

Operation Manual of the Universal Printer Driver

Ver. 1.10

Content

1 About the Universal Printer Driver (UPD).....	2
1-1 System Environment	2
1-2 Software Requirements	3
2 UPD Installation	4
2-1 Operational Environment.....	4
2-2 Installation by Add a printer	5
2-3 Installation by Point & Print.....	8
2-4 Deletion of UPD.....	11
3 Setup of the UPD	12
3-1 Basic operation of UPD	12
3-1-1 Respective sections and their functions ([Settings] tab).....	12
3-1-2 Respective sections and their functions (Printer Selection screen).....	13
3-1-3 Language Change.....	15
3-1-4 Setup of an output (default) printer.....	16
3-1-5 Default Printer Change.....	18
3-1-5-1 Setup of Access Authority	18
Server-Client Environment	19
Client Environment	21
3-1-5-2 Default Printer Change	22
4 Other Remarks	23

1 About the Universal Printer Driver (UPD)

UPD serves as a printer driver capable of supporting multiple different (color/mono) Printer/MFP series. Conventionally, a dedicated printer driver has been supplied for each Printer/MFP series, and it was necessary to manage all of the printer drivers for a corresponding number of the MFP series in an environment such as a large office equipped with multiple different Printer/MFP series. For example, installation/upgrade of a Printer/MFP involved checking all types of Printers/MFPs used by each individual user, obtaining corresponding printer drivers, and performing necessary installation/upgrade. In such an environment with multiple printer drivers, the IT admin has been burdened with troublesome tasks such as handling the inquiries from the users and guiding them for proper operation.

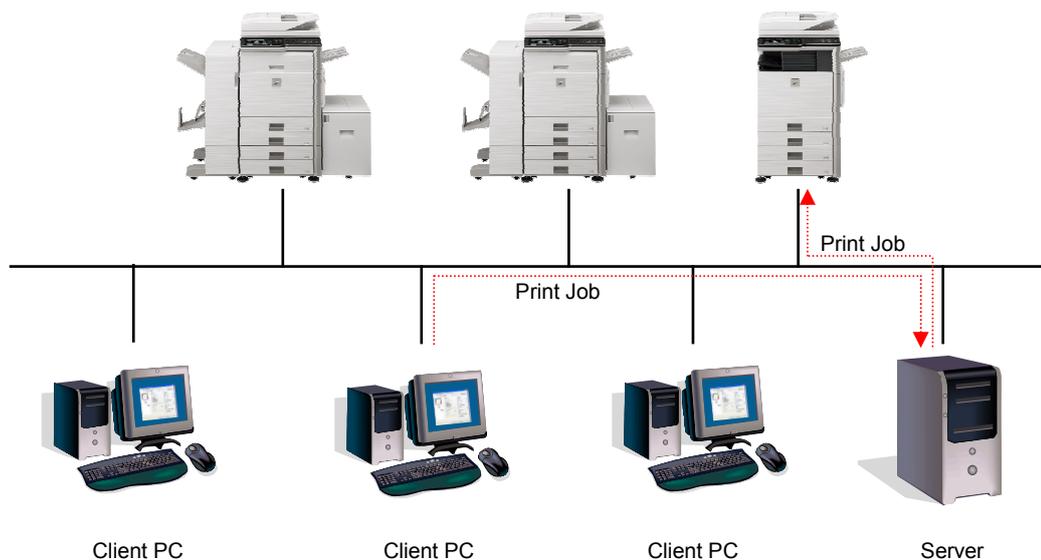
By introducing UPD, such burden of the IT admin as well as operational costs for printer drivers will be substantially reduced.

1-1 System Environment

UPD is intended to be used in either one of the following two system environments.

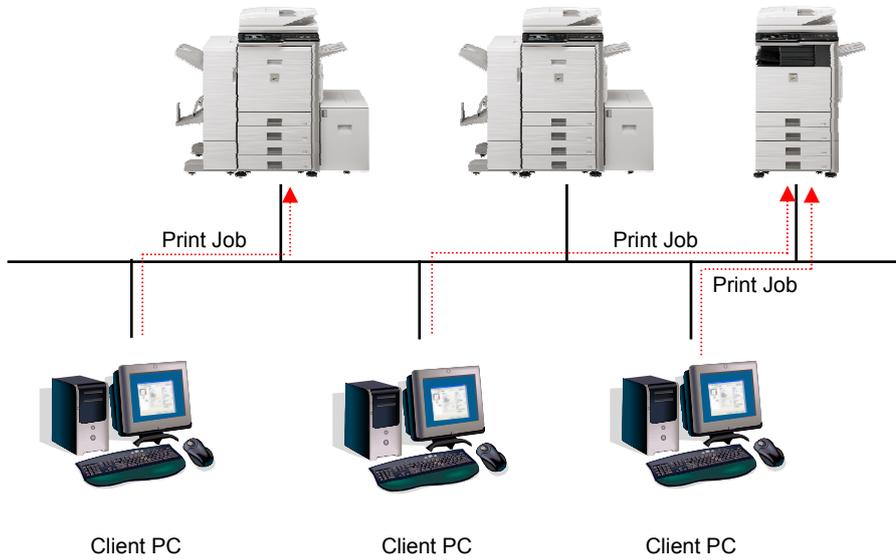
Server-Client Environment

The IT admin installs a printer driver to the server by Add a Printer, and each client user (or IT admin) installs a printer driver to the client PC by Point & Print. At the time of printing, a print job is sent to a printer via the server. See section 2-2 for the installation Step by Add a Printer, and section 2-3 for the installation Step by Point & Print.



Client Environment

Each client user (or IT admin) installs a printer driver to the client PC by Add a Printer, and at the time of printing, a print job is directly sent to a printer. See section 2-2 for the installation Step by Add a Printer.



1-2 Software Requirements

- The UPD supports the Hewlett-Packard PCL6 printer control languages.
- The UPD support language is following table.

Support Language	English	Dutch	Danish
	French	Italian	Norwegian
	Spanish	Swedish	Portuguese
	German	Finnish	

2 UPD Installation

2-1 Operational Environment

Before installing the UPD described in this manual, make sure that your computer satisfies the following requirements.

Required OS * ¹	Windows XP, Windows Vista, Windows 7, Windows Server 2003, Windows Server 2008, Windows Server 2008 R2. (Compatible with both 32 and 64 bit versions, but Windows Server 2008 R2 have not 32bit version.)
Computer	IBM PC/AT compatible machine equipped with LAN board compatible with 10Base-T/100Base-TX/1000Base-T
Display	1024x768 resolution and 16 bit or more color display capability are recommended.
Other hardware environment	The environment must allow the above OS to work properly.

