PR-C201 Card Printer
Printer Driver Manual

## **Contents**

# 1  Overview

This manual describes the PR-C201 (hereafter, referred to as card printer) printer driver network settings, the setting procedure for using the shared printer function via USB, as well as restrictions in terms or operation.

## 1.1  Copyright/Trademark

・Microsoft, Windows 7, and Windows XP are registered trademarks of Microsoft Corporation in the U.S. and other countries.

  * The Windows® operating system name may be indicated in this manual as follows for convenience.
    Please take note.

      Microsoft® Windows® XP operating system       →       Windows XP

      Microsoft® Windows® 7 operating system       →       Windows 7

・Other company/product names used in this manual are trademarks or registered trademarks of their respective companies.

## 2  Using the printer via a network

### 2.1  Precautions when using a network

・Perform network settings following the instructions of the network administrator.
・If the network settings are incorrect, that may affect other network devices.


### 2.2  Network settings

#### 2.2.1.  Network port settings

The network port settings can be viewed/changed using the following procedure.

(Point) The following uses Windows XP + PR-C201 as an example.
If you are using an operating system other than Windows XP, replace the "Windows XP" parts
with your operating system when reading.


(1) Open the [Nisca PR-C201 Network] properties of the printer folder and select the [Ports] tab.
(2) Click [Configure Port] to open [Nisca TCPIP PortMonitor].
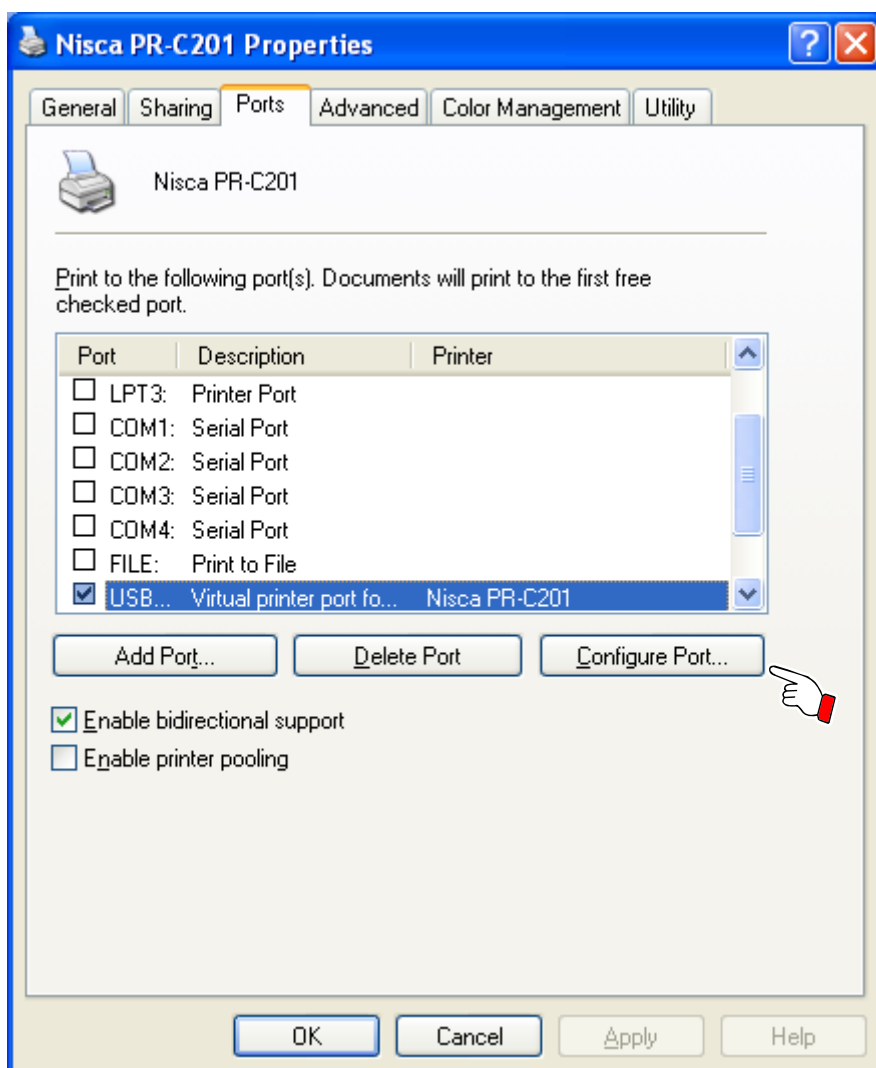
■Nisca TCPIP PortMonitor screen

You can check the [Port name], [IP address], and [Host name (Printer ID)] on this screen.
When changing the settings, click the [Network port setting] button, and start the Network port setting tool.
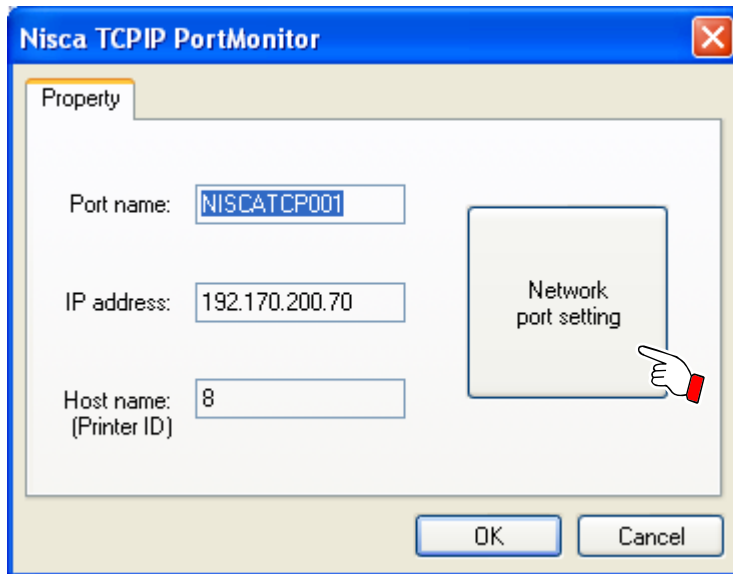


Port name:
    The name of the TCP port used by the PR-C201 printer driver is displayed.
    The port name cannot be changed.
IP address:
    The IP address of the printer used by the PR-C201 printer driver is displayed.
    You can change the IP address from the printer's Operation Panel or from the Network port
    setting tool.
Host name (Printer ID):
    The Printer ID of the printer used by the PR-C201 printer driver is displayed.
    You can change the Printer ID from the printer's Operation Panel or from the Network port
    setting tool.
Network port setting button:
    This displays the Network port setting tool.

### 2.2.2  Network port setting tool

Click the [Network port setting] button on the Network port setting screen to display the tool.
With the Network port setting tool, you can select the printer used by the PR-C201 printer driver.
You can also change the network settings of the selected printer on the PC screen.

■Network port setting tool screen
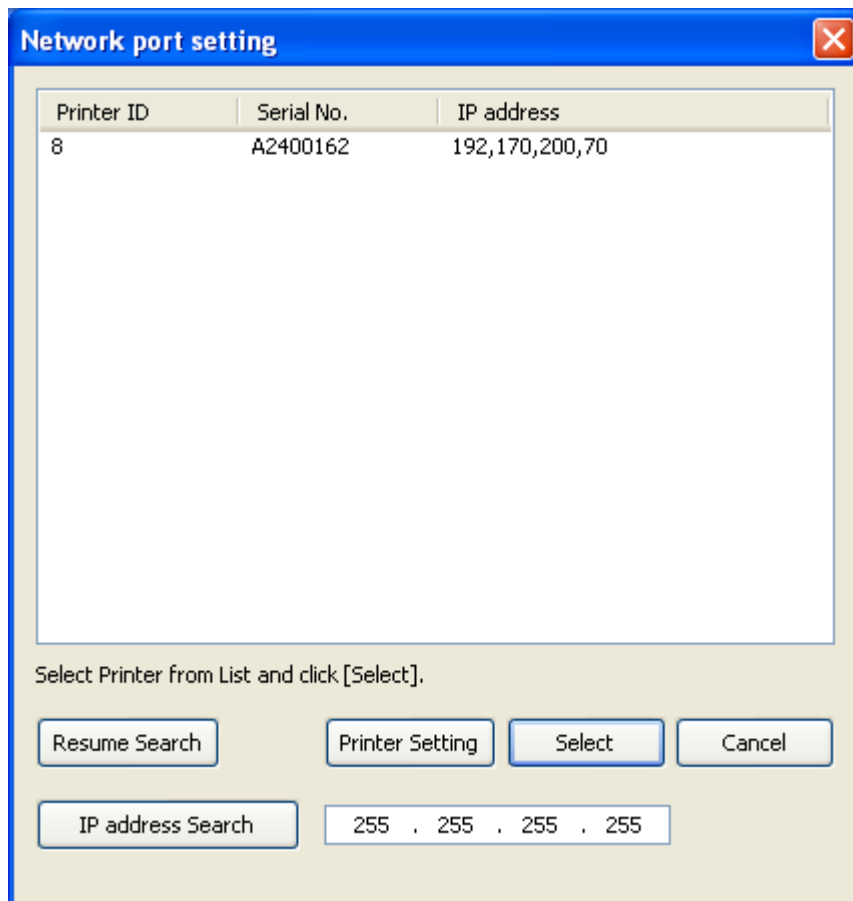


When you open this screen, printers connected to the same network (same segment) will be displayed in a list.

Resume Search:
    When you reconnect to a network and it is not visible although you are already connected, click [Resume Search]. Printers that are currently connected will be displayed in a list.
Printer Setting:
    You can view/change the network setting details of the printer.
    After selecting a printer from the list, click [Printer Setting].
    The Printer Setting screen is displayed.
Select:
    This selects the printer to be used.
    After selecting a printer from the list, click [Select].
IP address Search:
    This searches for printers connected outside of the same network (same segment).
    After specifying the IP address, click [IP address Search].
    Printers that are currently connected will be displayed in a list.

### 2.2.3  Printer settings

Click [Printer Setting] on the Network port setting tool to display the screen.
You can change the network settings of a printer on a PC screen through the Printer Setting screen.

■Printer Setting screen



Settings before and after changes are displayed.
Before Change cannot be edited since it is only used for reference.
When changing settings, set values for the input controls of After Change.
To set the changed values in the printer, click [Setting].
To close the screen without making any changes, click [Cancel].

Printer ID:
     This is the unique ID attached to a printer to identify it.
     The default setting is [8].
     When there are multiple printers connected to the PC, it is necessary to assign a unique
     number for each whether it is a USB printer or a network printer.
MAC Address:
     This displays the MAC address of the printer. This cannot be changed.
Session time-out(sec):
     This is the timeout time of the network communication.
     The default setting is [30] seconds.

IPSec:

This enables/disables IPSec.

If this is set to ON, a [IPSec pre-shared key] must be set.

IPSec setting must also be made on the PC side.

See p.8 for details.

IPSec pre-shared key:

This is the IPSec pre-shared key.

DHCP:

This enables/disables the automatic IP address acquisition function.

If DHCP is turned ON, the printer will automatically acquire an IP address/Subnet mask/Default gateway from the DHCP server.

However, a DHCP server will be necessary.

IP address:

This is the printer's IP address.

Subnet mask:

This is the printer's Subnet mask.

Default gateway:

This is the printer's default gateway.

Password Setting:

If a printer password is set, it is masked on the Properties screen of the printer driver.

Password:

This is the printer's password.

## 2.3  IPSec settings

By performing encrypted communication through IPSec, the security of communication between the PC and the printer can be improved. This printer supports the following algorithms.
　　◇ESP confidentiality (encryption algorithm):  AES / 3DES / DES
　　◇ESP consistency (authentication algorithm):  SHA1 / MD5

### 2.3.1  Precautions when using IPSec

When using IPSec to perform encrypted communication, setting the printer and PC is necessary.
If the printer and the PC are not properly set, encrypted communication cannot be performed.

### 2.3.2  How to set IPSec

The PR-C201 only supports pre-shared key authentication.
That is why it is necessary for you to set a pre-shared key for the printer, as well as the PC.

