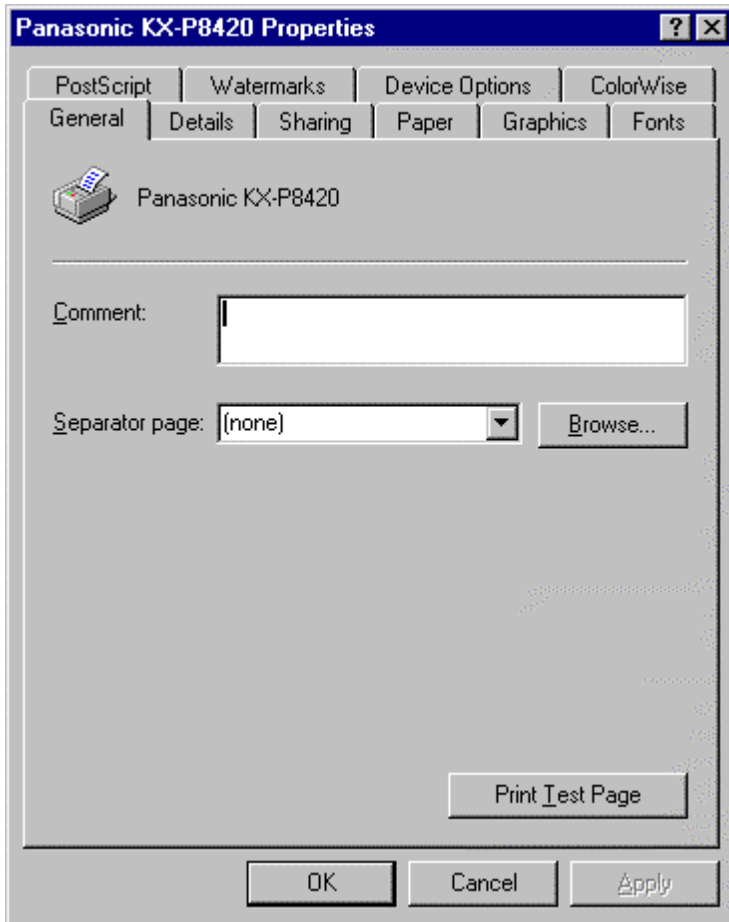
### (1.1.1.3)Setting up the Client Computer.

Before setting up the client computer, please do the following preparation in advance.

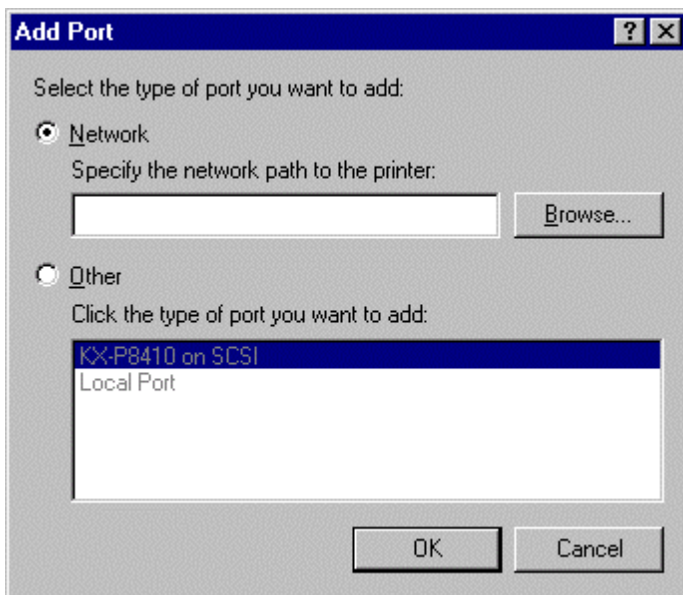
- (1)Setting up network configuration on Windows95 or Windows98.
- (2)Set up your Client PC so that you can login the server in NDS.
- (3)Install the printer driver.

- 1.Erom the **Start** menu, choose **Settings**, and click **Printers**.
- 2.Select the **Panasonic KX-P8420** Printer icon.
- 3.Choose **Properties** from the **File** menu.

4. Click the **Details** tab in the **Properties** window.



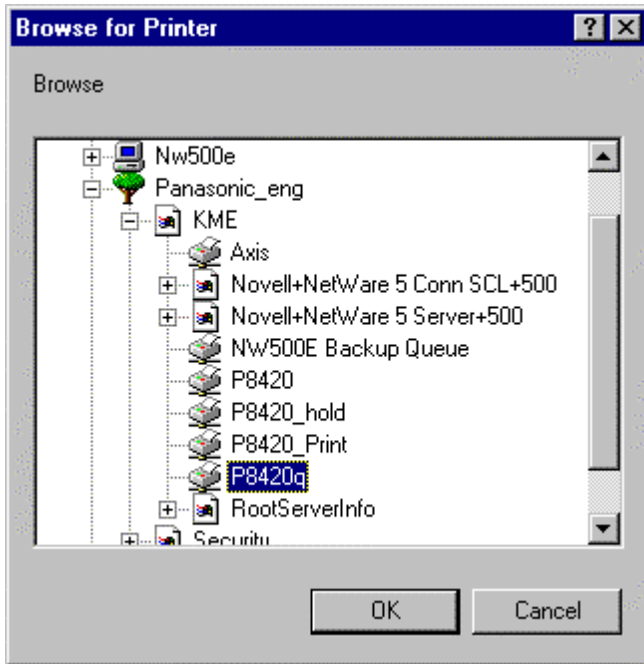
5. Click the **Add Port** button.