*1 Starter Edition is not supported (Windows XP, Windows Vista, Windows 7). Embedded is not supported (Window XP).

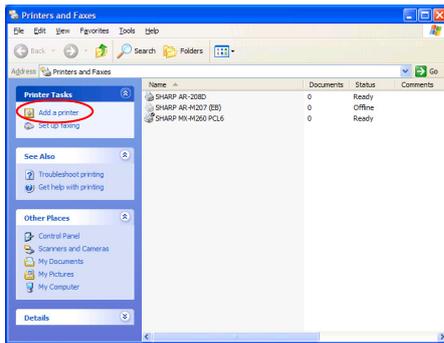
2-2 Installation by Add a printer

The installation of UPD to the server PC in Server-Client environment and to a PC in a client environment is done by OS standard, "Add a printer." It's Step for installing UPD in the Windows XP environment as follows.

Step

1 Extract the installation files of the UPD at any folder and store them.

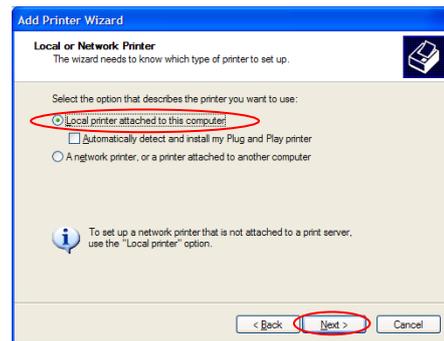
2 Open the [Printers and Faxes] in the Control Panel and click on the [Add a printer].



3 Click on the [Next] button.



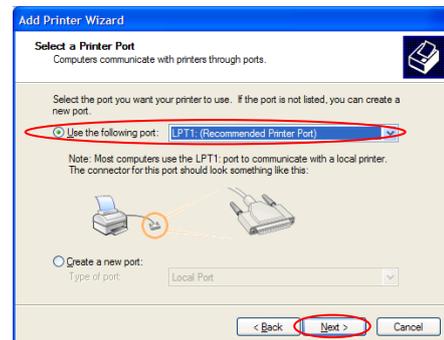
4 Check on the [Local printer attached to this computer] and click on the [Next] button.



Memo:

Do not check on the [Automatically detect and install my Plug and Play printer].

5 Check on the [Use the following port] and select any port, then click on the [Next] button.

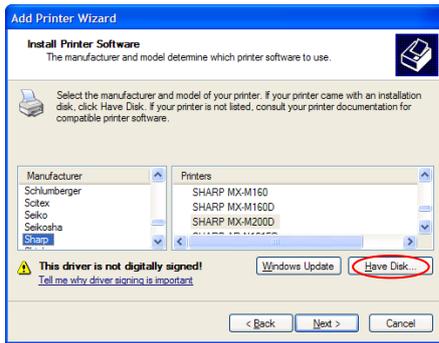


Memo:

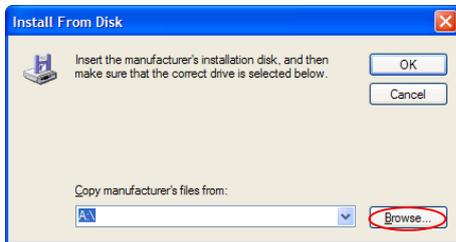
You select the printer as output printer after installing UPD and UPD makes the standard TCP/IP port for the printer.

In the Step 5, select any port and progress installation.

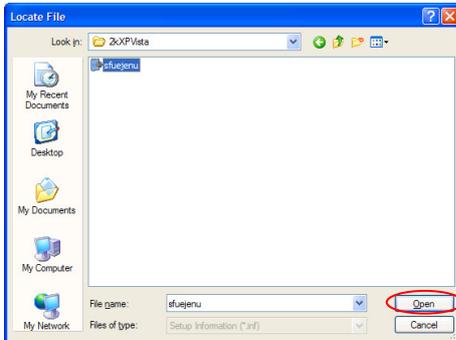
6 Click on the [Have Disk...] button.



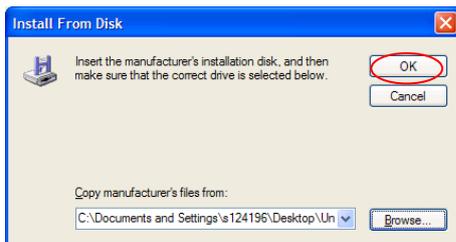
7 Click on the [Browse] button.



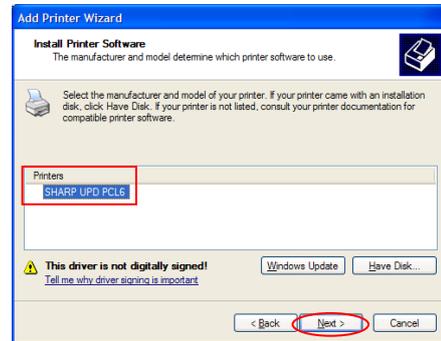
8 Select the Setup Information file (*.inf) in the folder where the installation files are extracted in the Step 1 and click on the [Open] button.



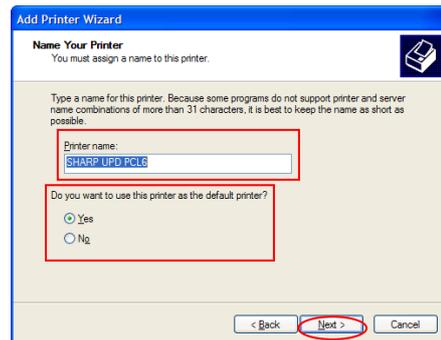
9 Click on the [OK] button.



10 Confirm that "Printers" shows "SHARP UPD PCL6" and click on [Next] button.



11 Enter the Printer name and set it as a default printer as necessary. Then click on the [Next] button.

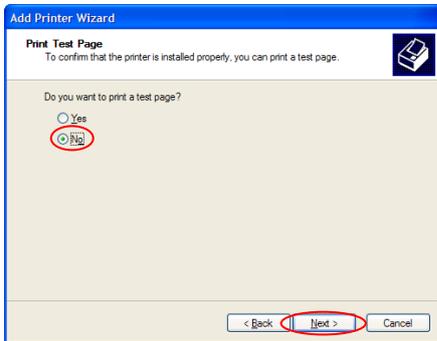


Memo:

When Printer name is not input, it is installed by the name of "SHARP UPD PCL 6".

When you specify the name of the printer used, enter any Printer name. Even when the default printer which is described in section 3-1-4 is changed, specified Printer name is not changed. For that case, the output has no problem though the Printer name is different between Printer name to output and specified Printer name.