■PR-C201 IPSec settings



(1) On the Printer Setting screen of the Network port setting tool, set [IPSec] to ON.
(2) On the [IPSec pre-shared key] input field, enter the "IPSec pre-shared key" that is the same with the one on the PC, and click [Setting].

■PC IPSec settings

On the "Local Security Settings" of the PC, make security settings for the communication with the printer.
The detailed setting method has been omitted from this instruction manual since it is a standard procedure.
　　◇Protocol:　TCP
　　◇Security method:　Security negotiation
　　◇Authentication method:　Pre-shared key
　　◇Tunnel settings:　An IPSec tunnel is not specified

## 2.3.3  Advantages and disadvantages of encrypted communication using IPSec

| PC setting / Printer setting | Local security setting (policy allocation) | | |
|---|---|---|---|
| | Yes | No | Not set |
| IPSec disabled | Communication not possible | Normal communication | Normal communication |
| IPSec enabled | Encrypted communication | Communication not possible | Communication not possible |

## 2.4  How to add a network printer

This section explains how to add a network printer to a network upon which a network printer is already used (printer driver installed)

**Point** The following uses Windows XP, 7 + PR-C201 as an example.
If you are using an operating system other than Windows XP or 7, replace the "Windows 7" parts with your operating system when reading.

Configure network settings for the printer to add to the network.
It is necessary to set "Printer ID" and "IP address" in order that these are different to those already connected to the network.
Settings can be carried out from the Operation Panel.
See "Changing Network Connection Settings" of the "Operation Guide" for how to use the Operation Panel to set printer network settings.
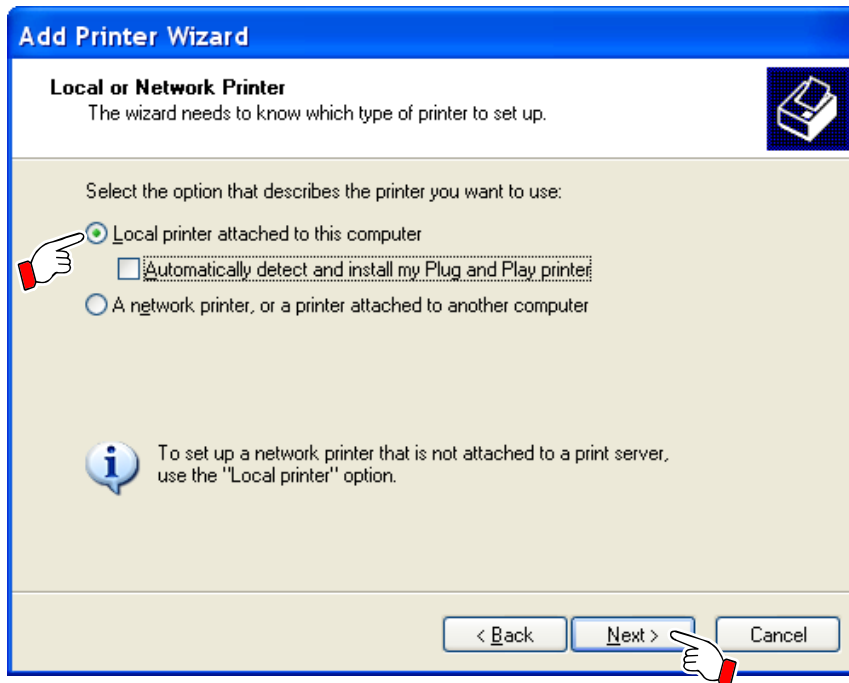
### 2.4.1  Windows XP

(1) Connect the printer to add to the network.

(2) On the PC that is adding the printer, from the Start menu, open "Printers and Faxes".
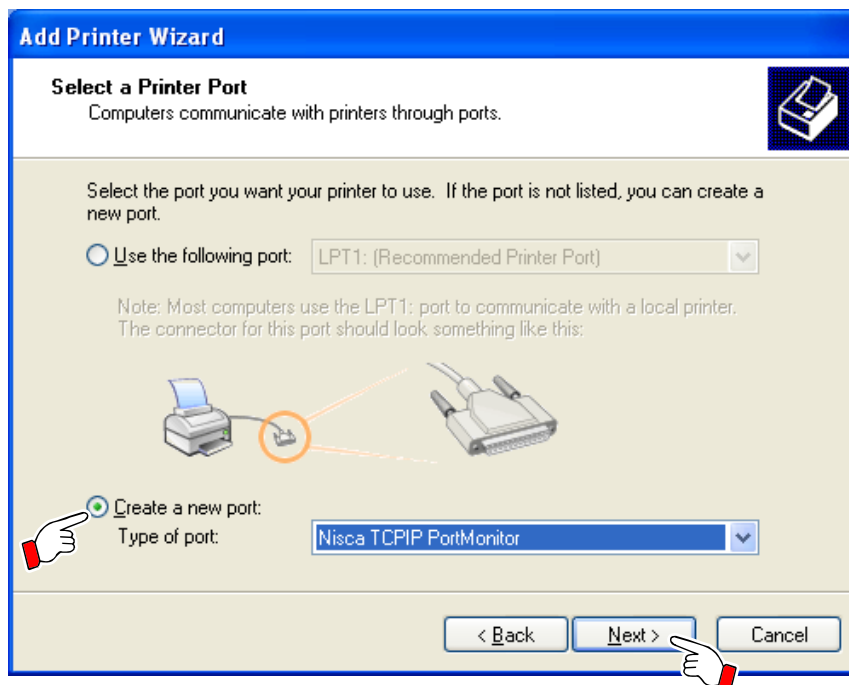Click "Add a printer".
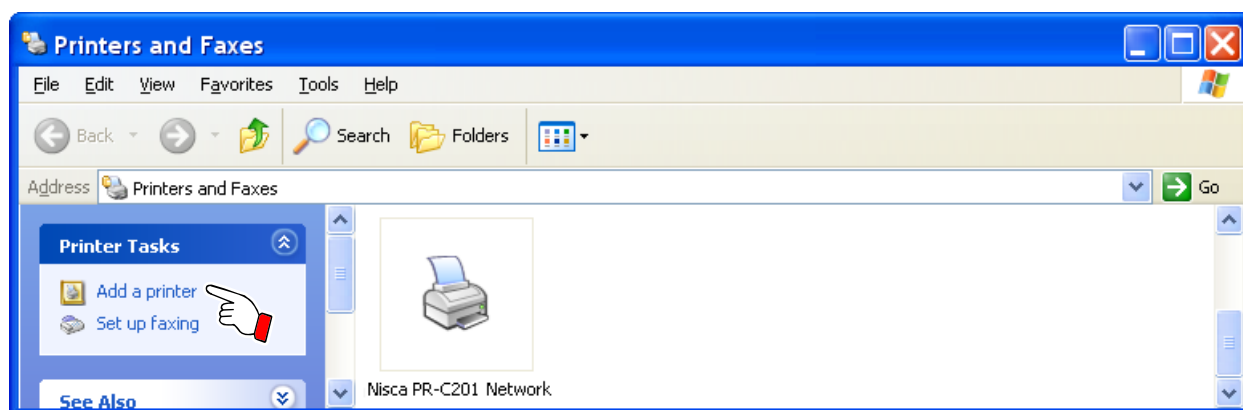


(3) The "Welcome to the Add Printer Wizard" screen is displayed.
Click "Next".
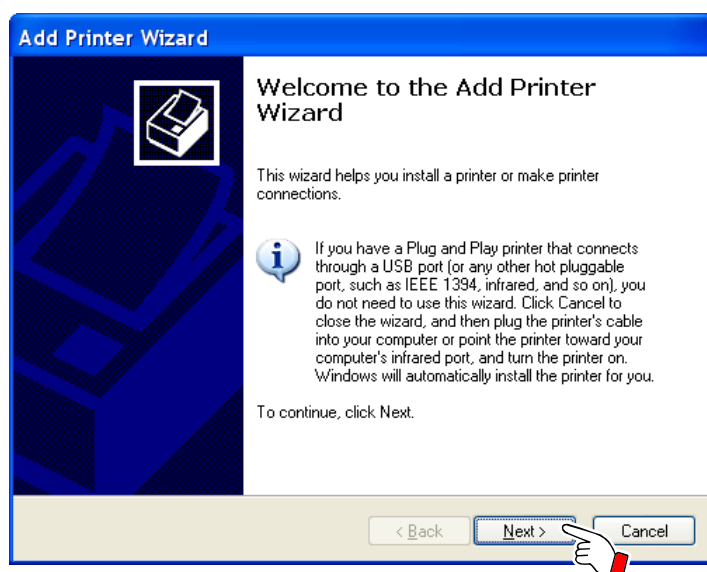
(4) Open the "Local or Network Printer" screen.
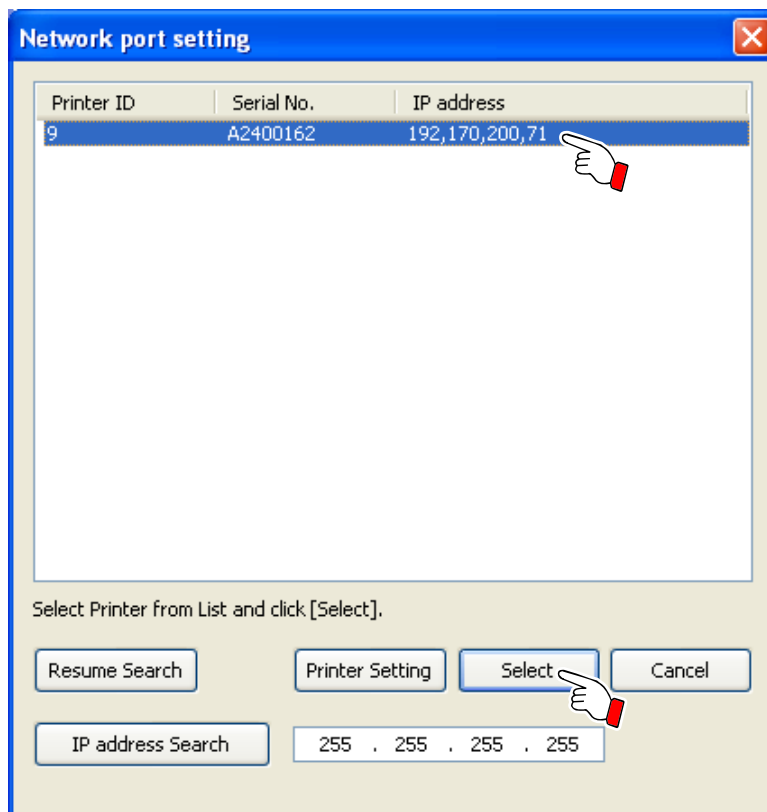Select the "Local printer attached to this computer".
Click "Next".



(5) Open the "Select a Printer Port" screen.
Click "Create a new port:", and in Type of port:, select "Nisca TCPIP PortMonitor".
Click "Next".

(6) Open the "Nisca TCP PortMonitor" screen.
Click "Network port setting".
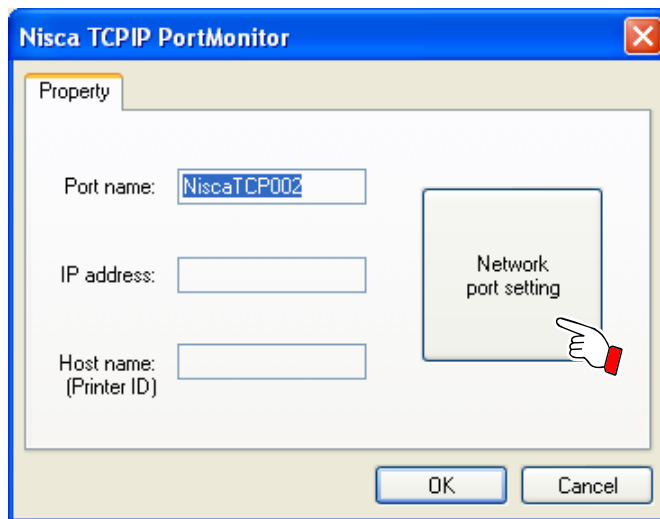


(7) Open the "Network port setting" screen.
From the list, select the printer to add, and click "Select".