6. In the **Add Port** dialog box, click **Network**.

7. Click **Browse** to display your network environment.

8. Expand the levels to locate the printer(print queue name) you want to use and click it.



9. Click **OK** button.

The **Add Port** window appears again showing the printer you specified in **Specify the network path to the printer** box with the following format

`\\Server name\Printer name(Print Queue name)`

10. Click **OK** button.

The **Properties** window appears again.

11. Click **OK** button.

**NOTE:**

Specify **ASCII** as a data type if you want to use a banner.

(1.1.2) Use Netware ver5.0 with NDPS with Nprinter mode, IPX/SPX protocol, NDS.

After installing the Ethernet card and setting up TCP/IP and IPX/SPX protocol, please follow the below three major setup procedures.

(1.1.2.1) Setting up the Nprinter.

(1.1.2.2) Setting up the printer settings in Netware ver5.0 file Server.

(1.1.2.3) Setting up the Client Computer.

(1.1.2.1) Setting up the Nprinter.

Please follow the procedure described in (1.1.1.1) Setting up the printer settings in Netware ver5.0 file Server.

(1.1.2.2) Setting up the printer settings in the server Netware ver5.0.

Set up your Client PC in advance so that you can login the server in NDS mode as the printer settings is done mostly on the Client PC. Please refer to Netware online manual for more detail.

1. Start the Netware server.

2. Start your client PC (Windows95 or Windows98). Login to the server in NDS mode as the Supervisor(Admin).

3. Install NDPS product on the server side if it is not installed.

Click **Novell** on the graphical console screen (X Server – Graphical Console) and select **Install**.

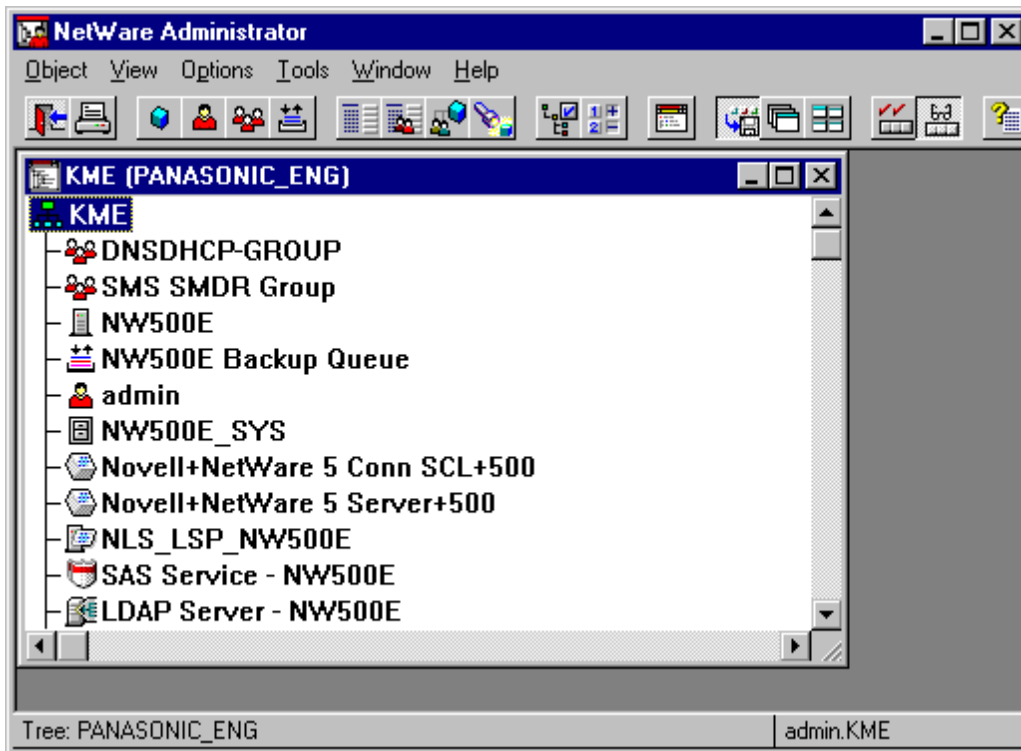
Confirm NDPS product is included in the **Install Products** screen.

If not, click **New Products** and follow the instruction on the screen.

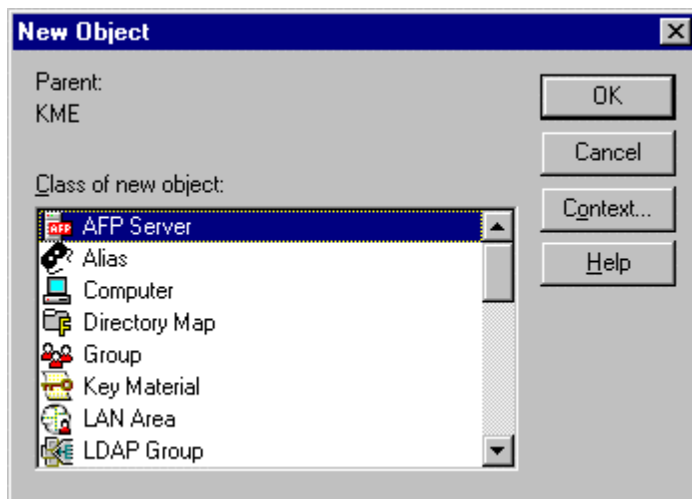
4. Confirm NDPS Broker is launched.

If NDPS product is installed, it is automatically launched. Confirm it at the server side by pressing Ctrl + Esc key.