12 Print Test Page is displayed. Check on the [No] and click on the [Next] button.



Remark:

- About the Test Page Print:
Since the output printer is selected after the installation of the UPD, a test page cannot be printed at the time of installation.

13 Click on the [Finish] button.
The installation will start.



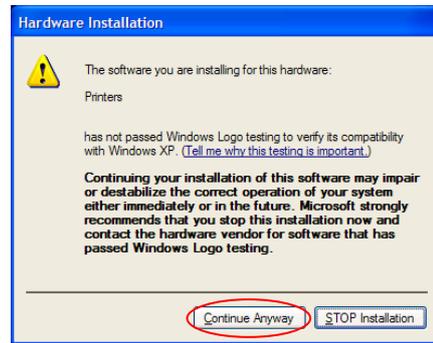
Memo:

- For the users of Windows Vista/ 7 /Server 2008 /Server 2008 R2:

If a warning window related to security is displayed, be sure to click on the [Install this driver software anyway].

- For the users of Windows XP/Server 2003:

If a warning window related to Windows Logo testing or Digital Signature is displayed, be sure to click on the [Continue Anyway] or [Yes] button.



Now, the installation is completed.

2-3 Installation by Point & Print

In UPD, the installation to a client PC in Server-Client environment is done by OS standard, “Point & Print.” Point & Print is a function which allows Windows users to establish connection to the remote printer without preparing any installation media such as disks. All required files and configuration information are automatically downloaded from the print server. The following are the procedures about the 3 Steps for Point & Print installation by Windows XP.

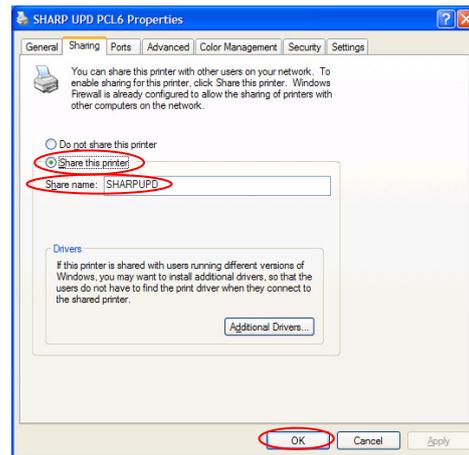
Memo:

- Before installation

It is necessary to set up an output printer and sharing of UPD at the server side in advance, before installation by Point & Print.

See the section 3-1-4 Setup of an output (default) printer for setting method of an output printer.

Check on the [Share this printer] and input [Share name] on the [Sharing] tab of [Property] of UPD, for UPD share setting at the server side.



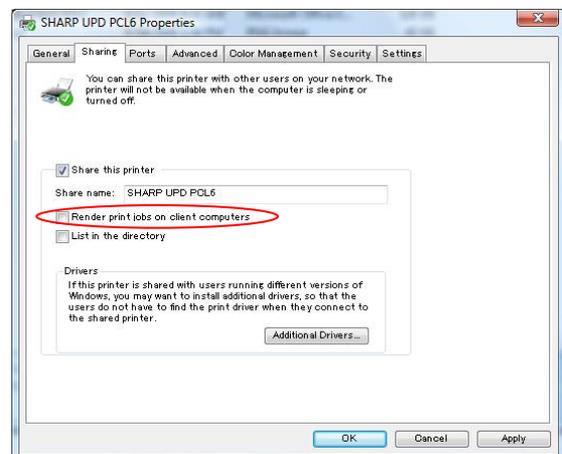
- When you use Windows Vista / 7 / Server 2008 / Server 2008 R2;

In Windows Vista / 7 / Server 2008 / Server 2008 R2, [Render print jobs client computers] check box is added in [Sharing] tab and it is turned on by default.

When the printer changeover is needed in Point & Print environment,

Be sure to turn off the above check box.

Otherwise printout will not be made on the printer selected by the client.



Installation by drag & drop

Step

1 On the command of [Specify the file name and execute] on [Start] menu, input the server name (for example: \\PrintServer) and click [OK] button.

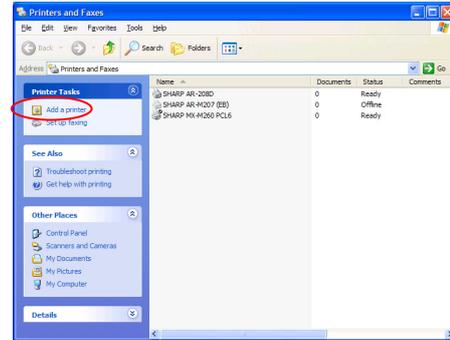
2 When the printers to be shared on the server are displayed, drag the icon of the target printer to [Printers and Faxes] folder of local work station.

Now, the installation is completed.

Installation by add a printer

Step

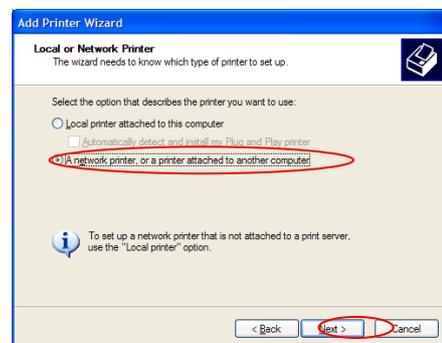
1 Open the [Printers and Faxes] in the Control Panel and click on the [Add a printer].



2 Click on the [Next] button.



3 Check on the [A network printer, or a printer attached to another computer] and click on the [Next] button.



Installation by double click

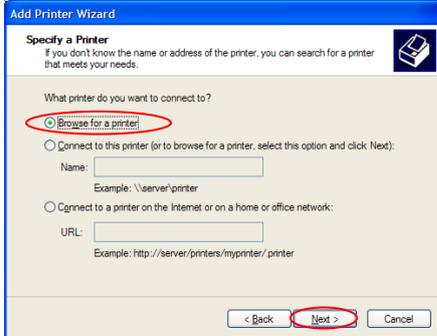
Step

1 On the command of [Specify the file name and execute] on [Start] menu, input the server name (for example: \\PrintServer) and click [OK] button.

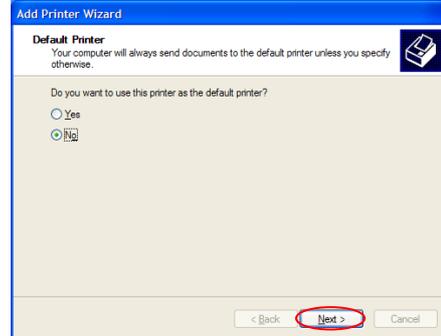
2 When the printers to be shared on the server are displayed, double click the icon of target printer.