(8) In the "Nisca TCP PortMonitor" screen "IP address" and "Host name (Printer ID)", confirm that
    the "IP address" and "Host name (Printer ID)" for the printer to add are displayed.
    Click "OK".
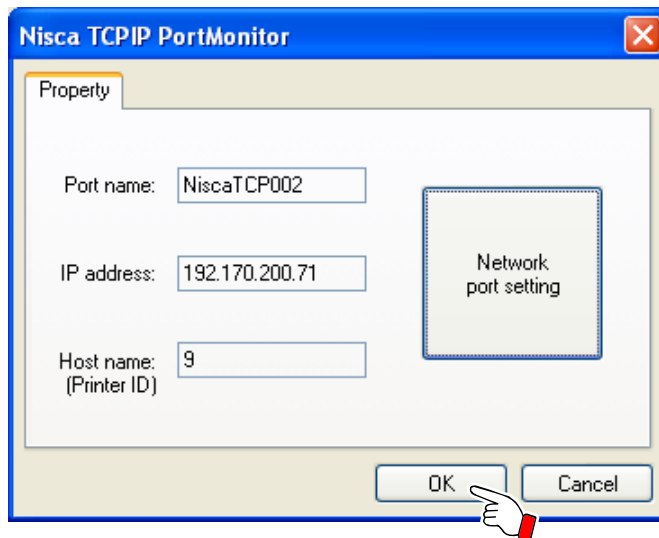


(9) The "Install Printer Software" screen is displayed.
    From the printer list, select "Nisca PR-C201 Network", and click "Next".
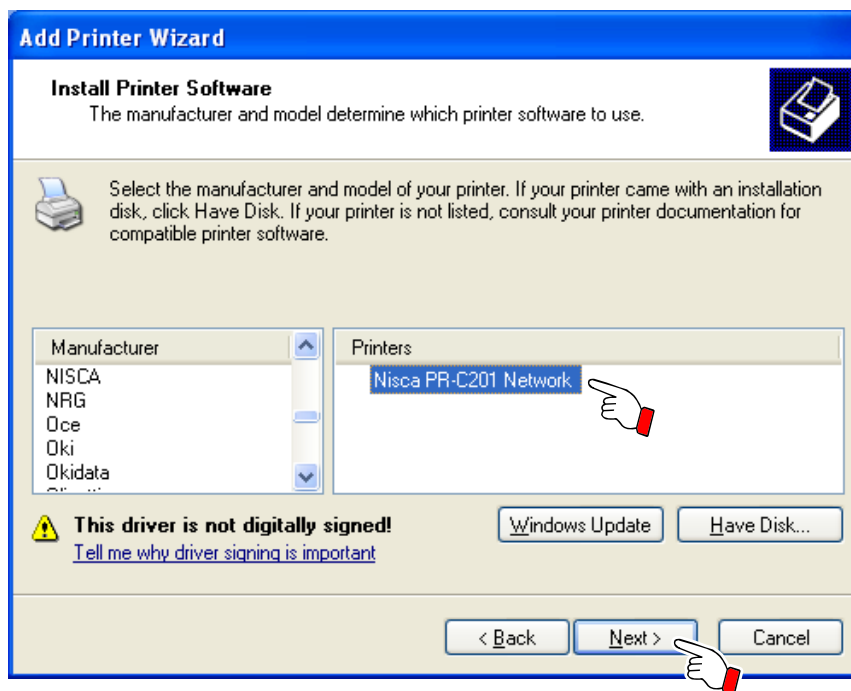
(10) The "Use Existing Driver" screen will be displayed.
    Select "Keep existing driver (recommended)", and click "Next".
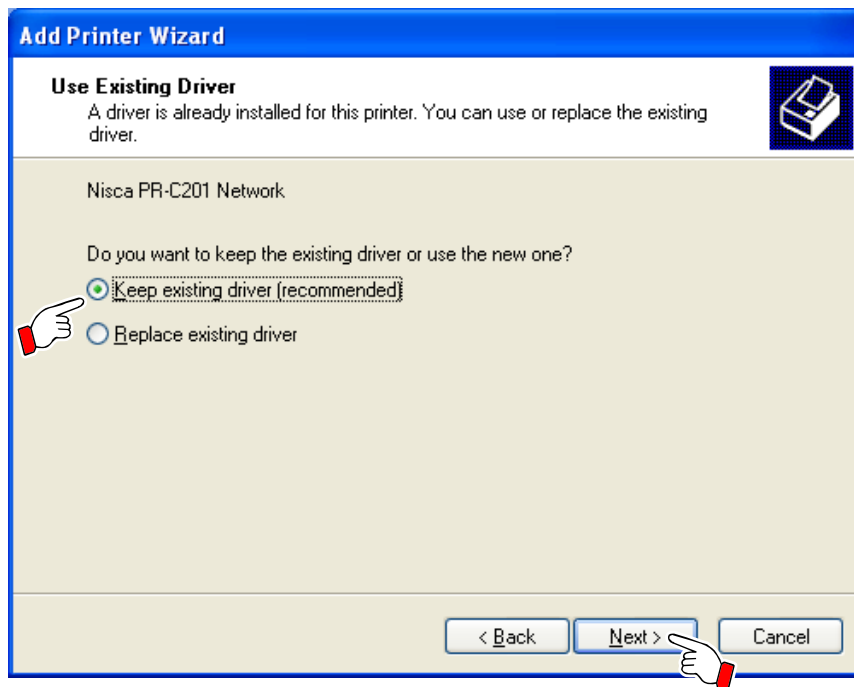


(11) The "Name Your Printer" screen will be displayed.
    In "Printer name", input a printer name, and click "Next".
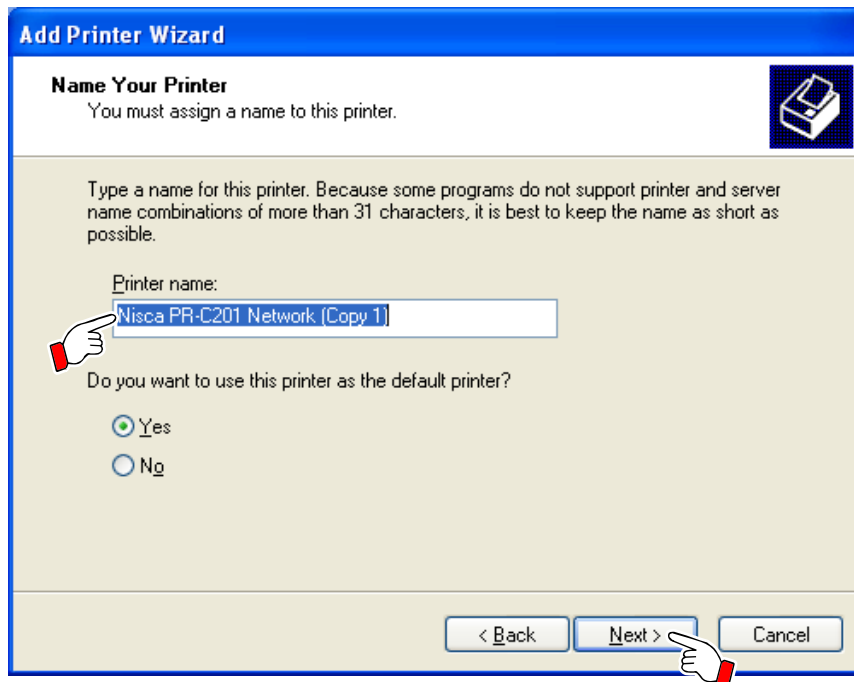
(12) The "Printer sharing" screen will be displayed.
Select "Do not share this printer", and click "Next".

(13) The "Print Test Page" screen will be displayed.
Click "Next".
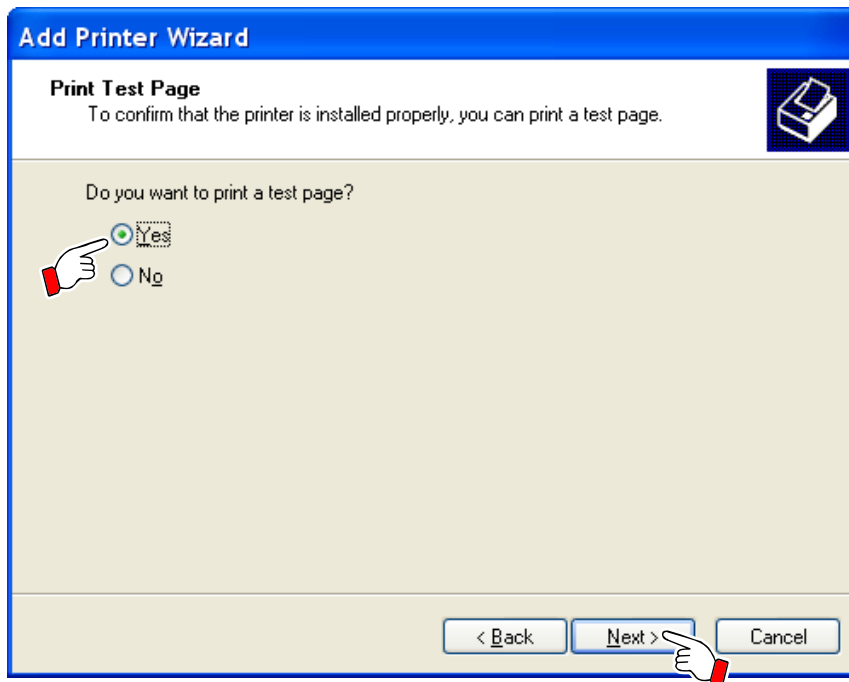


(14) The "Completing the Add Printer Wizard" screen will be displayed.
Click "Finish".
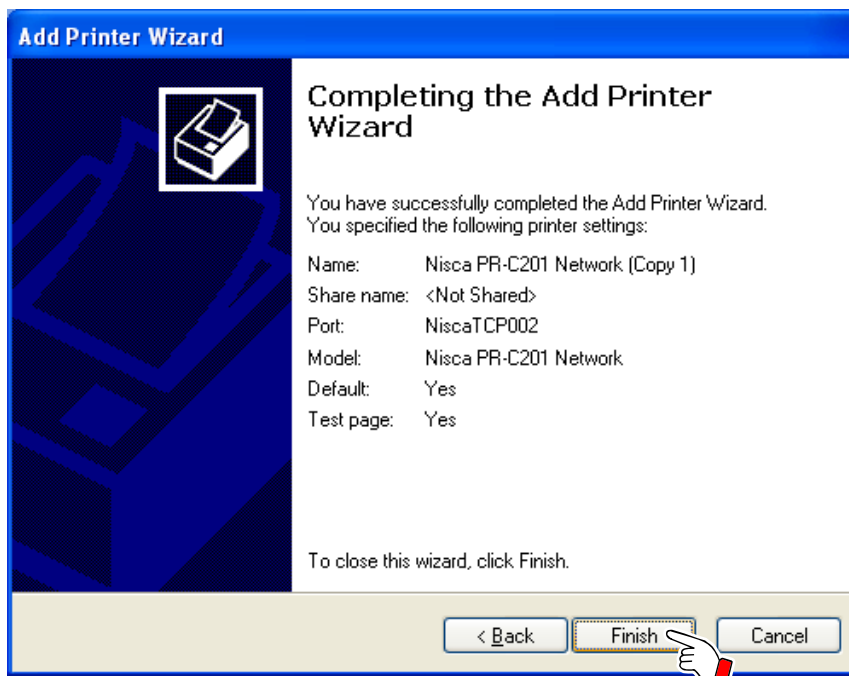


This concludes addition of a network printer.

### 2.4.2  Windows 7

(1) Connect the printer to add to the network.