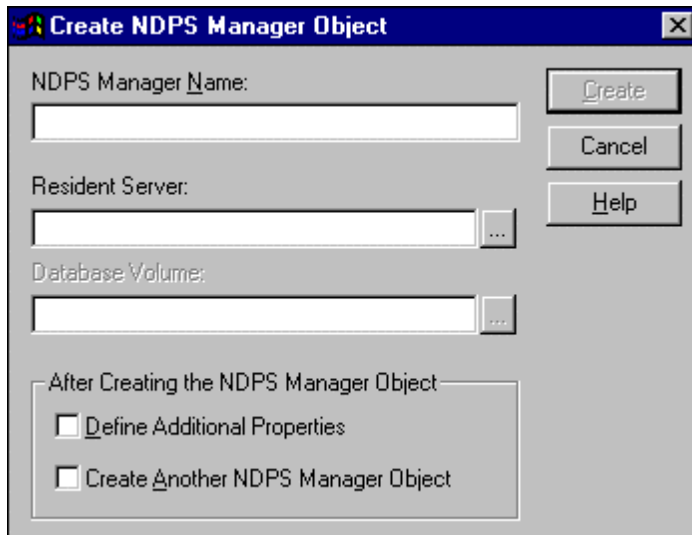
5. Launch NetWare Administrator. You can do so by clicking on **NWADMIN** icon in the NetWare Tools group in Windows.



6. If NDPS Manager has already been launched, proceed to 17.  
If not, move to the context where you want to create **NDPS Manager** object.  
Choose **Object** from **Main** menu and select **Create**.



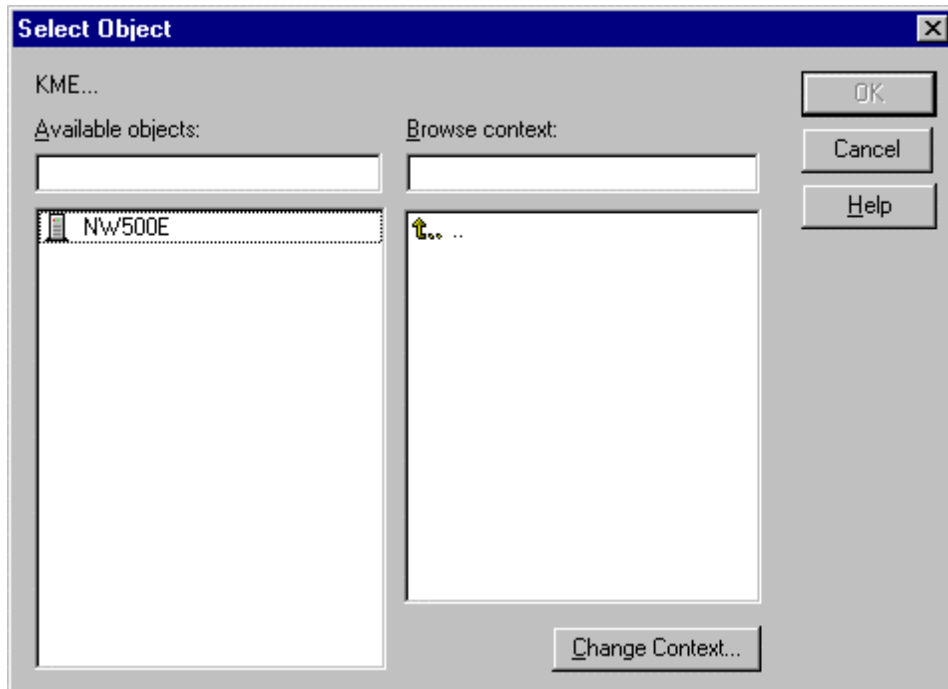
7. Select **NDPS Manager** from **Class of new Object** list and click **OK**.



8. Specify a NDPS manager name in the **NDPS Manager Name** box.

Ex) NDPS\_MANAGER

9. Click the button to the right of the **Resident Server** box.

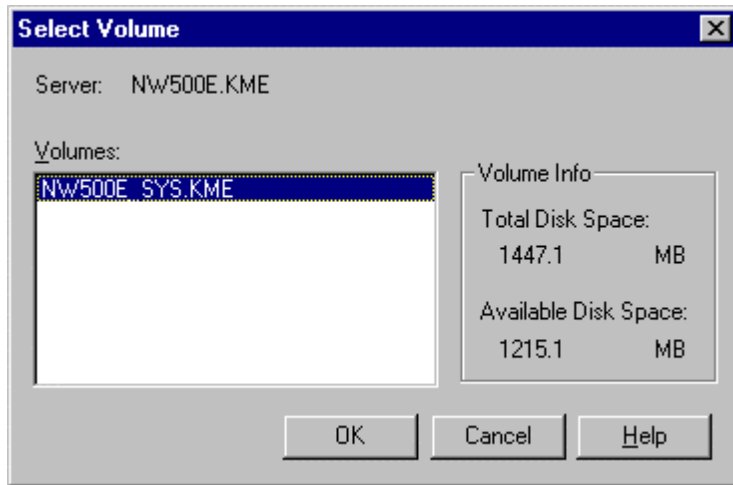


10. Scroll the Directory Context items until you find the server to which you want NDPS manager to belong. (You do not have to scroll if you want NDSP manager to locate in the current context.)

Highlight the server in the **Available object** list box and click **OK** button.

The specified server name is shown in “Create NDPS Manager Object” screen.

1. Click the button to the right of the “Database volume” box.



12. Highlight the volume to which you want the NDPS Manager to belong to in the **Volume** list and click **OK**.

The specified volume name is shown in "Create NDPS Manager Object" screen.

13. Click **Create** button.

NetWare Administrator window shows the created NDPS manager.

(Please do the following procedure on the server after the procedure 13.)

14. Enter **NDPSM** on the console screen and press **Enter** key.

15. Select the created NDPS Manager from "Contents of current context" box and press **Enter** key.

16. Enter **NWCONFIG** on the console screen and press **Enter** key.

**NetWare configuration** menu appears.

17. Select **NCF files options** from **Configuration option** and press **Enter** key.

"Available NCF Files options" menu appears on the screen.