Now, the installation is completed.

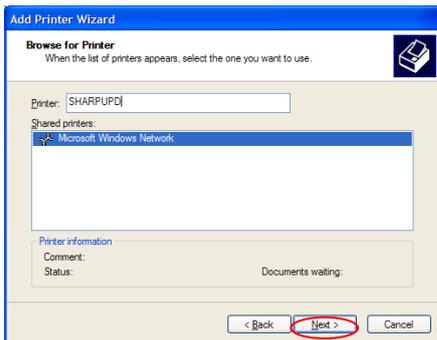
4 Specify the printer to be shared. To retrieve a printer, select the [Browse for a printer] and click on the [Next] button.



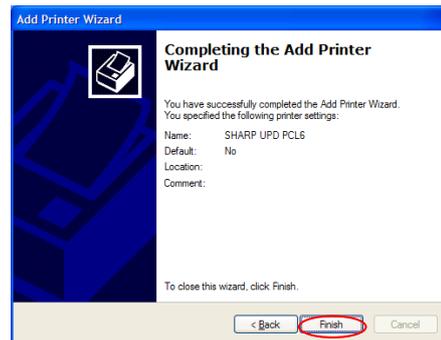
6 Select the printer as a default as necessary and click on the [Next] button.



5 Select a printer to be shared and click on the [Next] button.



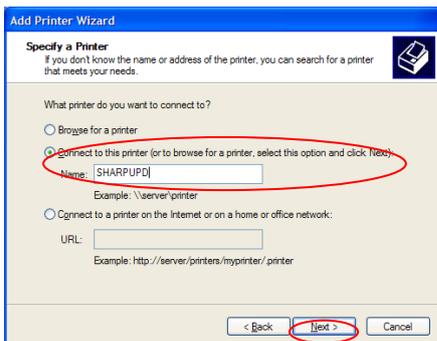
7 Click on the [Finish] button, then the installation will start.



Memo:

You can directly specify a printer to be shared. To do so, check on the [Connect to this printer (or to browse for a printer, select this option and click Next):] and specify a printer to be shared and click on the [Next] button.

Now, the installation is completed.

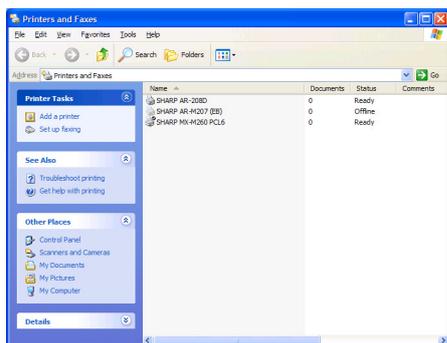


2-4 Deletion of UPD

It's Step for deleting UPD in the Windows XP environment as follows.

Step

- 1 Open the [Printers and Faxes] in the Control Panel and delete the driver.



- 2 Click on the [File] > [Server's Properties].
On the [Driver] tab, delete the driver.

- 3 Reboot your computer.

3 Setup of the UPD

3-1 Basic operation of UPD

In UPD, the [Settings] tab for setting an output printer (default printer*) and displayed language is newly added to the [Properties] of the UPD. Also, the Printer Selection to be displayed when a default printer is set on the [Settings] tab has been added.

* “default printer” means the printer to use for output in UPD. (“default printer” is used for this meaning hereafter.)

3-1-1 Respective sections and their functions ([Settings] tab)

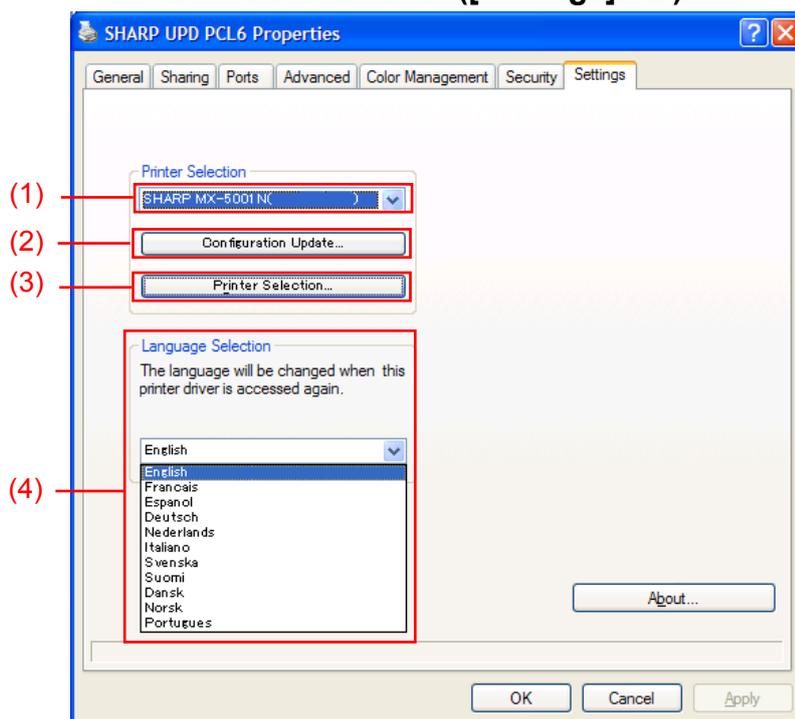


Fig. 1 [Settings] tab of UPD

(1) Printer Name (IP address)

The printer name (IP address) is displayed. A default printer can be set from the list of registered printers.

(2) “Configuration Update” button

When a selection of a default printer is changed, the configuration of the default printer displayed in (1) is acquired

(3) “Printer Selection” button

The Printer Selection screen is displayed. (See the next section, “Printer Selection screen.”)

(4) “Language Selection” button

Language displayed now in UPD is displayed. Language displayed in UPD can be set from the list of support languages (In default setting, it’s displayed in English.). When language is changed, [Settings] tab of [Properties] of the UPD, the Printer Selection screen and [Printing Preferences] are reflected the selected language. See 1-2 Software Requirements for support language.

3-1-2 Respective sections and their functions (Printer Selection screen)

The Printer Selection screen include search function (Fig. 2) or no search function (Fig. 3). The Printer Selection screen cannot include Search function (Fig. 3) from any client PC in a Server-Client environment.

In other case, the Printer Selection screen includes Search function (Fig. 2).