(2) On the PC that is adding the printer, from the Start menu, open "Devices and Printers".
Click "Add a printer".
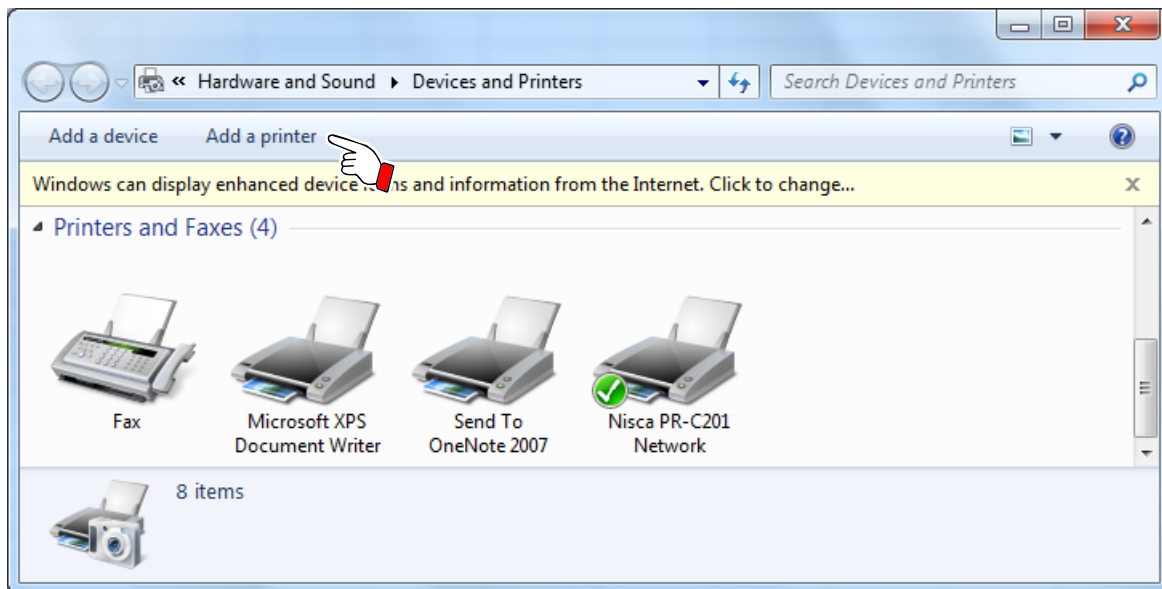


(3) Open the "What type of printer do you want to install?" screen.
Click "Add a local printer".
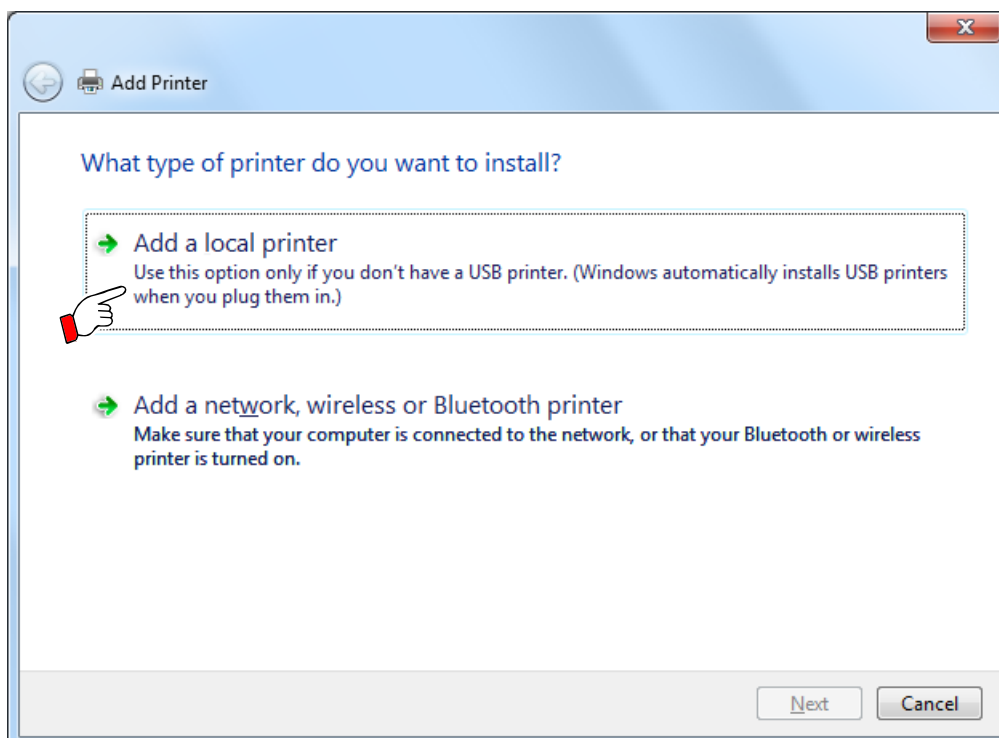
(4) Open the "Choose a printer port" screen.
Click "Create a new port:", and in Type of port:, select "Nisca TCPIP PortMonitor".
Click "Next".
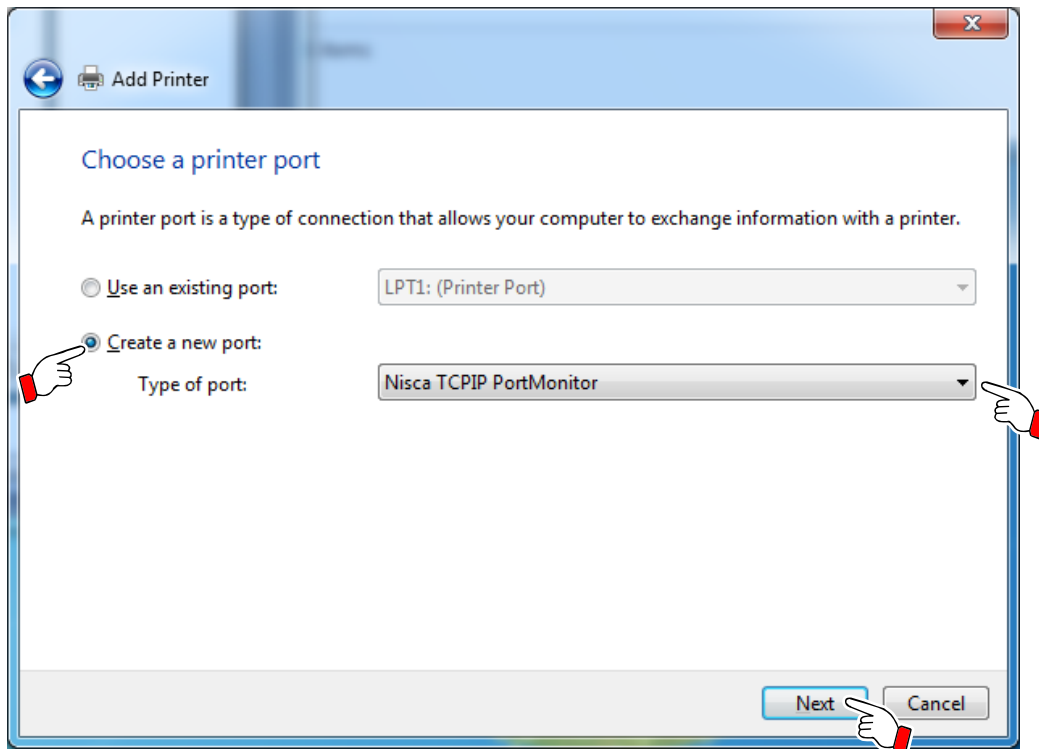


(5) Open the "Nisca TCP PortMonitor" screen.
Click "Network port setting".
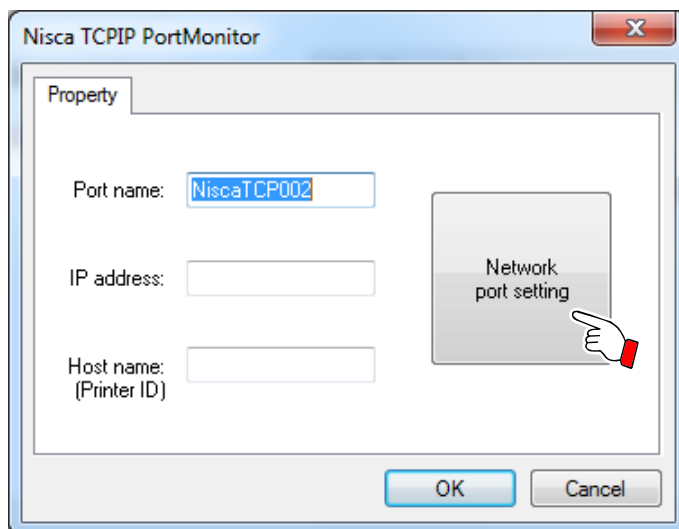
(6) Open the "Network port setting" screen.
From the list, select the printer to add, and click "Select".
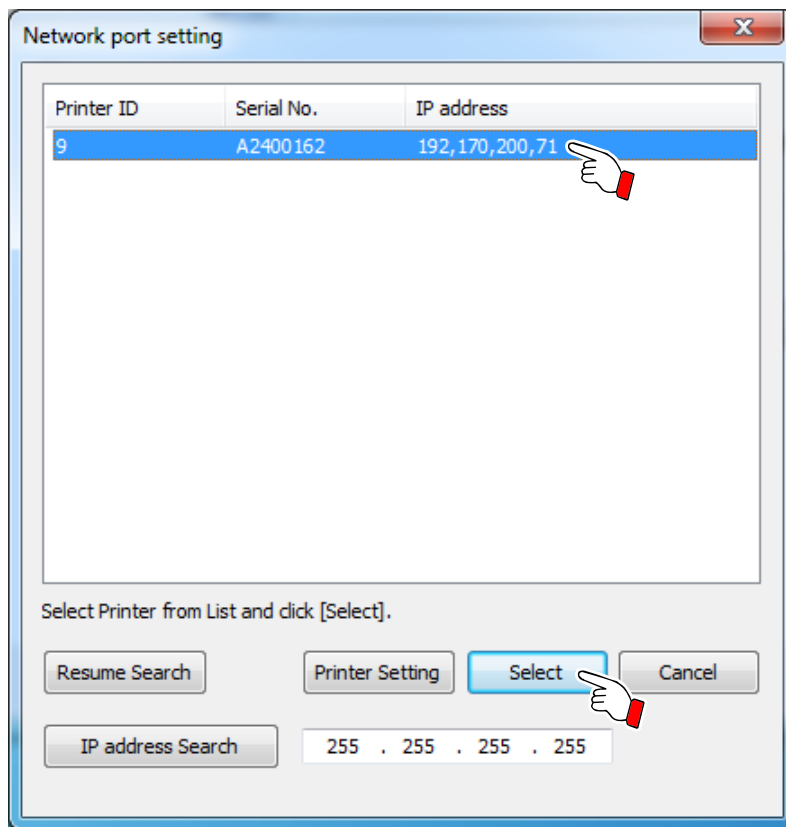