18. Select **Edit AUTOEXEC.NCF** and press **Enter** key.

**File :AUTOEXEC.NCF** screen appears.

19. Enter NDPSM XXXXXXXX at the bottom of the edit screen.

XXXXXXXX is the NDPS Manager name specified in the procedure 8.

20. Press **ESC** button.

The message box "Save file AUTOEXEC.NCF?" appears on the screen.

21. Select **Yes** and press **Enter** key.

22. Press **ESC** key twice.

The message box "Exit nwconfig?" appears on the screen.

23. Select **Yes** and press **Enter** key.

(Please return to the client screen and do the following procedure.)

24. Highlight the Context where you want to create NDPS Printer object and select the Object from Main menu and Choose **Create**.

25. Select **NDPS Printer** when **New Object** windows appears and click **OK**.

26. Specify a NDPS Printer name in the **NDPS Printer Name** box.

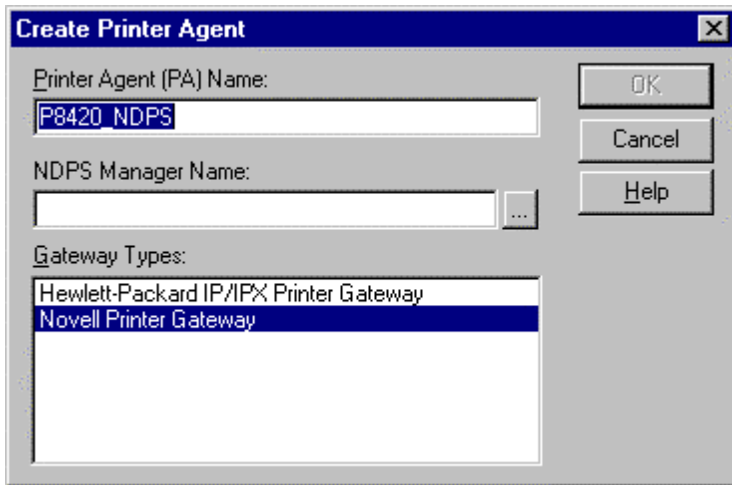
It is recommended to specify the name with Printer model name.

Ex) P8420\_NDPS

**NOTE:**

You cannot use the same name as you specified for the queue name you created before.

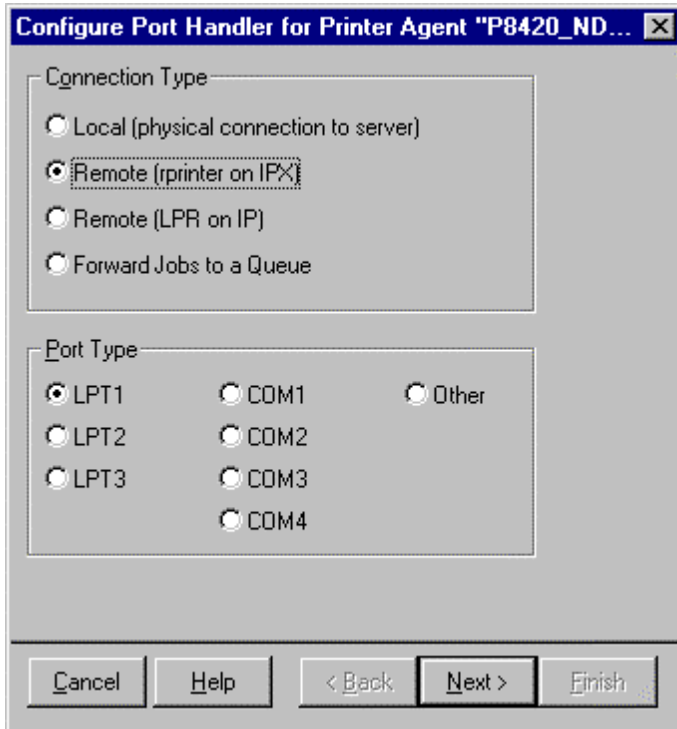
27. Click the check box labeled "**Define additional properties**" and click **Create** button.



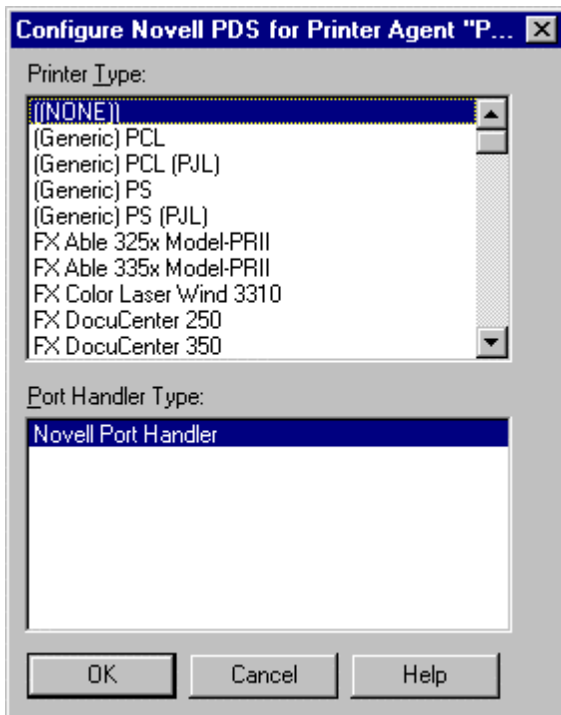
28. Click the button to the right of **NDPS Manager Name** box.

29. .Scroll the Directory Context until you find the NDPS Manager. (You do not have to scroll if you can find it on the current context.)