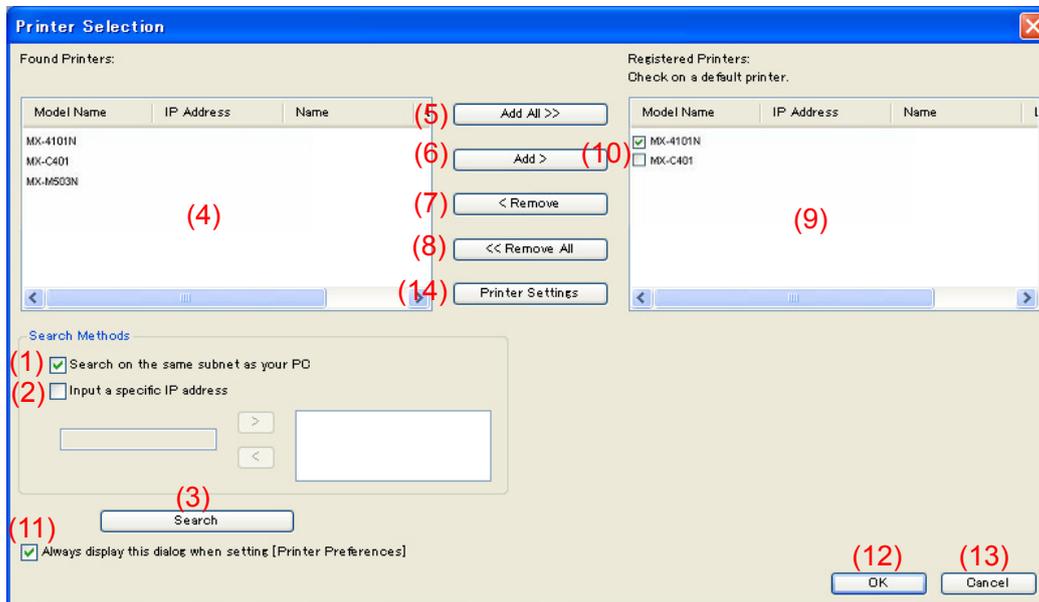


Fig. 2 Printer Selection screen with Search function

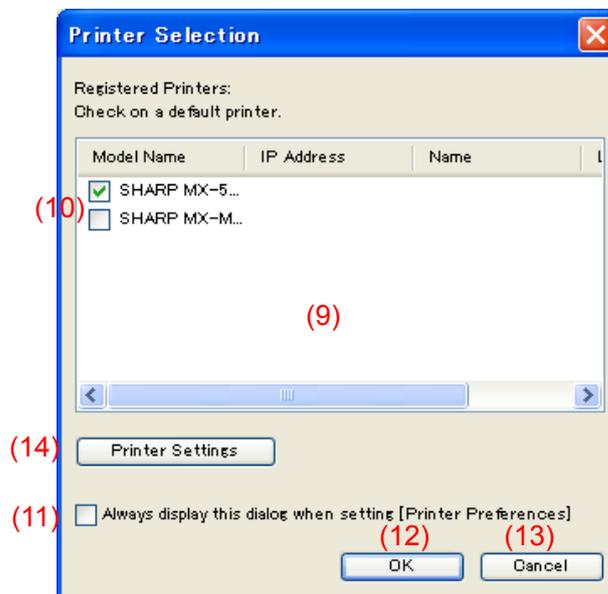


Fig. 3 Printer Selection screen without Search function

(1) Search on the same subnet as your PC

Printer search is performed within the same segment of the PC in use.

(2) Input a specific IP address

Enter the IP address of the printer to be used.
Enter the IP address in the text box below (2) and press the [>] button to add. To delete a printer, select the printer from the printer list on the right and press the [<] button.

(3) “Search” button

Printer search is performed based on the conditions set in (1) and (2).

(4) “Found Printers” screen

Found printers are displayed in the List Box.
The following items are displayed.

1. Model Name
2. IP Address
3. Name
4. Location

(5) “Add All” button

All the printers displayed in (4) are registered to (9), Registered Printers.

(6) “Add” button

Among the printers displayed in (4), selected (highlighted) Printer is registered to (9), Registered Printers.

(7) “Remove” button

Among the printers displayed in (9), selected (highlighted) printer is deleted.

(8) “Remove All” button

All the printers displayed in (9) are deleted.

(9) “Registered Printers” screen

Registered printers are displayed in the List Box.
The following items are displayed.

1. Model Name
2. IP Address
3. Name
4. Location

Remark:

In [Registered Printers], please make the number of registration of printer under-30. When over 30 printers are registered, operation is not guaranteed.

(10) Default Printer

This check box is for setting a default printer from the Registered Printers.

(11) Always display this dialog when setting [Printer Preferences]

This check box is for setting this Dialog to be displayed always on displayed [Printing Preferences].

(12) “OK” button

Current settings are saved and the Dialog is closed.

Remark:

When the printer selection screen is displayed from [Settings] tab, the settings won't be saved by pressing “OK” button of (12). “OK” or “Apply” button on [Settings] tab should be pressed to save the settings.

(13) “Cancel” button

Current settings are cancelled and the Dialog is closed.

(14) “Printer Settings” button

The web page of the selected printer is activated.

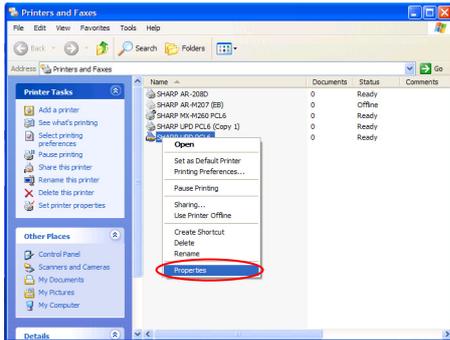
3-1-3 Language Change

In UPD, displayed language can be changed. See 1-2 Software Requirements for support language.

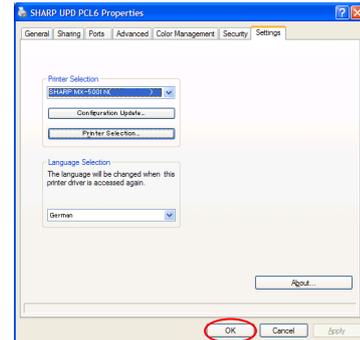
It's Step for setting default printer of UPD in the Windows XP environment as follows.

Step

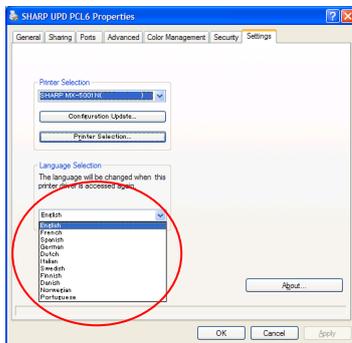
- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



- 3 Click on the [OK] button, and Settings are reflected. (The language will be changed when this UPD is accessed again.)