(7) In the "Nisca TCP PortMonitor" screen "IP address" and "Host name (Printer ID)", confirm that the "IP address" and "Host name (Printer ID)" for the printer to add are displayed.
Click "OK".
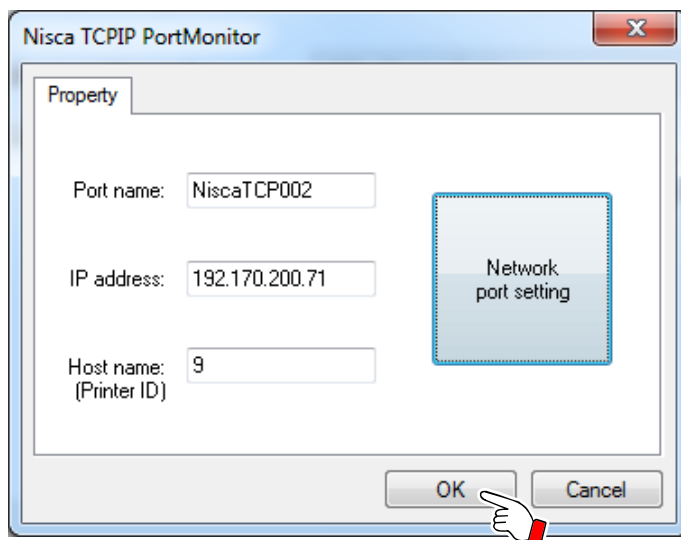
(8) The "Install the printer driver" screen is displayed.
From the printer list, select "Nisca PR-C201 Network", and click "Next".
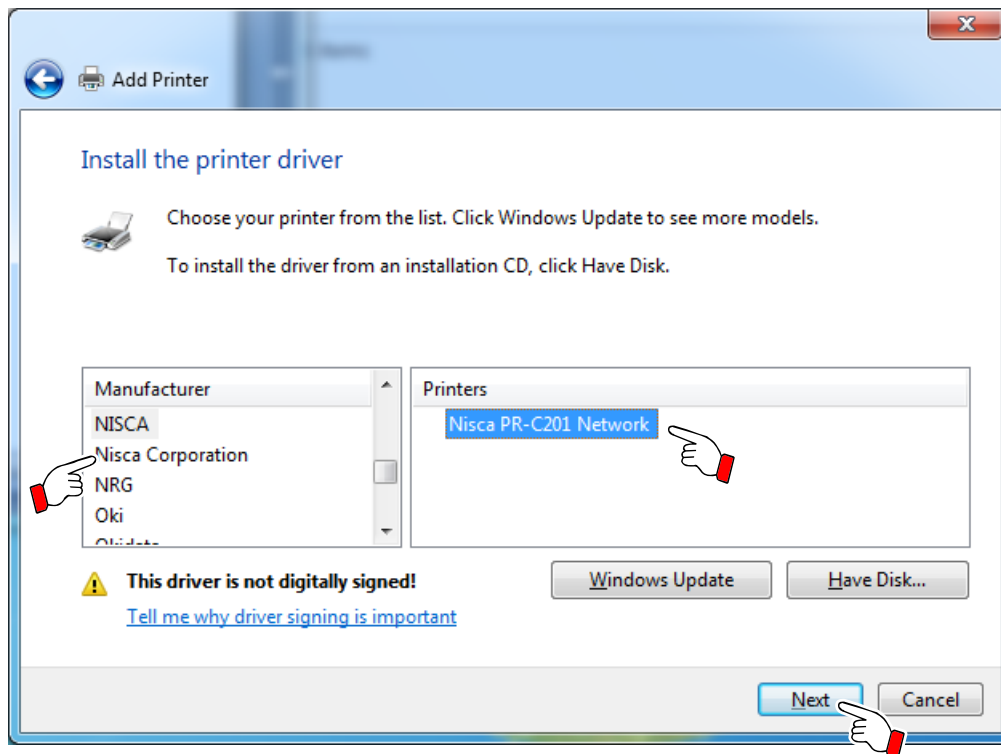


(9) The "Which version of the driver do you want to use?" screen will be displayed.
Select "Use the driver that is currently installed (recommended)", and click "Next".
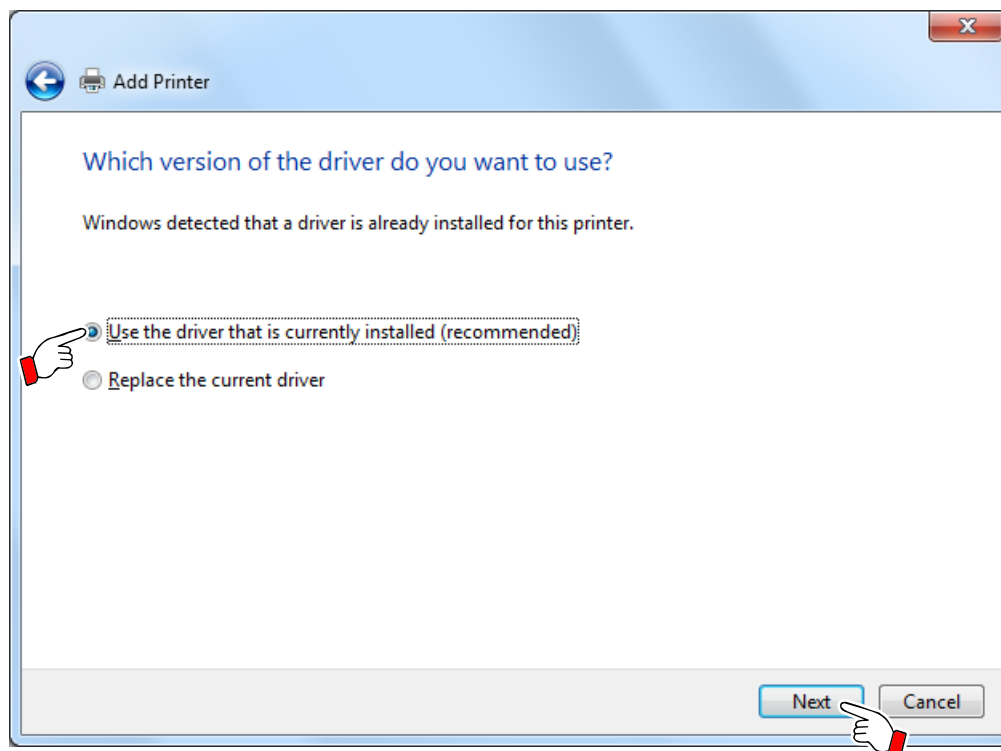
(10) The "Type a printer name" screen will be displayed.
In "Printer name", input a printer name, and click "Next".
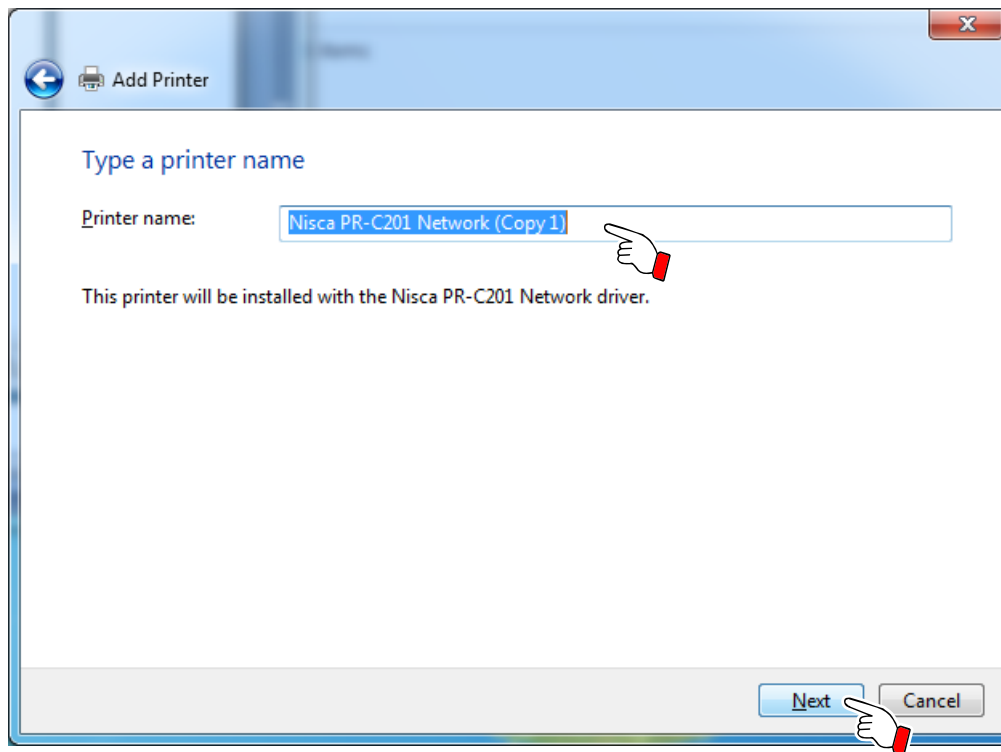


(11) The "Printer sharing" screen will be displayed.
Select "Do not share this printer", and click "Next".
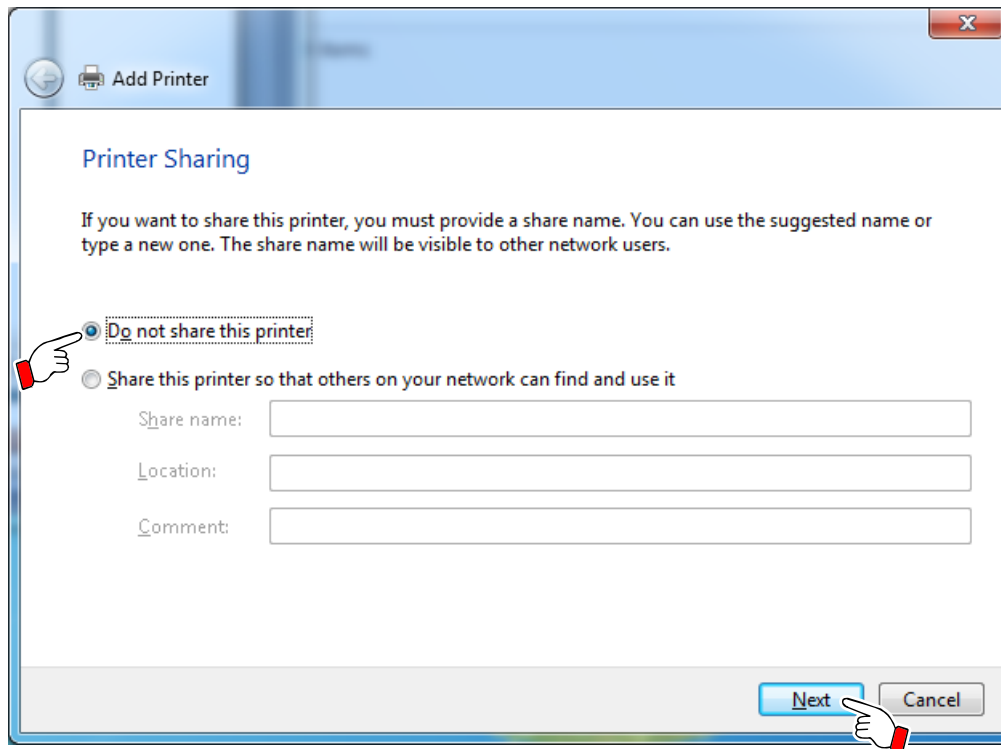
(12) The "You've successfully added Nisca PR-C201 Network (Copy 1)" screen will be displayed. Click "Finish".
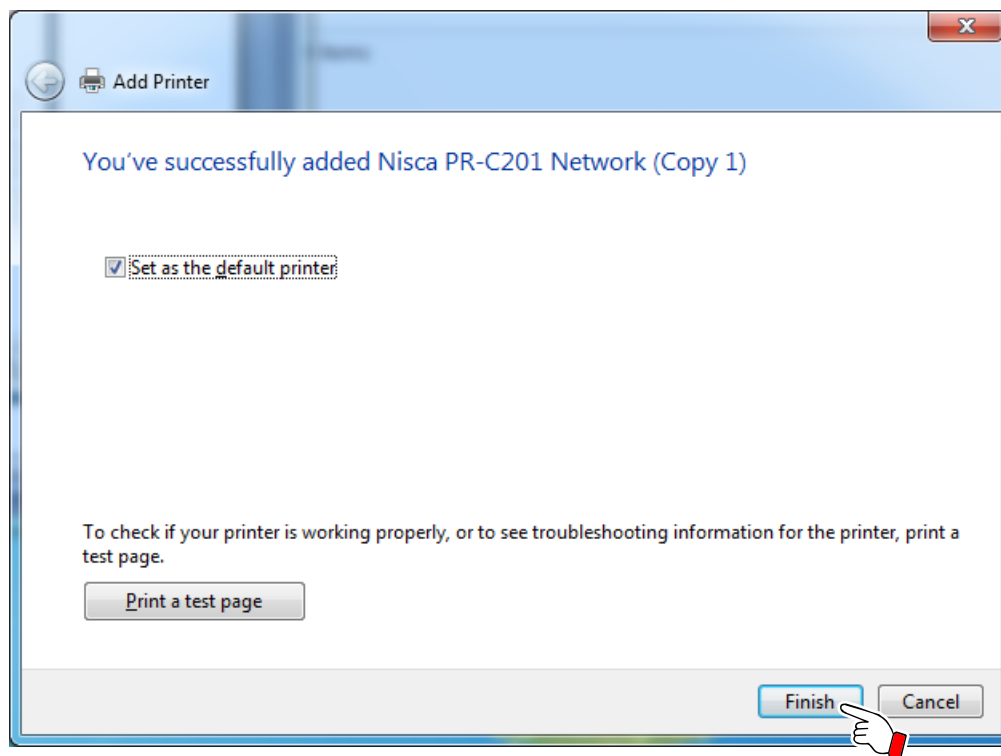


This concludes addition of a network printer.