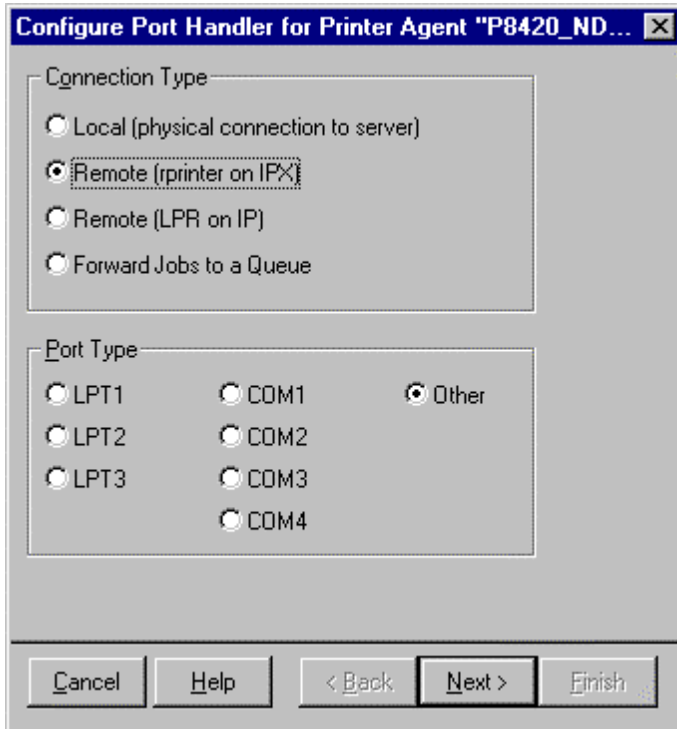
30. Click **OK** button.



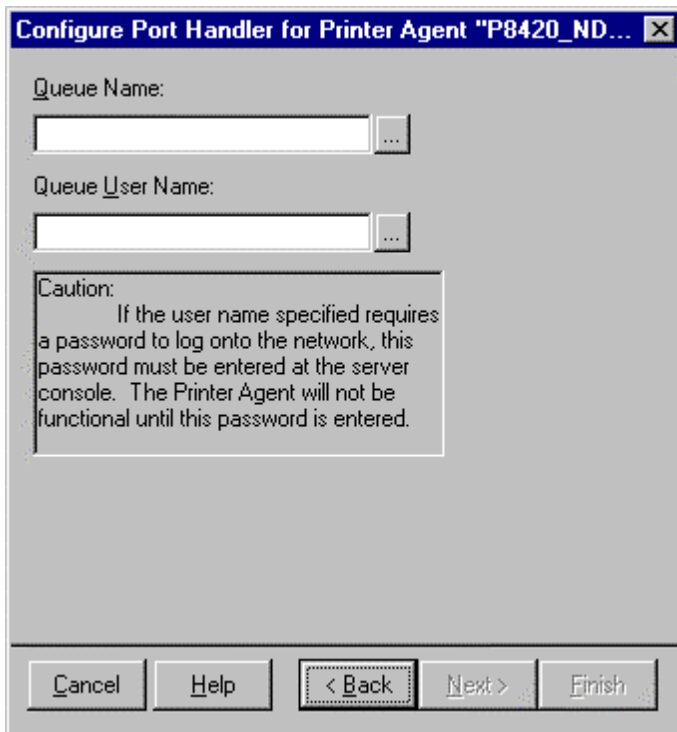
Highlight the NDPS Manager in the **Available Object** list box and click **OK** button.  
30. Click **OK** button.



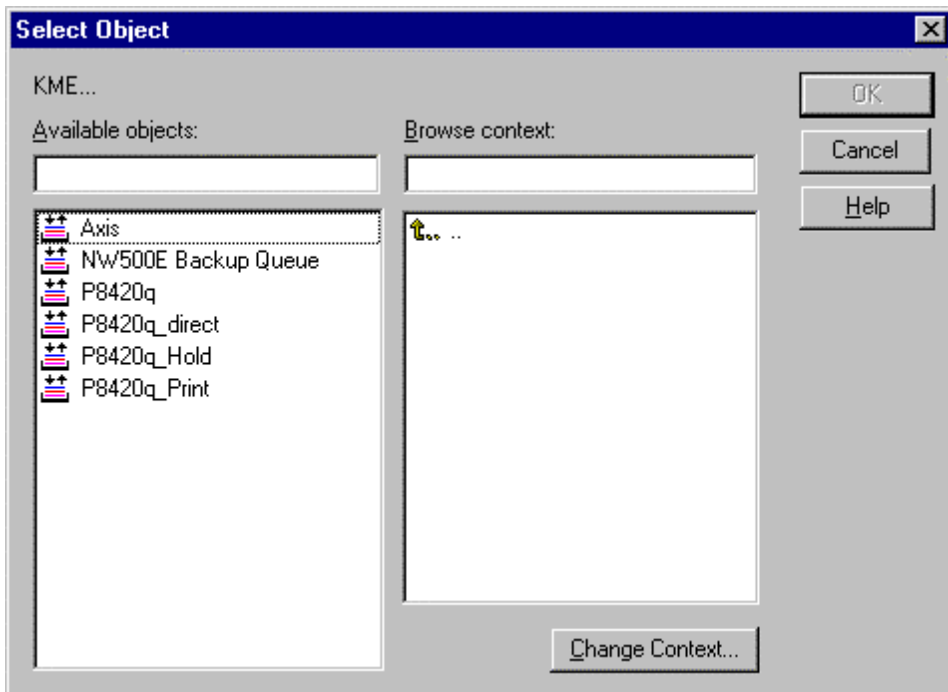
31. Specify (Generic)PS as Printer Type.  
32. Click **OK** button.