- 2 On the [Settings] tab of the UPD, click on the drop-down list of Language Selection, and select a displayed language.



Now, the Language Change is completed.

Memo:

In tabs of [Properties] of the UPD, only [Settings] tab is reflected the selected language. Other tabs are described based on language which Windows OS is supported

3-1-4 Setup of an output (default) printer

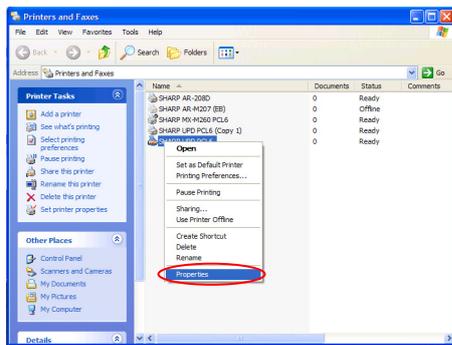
A default printer needs to be set up after the installation. Some users cannot set up a default printer depending on their authorization levels. See 3-1-5-1 Setup of Access Authority for more detail. It's Step for setting default printer of UPD in the Windows XP environment as follows.

Remark:

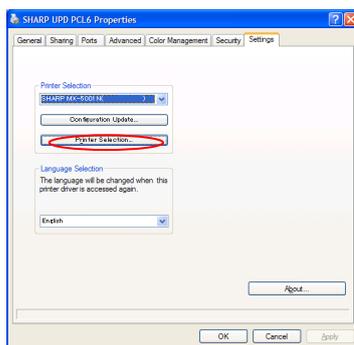
In a Server-Client environment, this setup must be done on server PC before the UPD is installed to respective client PCs, while in a client environment, it must be done by user which has [Manage Printers] before using the UPD.

Step

- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



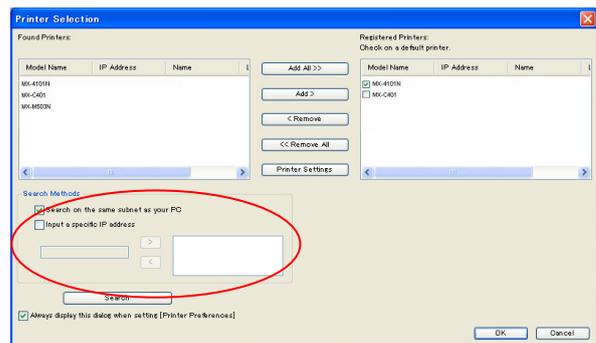
- 2 On the [Settings] tab of the UPD, click on the [Printer Selection] button.



Memo:

In the Step 2, clicking on the [Printing Preferences] of the [General] tab gives the same effect when you check [Always display this dialog when setting [Printer Preferences]] of (11) of section 3-1-2.

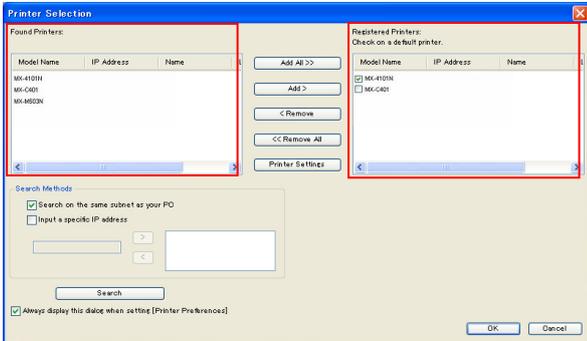
- 3 After the Printer Selection dialog is opened, select the [Search on the same subnet as your PC] button and click on the [Search] button. The search will start.



Memo:

If you want to directly specify a printer to be used, check on the [Input Specific IP Address] and enter an IP address at the text box below. Click on the [>] button and register IP address. Then click on the [Search] button to start the search.

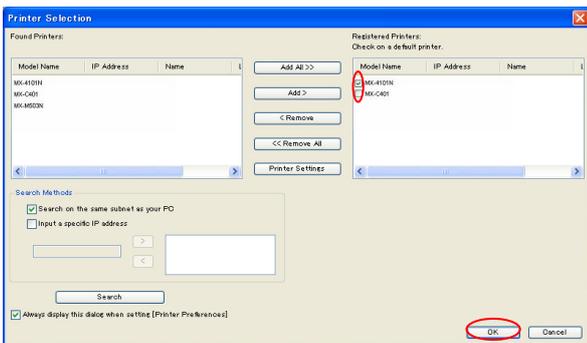
4 Found printers will be displayed in the Searched Printers. Click on the [Add All] or [Add] button to register the printers to be used to the Registered Printers.



Remark:

In [Registered Printers], please make the number of registration of printer under-30. When over 30 printers are registered, operation is not guaranteed.

5 The Registered Printers have respective check boxes. Check on the box of the printer to be set as a default printer and click on the [OK] button.

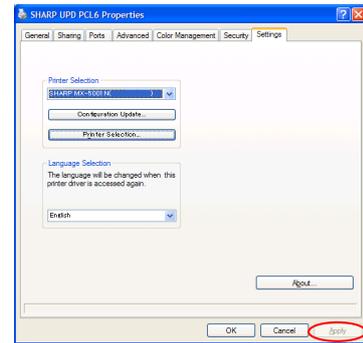


Memo:

When the printer selection screen is displayed from [Printing Preferences], information about main frame option is acquired automatically by clicking [Apply] button.

When the printer selection screen is displayed from [Settings] tab, information about configuration is acquired automatically by clicking [Apply] button at the Step 6.

6 Click on the [Apply] button to apply the setting.



Now, the default printer setup is completed.

Remark:

Before a default printer is set, the [Printing Preferences] of the UPD displays a screen as shown in Fig. 4, and you can't print to the printer that you want to print. After a default printer is set, the setup screen according to the default printer is displayed as shown in Fig. 5 and you can print. Its machine image is not displayed.

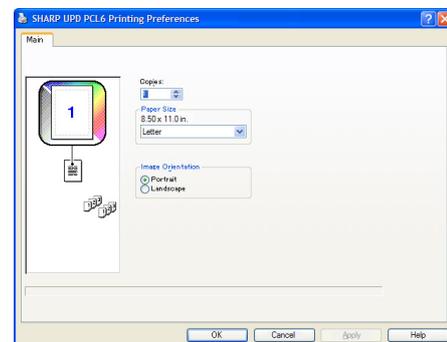


Fig. 4 [Printing Preferences] without a default printer set

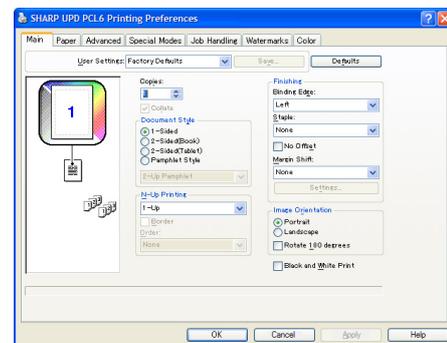


Fig. 5 [Printing Preferences] with a default printer set

3-1-5 Default Printer Change

In UPD, EMF is specified as default for "Spool Data Format" to actualize default printer change. If EMF is default for "Spool Data Format", the following restrictions are applied.