## 3.  Shared printer function via USB

This section describes the installation procedure, as well as the setting method when using the shared printer function via USB.

**Important**

Make sure to read the restrictions in Chapter 3.4 before using the shared printer function.

### 3.1  Local printer installation

The local printer needs to be installed on both the server side and client side.
Follow the installer procedures when performing the installation.

**REF**

PR-C201 : [Easy Setup Guide] bundled with the printer

## 3.2  Server side shared settings

Shared settings must be performed for the local printer installed in the server side.

**Point** The following uses Windows XP + PR-C201 as an example.
If you are using an operating system other than Windows XP, replace the "Windows XP" parts with your operating system when reading.
* For procedures and screen configurations that differ greatly between Windows 7 and Windows XP, they will be shown side by side for both operating systems.

(1) Right-click Nisca PR-C201, and open [Properties].
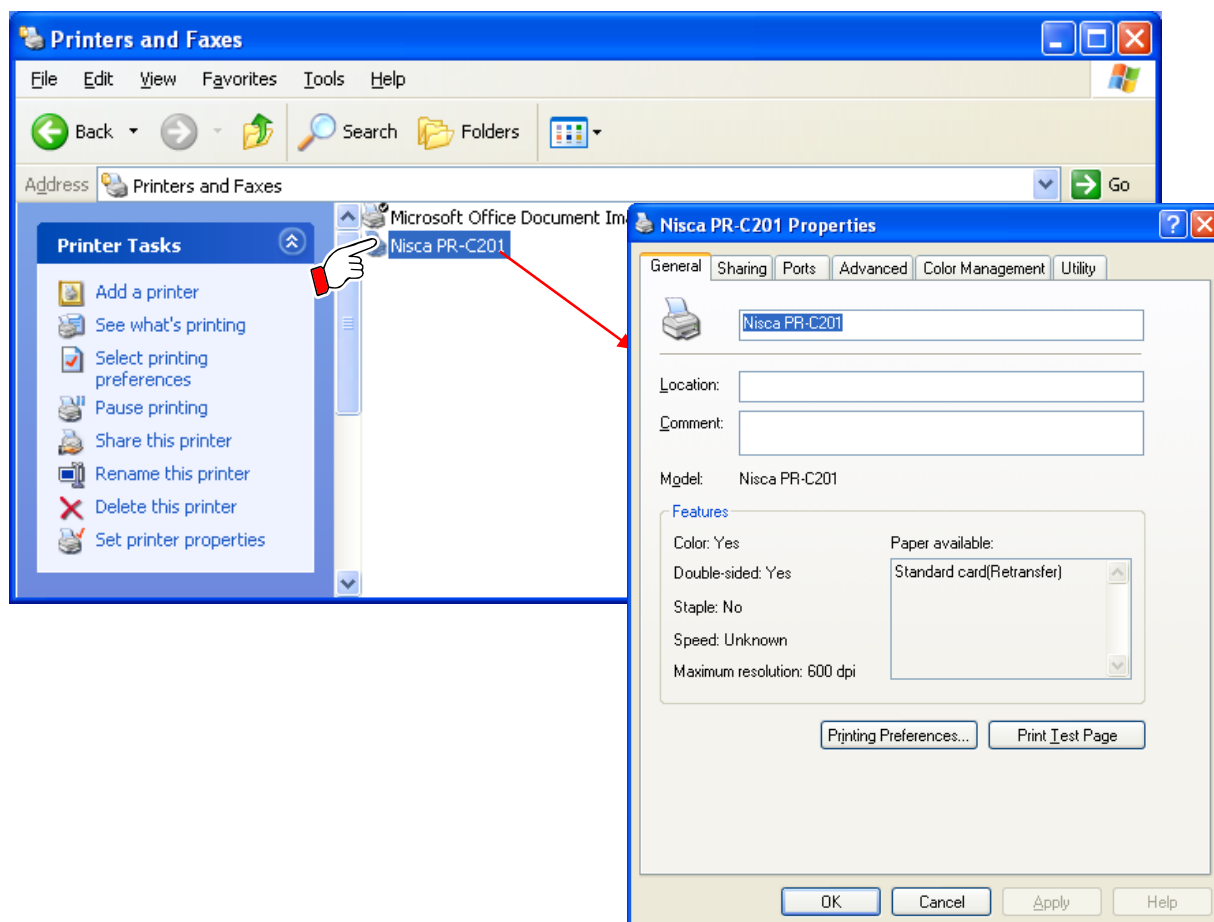
(2) Select the Sharing tab.
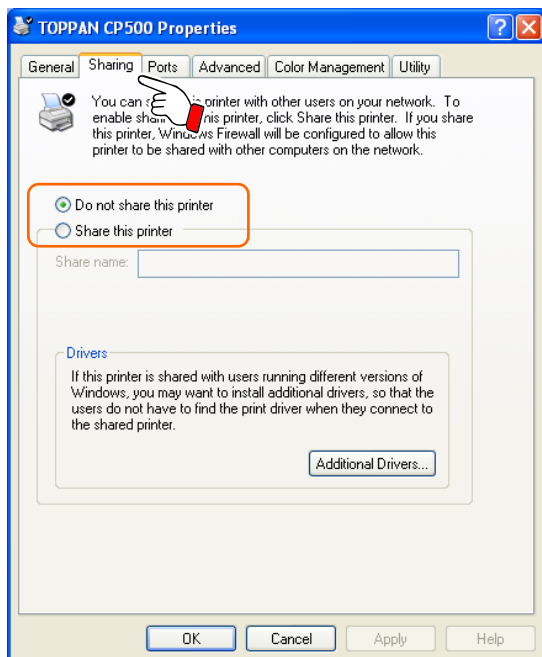


By default,
  "Do not share this printer" is selected.

**Point** In Windows 7,
        "Share this printer" is not checked.

(3) Select "Share this printer" and click [OK].
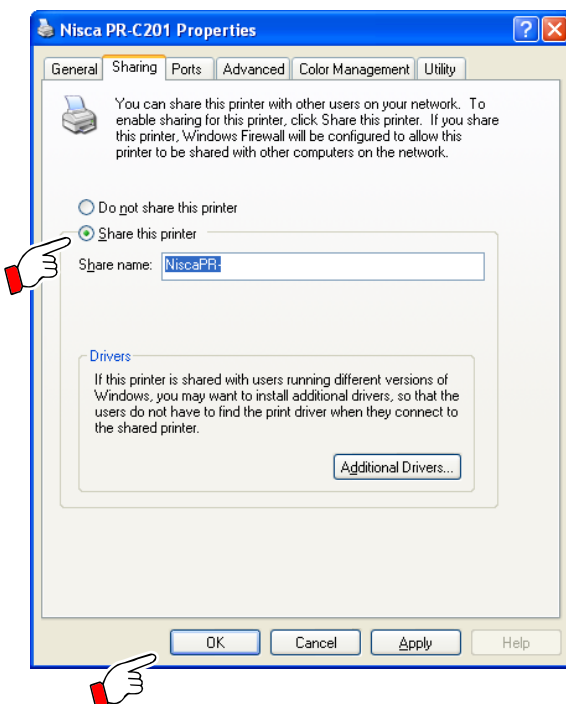


**Important**
  Set a unique share name within the
  network environment to which the PC
  used for setting is connected.

  By default,
    "NiscaPR-"
  is indicated.

  **Point** In Windows 7,
          "Nisca PR-C201"
        is indicated.

  When using sharing, it is recommended
  that you change the name using the
  following convention.
    "Nisca PR-C201xxxx"

**Point** In Windows XP, the following message will be displayed when the share name entered
exceeds 8 characters.



If you don't need access from a DOS system, select [Yes] to complete the setting.
If you need access from a DOS system, change the name to 8 characters or less.

After this, the shared setting is complete.
Once the shared setting is complete, the printer icon will change to indicate that it is shared.
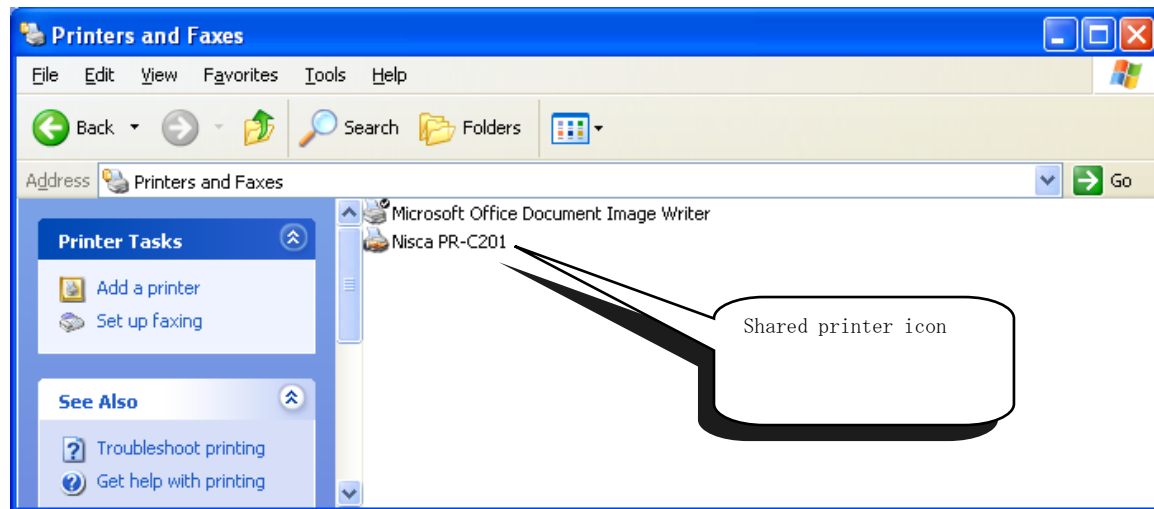
### 3.3  Client side shared printer installation

The shared printer needs to be installed on the client side.

### 3.3.1  Installing in Windows XP

(1) Run the [Add Printer Wizard] from the printer folder of the client PC, and click [Next].
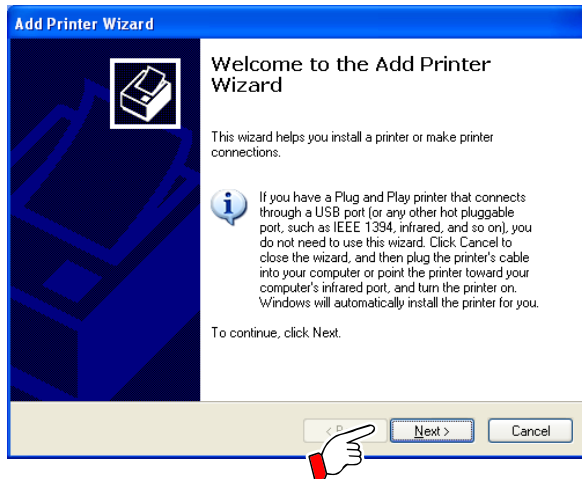


(2) Select "A network printer, or a printer attached to another computer" then click [Next].
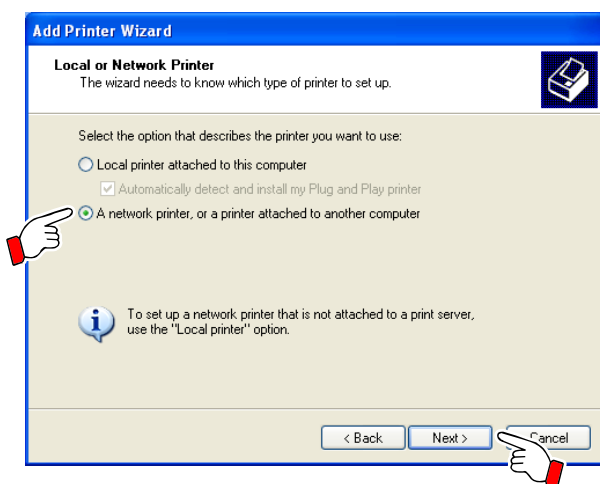


(3) On this screen, you can select a shared printer using one of the following 2 procedures.
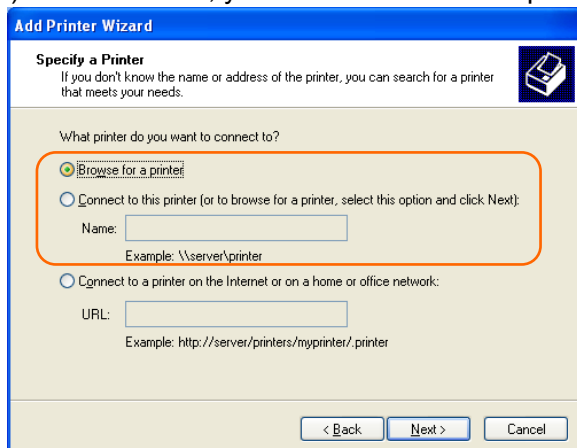


・"Browse for a printer"
  is described in (4)-1.