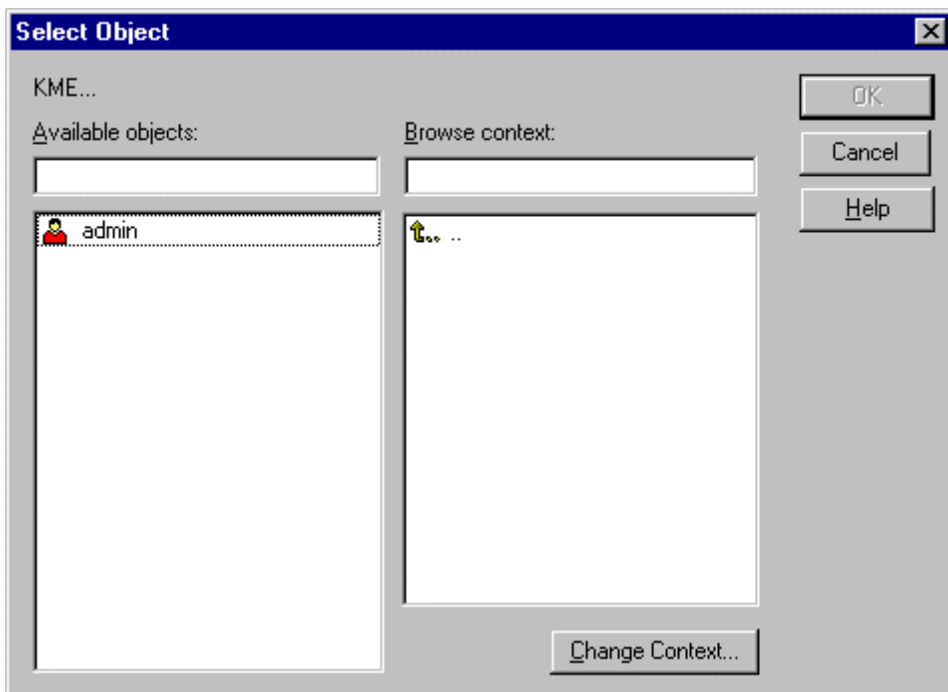
33. Select "Forward Jobs to a Queue " as a **Connection Type** and click **Next**.



34. Click the button to the right of **Queue name** box.



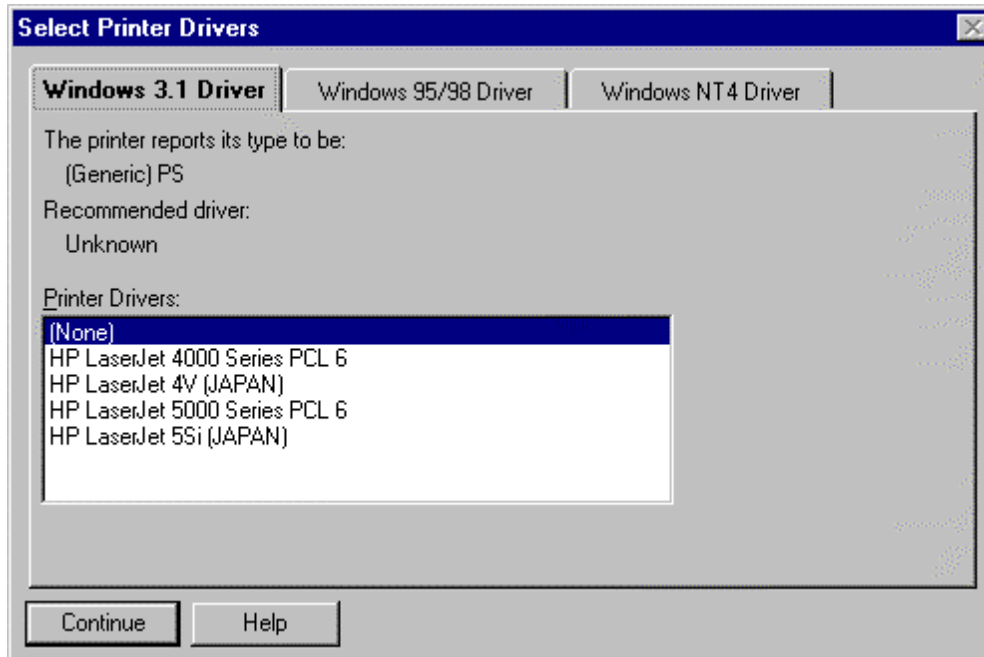
35. Scroll the Directory Context items until you find the Queue that you created when you set up Pserver(1.1.1). (You do not have to scroll if you can find it on the current context.) Highlight the queue in the **Available Object** list box and click **OK** button.
36. Click the button next to the **Queue User Name** box.



37. Scroll the Directory Context items until you find the context where you can find the user(s) to use the queue. (You do not have to scroll if you can find the user(s) on the current context.)

Select the user or the group who use the queue and click **OK** button.

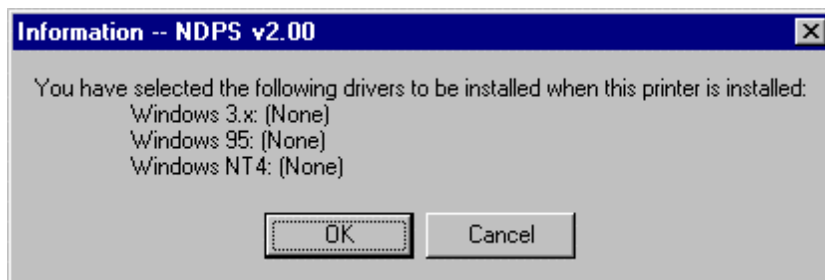
38. Click **Finish** button.