	Server-Client environment		Client environment
	Server PC	Client PC	
Auto Job Control Review	Not supported	Not supported	Not supported
Image Stamp	Supported	Not supported	Supported
Overlays	Supported	Not supported	Supported

Memo:

When RAW is set for "Spool Data Format", the above restrictions are not applied. But some data may not be printed out on the target printer from the client PC under Server-Client environment.

Remark:

Since the print processing is done at the server side with EMF in the server-client environment, print jobs are concentrated on UPD of server, it might take time to print.

Installing multiple UPD on server and setting default printer for each UPD enable to improve print processing time, compared with one UPD. For instance, UPD is installed for each printer and you can use UPD just like a usual driver (only for model) for each printer.

■ For installing UPD multiple times:

See and follow the section 2-2 for installing UPD multiple times (with naming [Printer name] unique name at Step 11 of section 2-2). After installation of UPD multiple times, perform "Allowing change of the default printer by client PC" described on the next section for each UPD.

- ⇒ After installation of UPD multiple times, you can manage printers per group or user by setting access authority for each UPD. See a next section "Printer management per group or user"

3-1-5-1 Setup of Access Authority

As a default setting which does not set Access Authority in UPD, users who install UPD can change the default printer. To allow all the users to change the default printer, the following settings/operations need to be done. It's Step for setting Access Authority in the Windows XP environment as follows.

Remark:

In the circumstances that both users with/without permission of [Manage Printers] are mixed, some data may not be printed out to the target printer. It is recommended that [Manage Printers] is permitted for all users, or cancel the check on permission for all users.

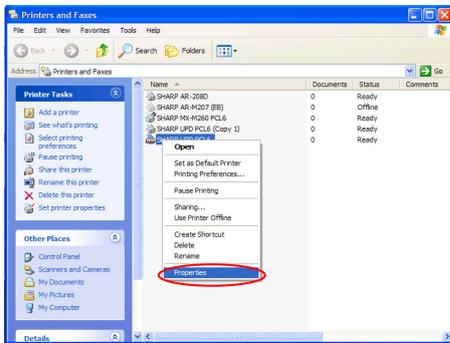
Server-Client Environment

Allowing change of the default printer by client PC

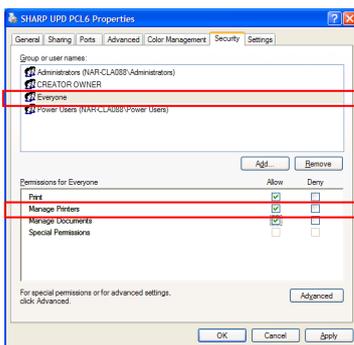
By giving printer management authorization of the server PC to all client users who use the UPD, respective users can change the default printer.

Step

- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



- 2 On the Security tab of the [Properties] of the UPD, check the [Manage Printers] of all login users (Everyone) to [Allow].

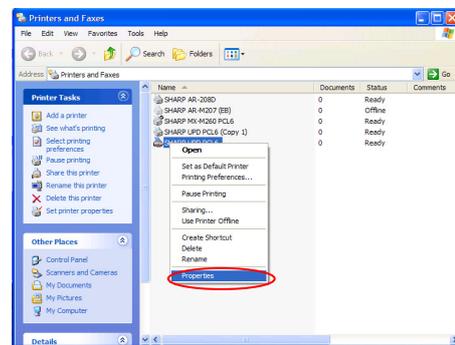


Prohibiting change of the default printer by client PC

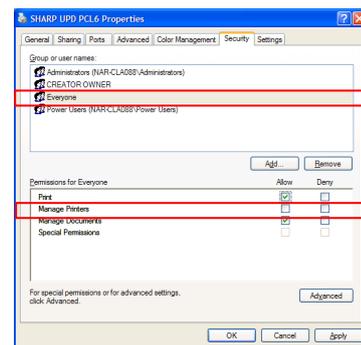
Only the server PC can set/change the default printer. (This is the default setting.)

Step

- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



- 2 Uncheck the [Allow] of the [Manage Printers] for all client users (Everyone) on the Security tab of the [Properties] of the UPD.



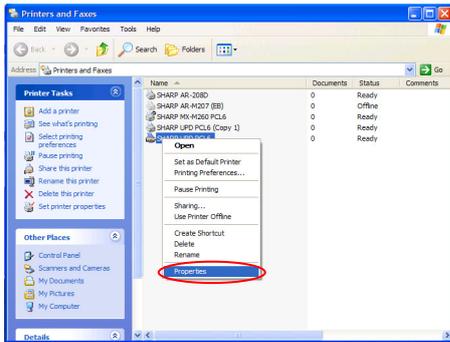
Printer management per group or user

This printer management is applied when a printer to needs to be set per group or user.

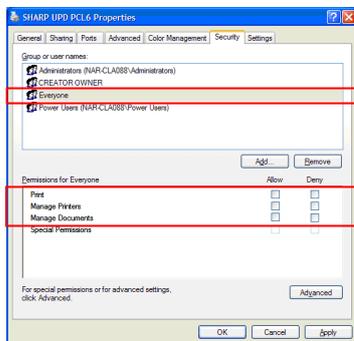
Step

1 Install the UPD according to the Steps described in 2-2 and 3-1-4, and register the printers to be used and set a default printer.

2 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



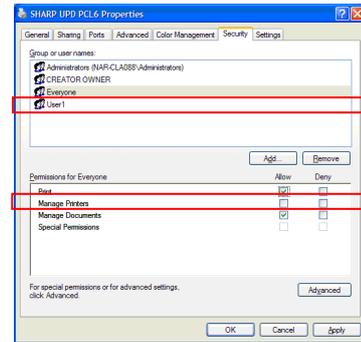
3 Uncheck the [Allow] of the [Print], [Manage Printers] and [Manage Document] for all client users (Everyone) on the Security tab of the [Properties] of the UPD.



4 On the Security tab of the [Properties] of the UPD, click on the [Add] button of the [Group or User names] to register a user to be allowed.



5 Check the [Allow] of the [Print], [Manage Documents] for the users added at the Step 4 on the Security tab of the [Properties] of the UPD.