・"Connect to this printer (...)"
  is described in (4)-2.


After selecting a method, click [Next].

(4)-1 Select the PC on the network in which the shared printer is installed.
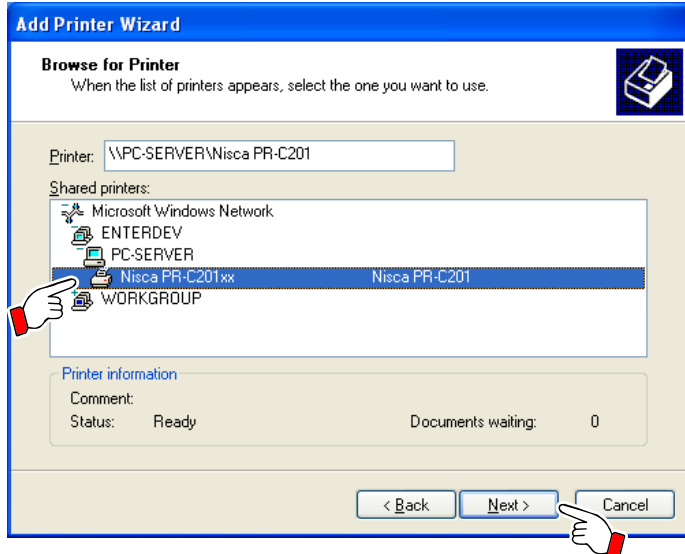


If you click on a PC name, the devices shared on that PC will be shown. Select the target card printer among the devices displayed and click [Next].

(4)-2 Enter the shared printer name directly into the [Name] input field and click [Next].
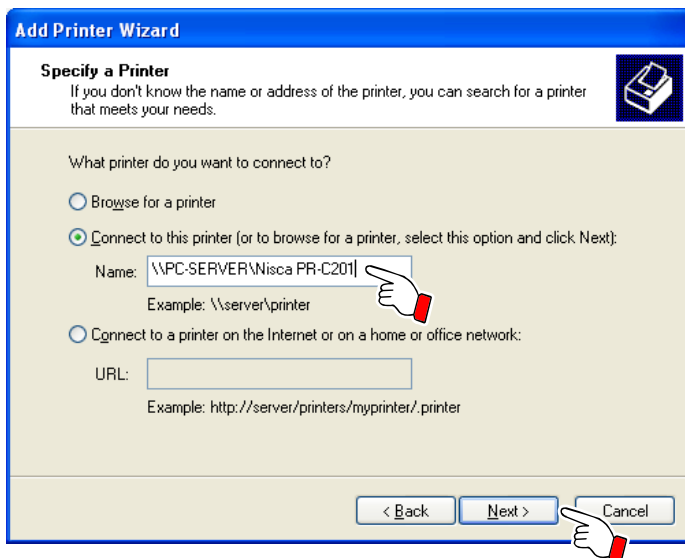


[Name]
 \\Server Name\\Shared
 Printer Name

(5) When the user authentication screen appears, enter your [User name] and [Password], and click [Next].



If the user name and password is incorrect, this user authentication screen will be displayed on the server side and the client side

Important

When registering your user name and password on this screen, make sure to check the [Remember my password] checkbox.

(6) When the warning screen below appears, click [Yes].
   This warning is displayed for copying the server side printer driver to the client when performing a shared installation of the server side printer.

**Connect to Printer**

You are about to connect to a printer on PC-SERVER, which will automatically install a print driver on your machine. Printer drivers may contain viruses or scripts that can be harmful to your computer. It is important to be certain that the computer sharing this printer is trustworthy. Would you like to continue?

[Yes]   [No]

(7) Choose whether to specify the installed shared printer as the "Default Printer", then click [Next].

**Add Printer Wizard**

**Default Printer**
Your computer will always send documents to the default printer unless you specify otherwise.

Do you want to use this printer as the default printer?

○ Yes
◉ No

[< Back]   [Next >]   [Cancel]

(8) Click [Finish].

**Add Printer Wizard**

**Completing the Add Printer Wizard**

You have successfully completed the Add Printer Wizard. You specified the following printer settings:

Name:         Nisca PR-C201 on PC-SERVER
Default:       Yes
Location:
Comment:

To close this wizard, click Finish.

[< Back]   [Finish]   [Cancel]

After this, the shared printer installation in the client PC is complete.

**Printers and Faxes**

File   Edit   View   Favorites   Tools   Help

Back       Search   Folders

Address   Printers and Faxes          Go

Printer Tasks
   Add a printer
   Set up faxing

Microsoft Office Document Image Writer
Nisca PR-C201
Nisca PR-C201 on PC-SERVER

**Point** Once the shared printer installation is complete, the printer driver with the server name will be displayed.
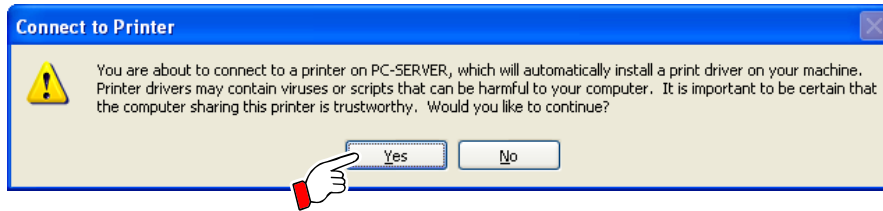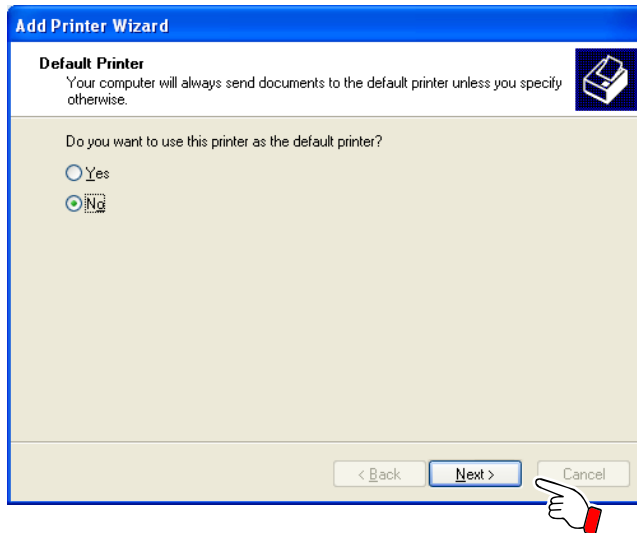
### 3.3.2  Installing in Windows 7

(1) Run the [Add Printer] from the printer folder of the client PC, and click "Add a network, wireless or Bluetooth printer".
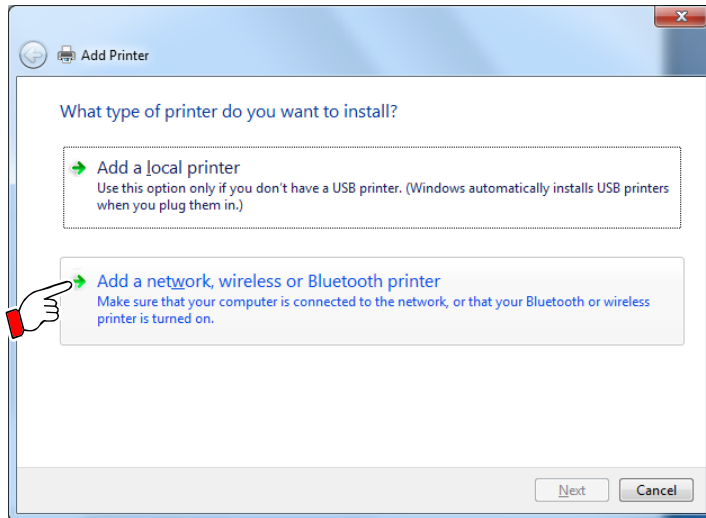


(1) When the target printer is included in the printer list on the upper portion, select that printer and click [Next].
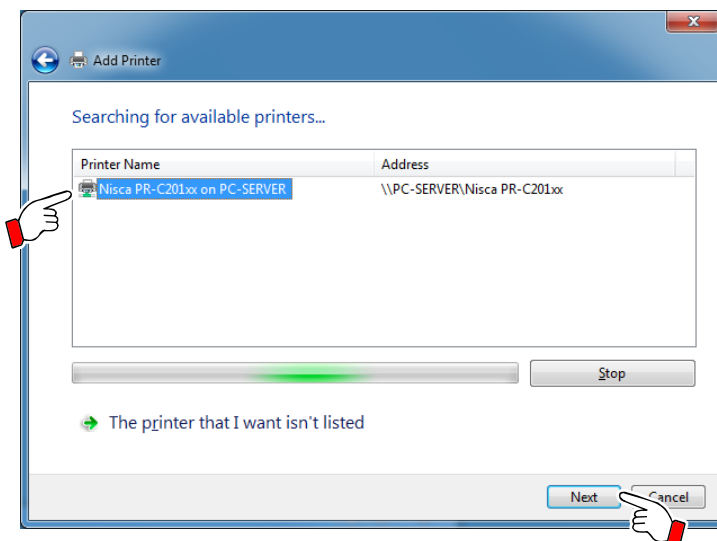


Proceed to Step (5).

If the printer was not found, click "The printer that I want isn't listed".
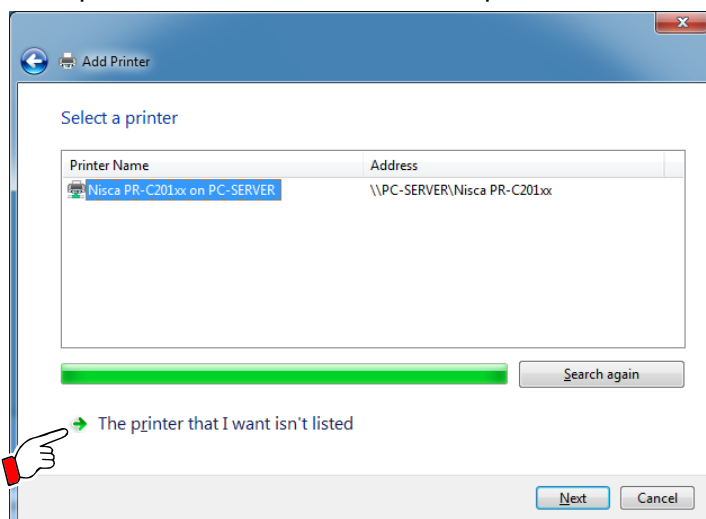


Proceed to Step (3).

(3) On this screen, you can select a shared printer using one of the following 2 procedures.
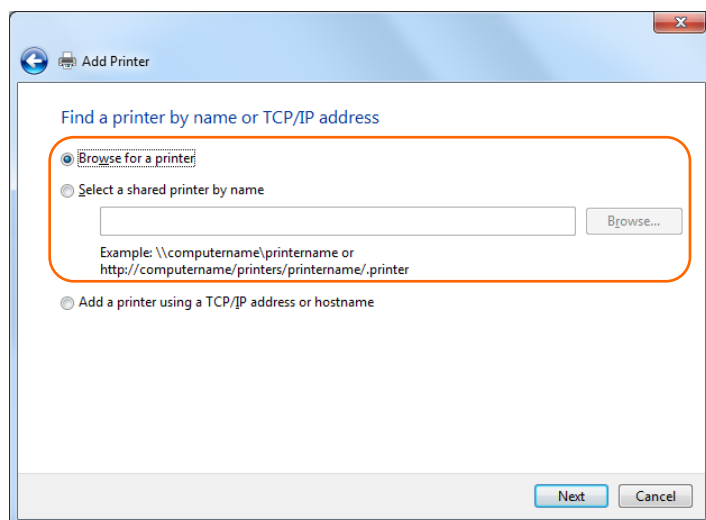


・"Browse for a printer"
  is described in (4)-1.