**NOTE:**

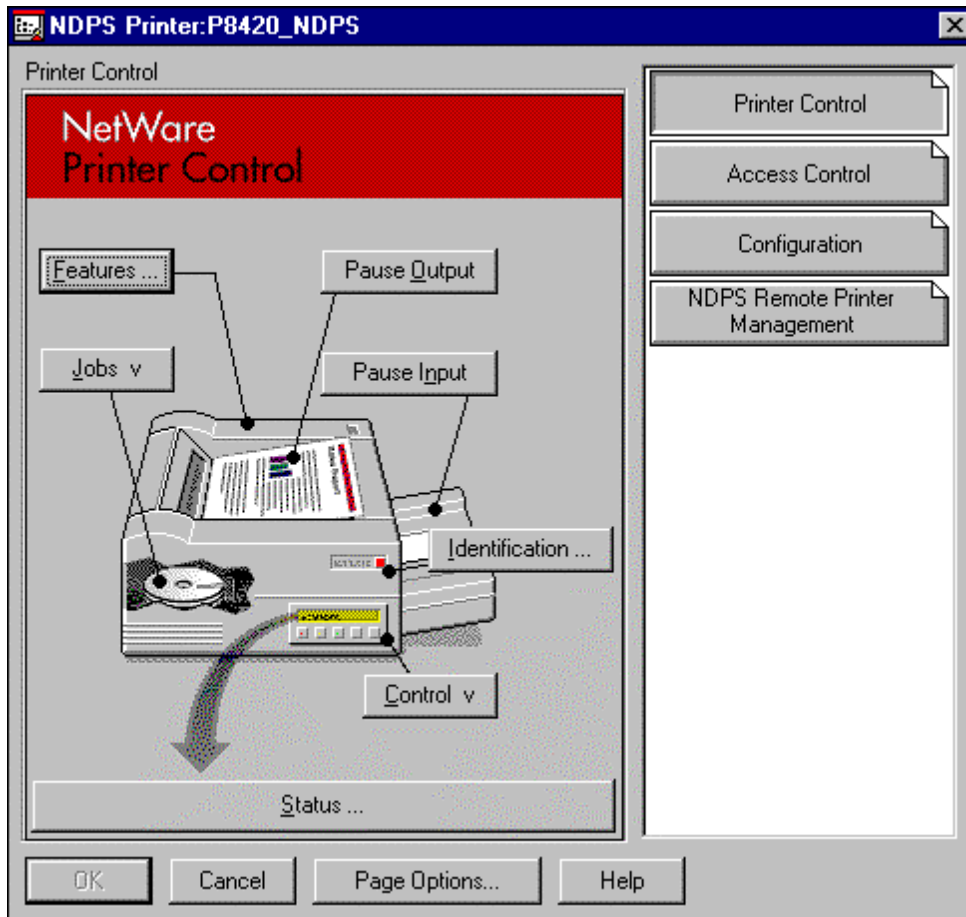
If password is specified for the user who manage, please go to the server console screen and enter the password before “**Loading Printer Agent (PA)**” message appears on the screen.

39. Click **Continue** button.



40. Click **OK** button.

After “**NDPS Printer Object Creation**” message appears, the following window appears on the screen.



41. Click **Cancel** button.

(1.1.3.3) Setting up the Client Computer. (Windows95 or Windows98).

Please follow the procedure described in (1.1.1.3) Setting up the Client computer.

(1.2.1) Use Netware ver5.0 with NDPS with lpr, TCP/IP protocol, NDS.

After installing the Ethernet card, please follow the below two major setup procedures.

(1.2.1.1) Setting up the printer settings in Netware ver5.0 file Server.

(1.2.1.2) Setting up the Client Computer.

(1.2.1.1) Setting up the printer settings in Netware ver5.0 file Server.

Set up your Client PC in advance so that you can login the server in NDS mode as the printer settings is done mostly on the Client PC. Please refer to Netware online manual for more detail.

1. Follow the procedure 1-32 of ((1.1.2.2) Setting up the printer settings in the server Netware ver5.0.

2. Select "**Remote (LPR on IP)**" as a **Connection Type** and click **Next** button.

Configure Port Handler for Printer Agent "P8420\_ND..."

Host Address  
 .  .  .

Host Name

Printer Name

Cancel Help < Back Next > Finish

3.If you specify the printer with the IP address:

Click **Host Address** check button and enter the IP address.

If you specify the printer with the host name.

Click **Host Name** check button and enter the host name.

4.**Printer Name** box shows PASSTHROUGH as a default name. Delete it and Enter one of the below three names with all upper caps.

xjdirect, xjprint,xjhold

These names are associated with the queues that KX-P8420 has inside. Only xjdirect is available when P8420 does not have HDD option.

Please refer to [\(1.1.1.1\)6 About KX-P8420 internal queue support](#) for more detail.

Configure Port Handler for Printer Agent "P8420\_ND..."