Remark:

Users added at the Step 5 cannot change the printer. If change of printer is needed, please check [Allow] of [Manage Printers] for all users you want to let use.

6 To apply the same printer management to multiple groups or users, install additional UPDs ([Printer name] at Step 11 of section 2-2 is unique name for the respective groups/users) and register respective defaults printers. Perform the setup in the Step 3-5 of this section for the respective additional UPDs.

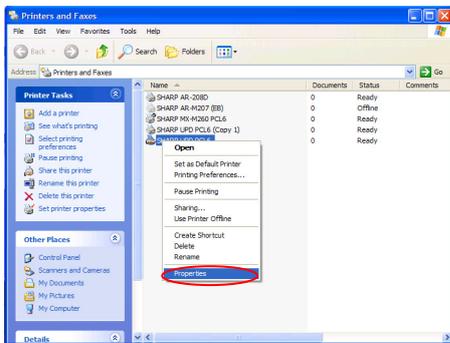
Client Environment

Allowing change of the default printer by all users

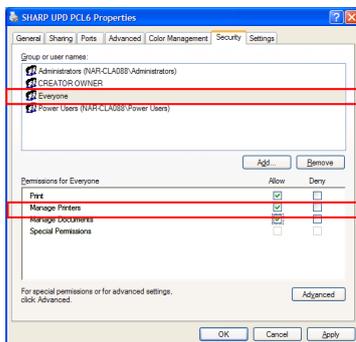
By giving printer management authorization to all client users who have logged in, respective users can change the default printer.

Step

- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



- 2 On the Security tab of the [Properties] of the UPD, set the [Manage Printers] of all login users (Everyone) to [Allow].

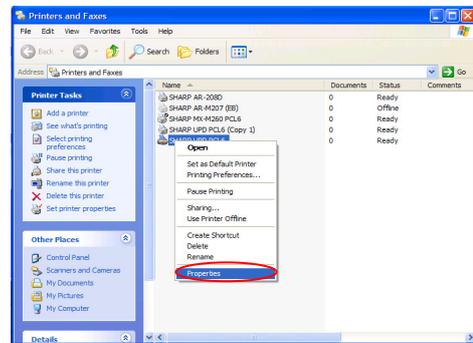


Prohibiting change of the default printer by all users

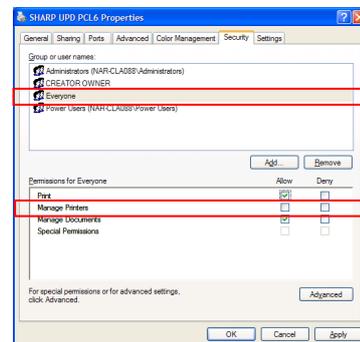
Only the printer admin can set/change the default printer. Each user can only print to the default printer that is set by the printer admin. (This is the default setting.)

Step

- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



- 2 Uncheck the [Allow] of the [Manage Printers] for all the log-in users (Everyone) on the Security tab of the [Properties] of the UPD.

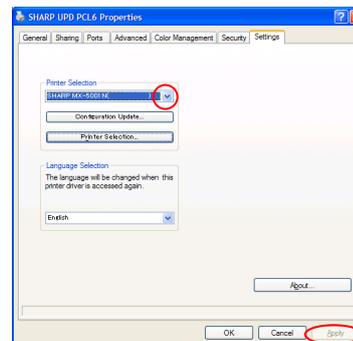
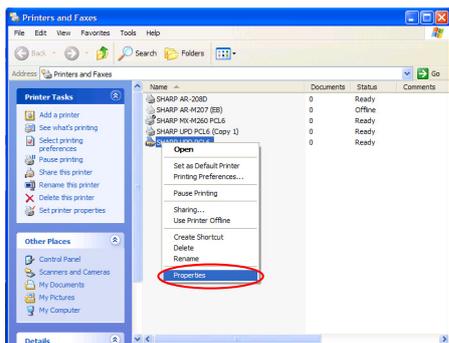


3-1-5-2 Default Printer Change

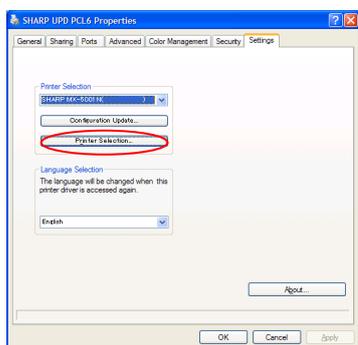
It's Step for installing UPD in the Windows XP environment as follows.

Step

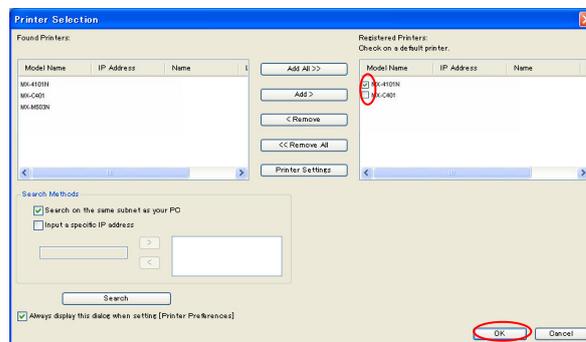
- 1 Open the [Printers and Faxes] in the Control Panel and open the [Properties] of the UPD.



- 2 On the [Settings] tab of the [Properties] of the UPD, click on the [Printer Selection] button.

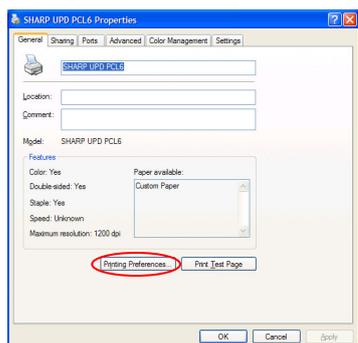


- 3 Check on the printer to be used as a default printer in the [Registered Printers] and click on the [OK] button.

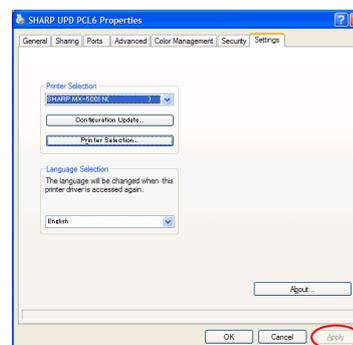


Memo:

In the Step 2, clicking on the [Printing Preferences] of the [General] tab gives the same effect when you check [Always display this dialog when setting [Printer Preferences]] of (11) of section 3-1-2.



- 4 Click on the [Apply] button and reflect a setting.



Now, the change is effected.

4 Other Remarks

In the UPD, tandem print cannot be used.