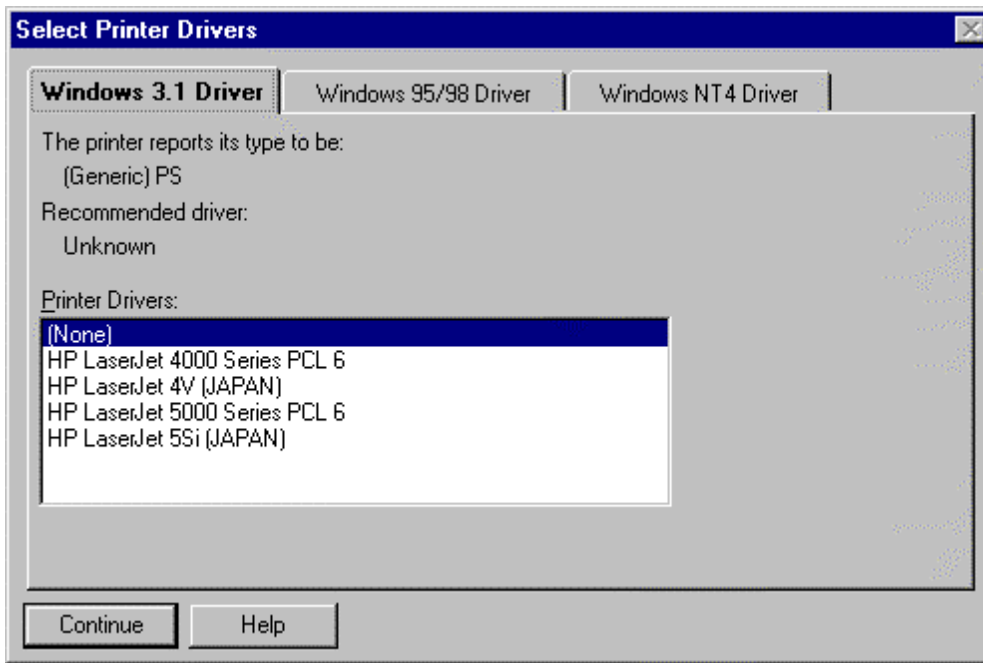
Host Address  
 .  .  .

Host Name

Printer Name

Cancel Help < Back Next > Finish

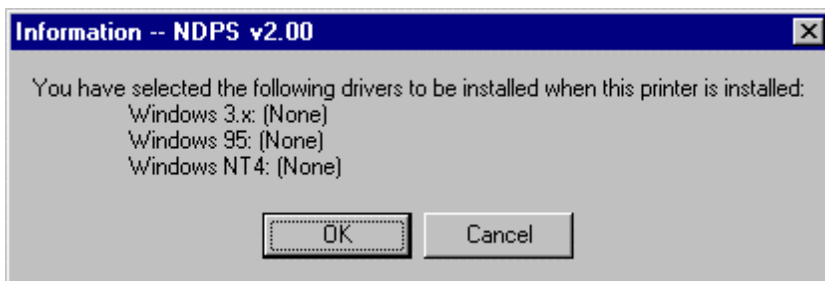
5. Click **Finish** button.



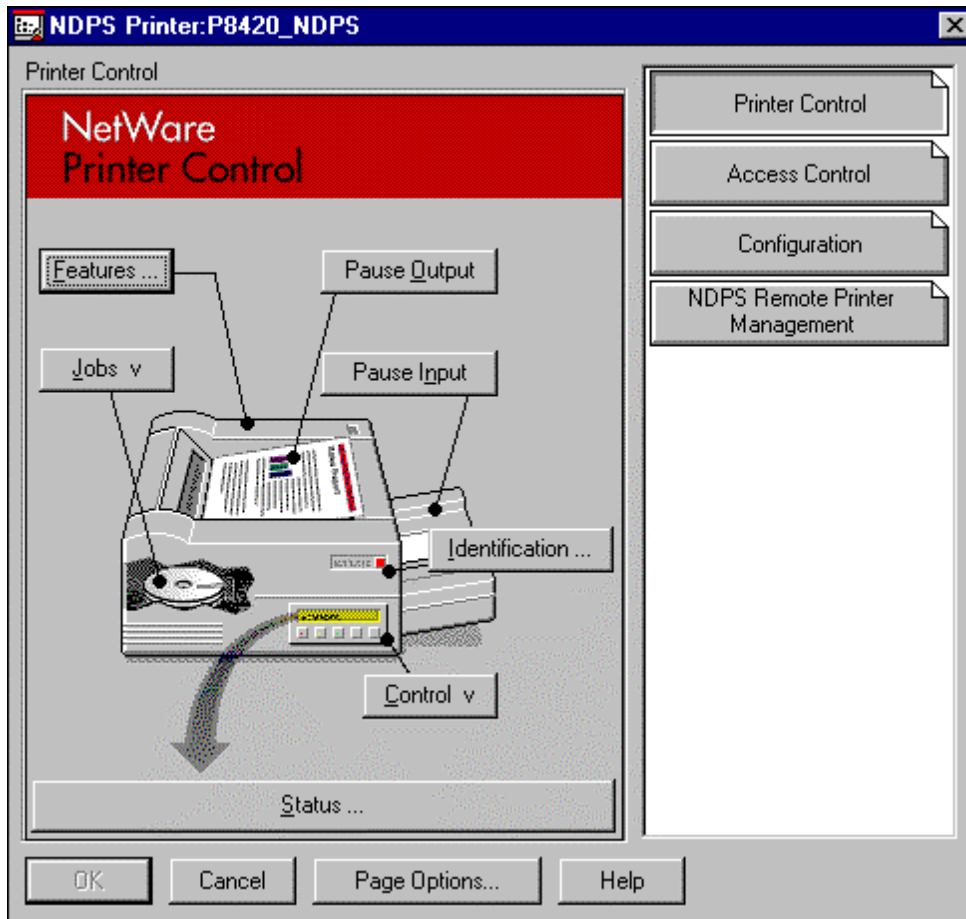
**NOTE:**

If password is specified for the user who manage, please go to the server console screen and enter the password before “**Loading Printer Agent (PA)** “ message appears on the screen.

6. Click **Continue** button.



7. Click **OK** button.



8. Click **Cancel** button.

Netware Administrator appears showing the created NDPS Printer.

(1.2.1.2) Setting up the Client Computer. (Windows95 or Windows98).

Please follow the procedure described in (1.1.1.2) Setting up the Client computer.