・"Select a shared printer by name"
  is described in (4)-2.

After selecting a method, click [Next].

(4)-1 Select the PC on the network in which the shared printer is installed.
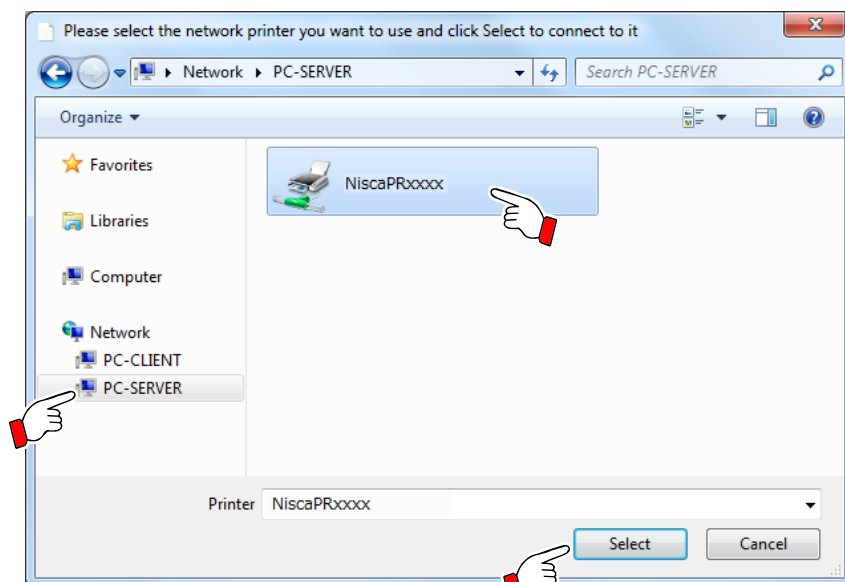


If you click on a PC name, the devices shared on that PC will be shown. Select the target card printer among the devices displayed and click [Select].

(4)-2  Enter the shared printer name directly into the [Name] input field and click [Next].



[Name]
  \\Server Name\\Shared Printer Name

(5) When the user authentication screen appears, enter your [User name] and [Password], and click [OK].
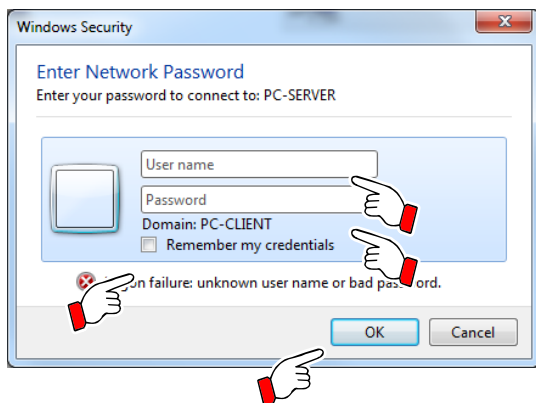
If the user name and password is incorrect, this user authentication screen will be displayed on the server side and the client side.

**Important**

When registering your user name and password on this screen, make sure to check the [Remember my credentials] checkbox.

(6) When the warning screen appears that is written "Do you trust this printer?", please click "Install driver" button.
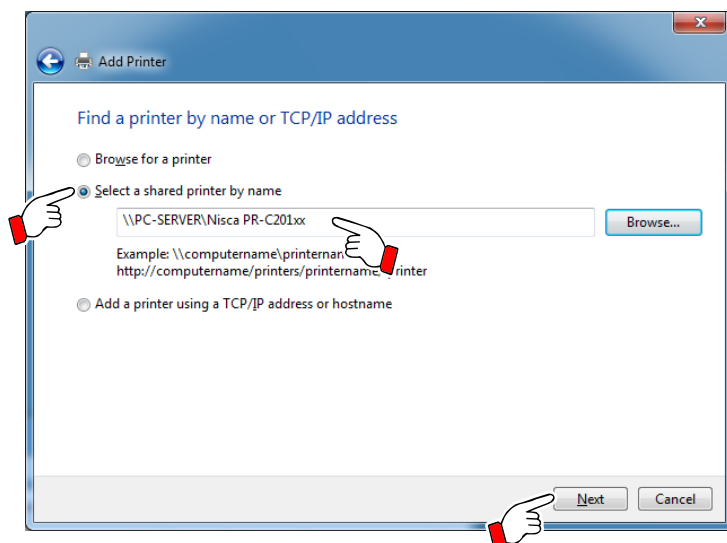
**Point**   This warning is displayed for copying the server side printer driver to the client when performing a shared installation of the server side printer.

(7) After confirming the added printer's name, click [Next].
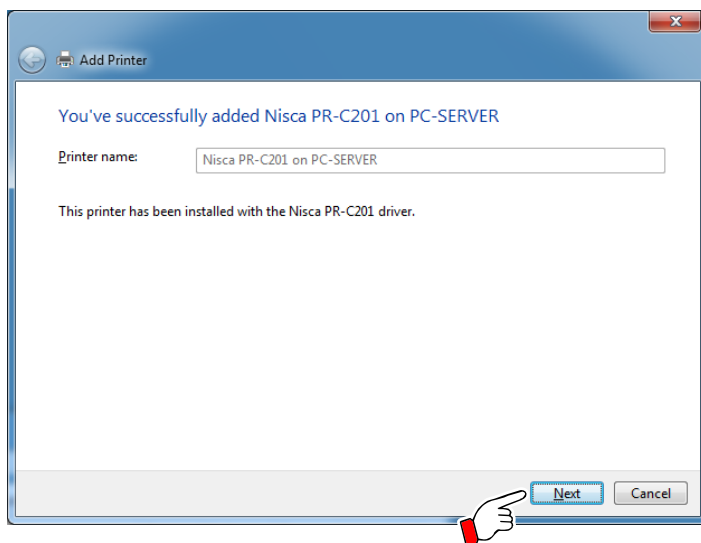
(8) Click [Finish].

After this, the shared printer installation in the client PC is complete.

Point Once the shared printer installation is complete, the printer driver with the server name will be displayed.

### 3.4 Restrictions

(1)  In environments where the client PC and the server PC have different OS bit systems (the client PC has a 32-bit OS and the server PC has a 64-bit OS, for example), it is possible to perform normal printing using general commercial application software. However, advanced printing (magnetic, IC processing, etc.) through exclusive application software is not possible.

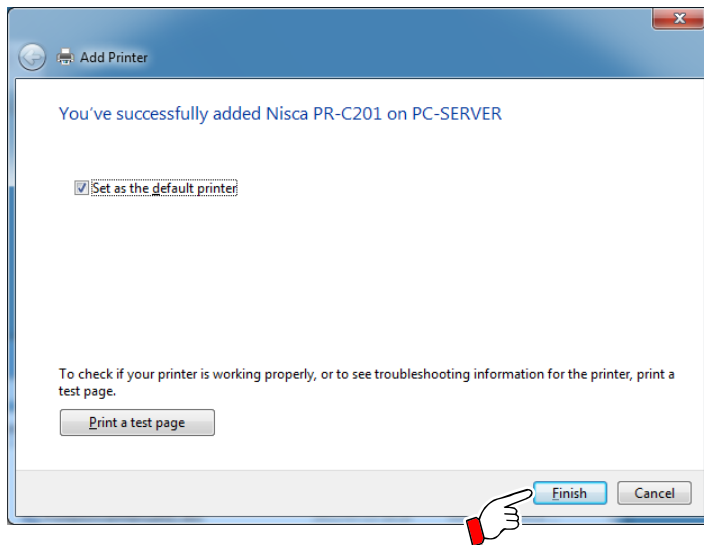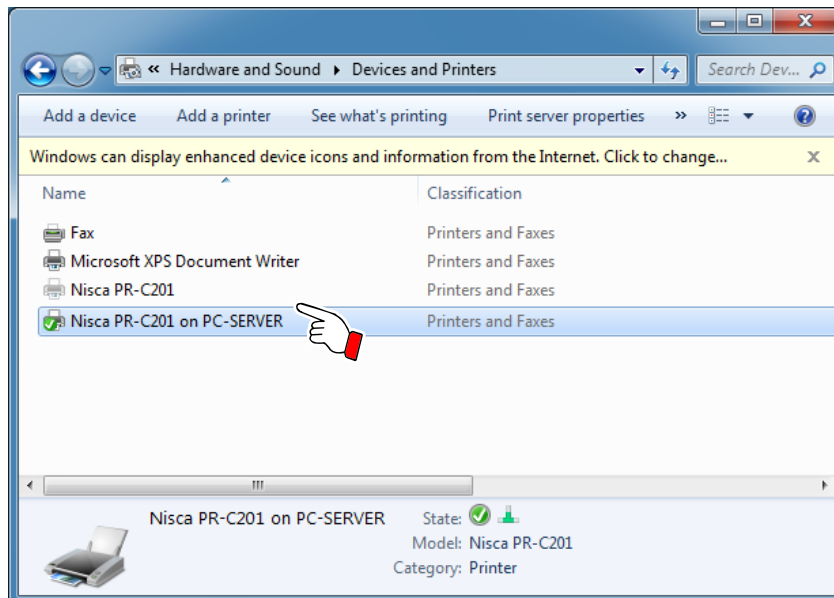(2)  Normal printing may not be possible in PCs that have anti-virus software installed.

(3)  When there are multiple server PCs connected, operation cannot be guaranteed.

(4)  When you change the user-friendly name of the printer driver, you must restart both the server PC and the client PC.

(5)  Both the shared printer and the local printer do not support fast user switching.

(6)  The share function cannot be used in a PC which does not have a login password set. (OS specification)

(7)  If printing was executed while the server is turned OFF, printer driver recovery may take time.

(8)  When the client PC with Windows XP has its folder option (network folder and printer are searched automatically) ON, the shared icon is automatically created. However, printing cannot be performed from this shared icon.

(9)  When printing is performed with the shared printer, a warning about an existing print job may be displayed during uninstallation.
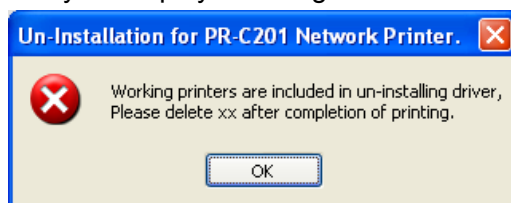


In this case, manually delete the shared printer in the printer folder without cancelling the uninstallation process.
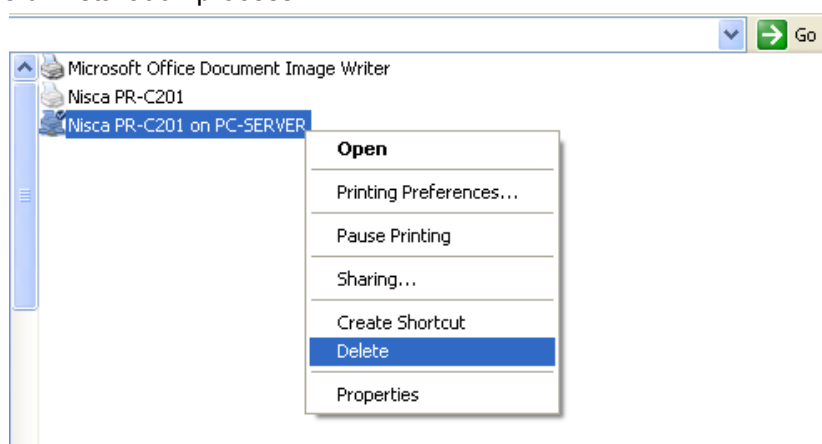


After deleting the printer, if you continue with the uninstallation, uninstallation will be carried out as usual.

(10)  Set [Domain] or [Workgroup] same on sever PC and client PC.

## 3.5   Connection examples

This section shows examples of prerequisite conditions and connections affected by these conditions in a shared connection.


### 3.5.1   Conditions for a shared connection

The following are specifications related to shared connections:

[Printer driver restrictions]
・The Printer ID cannot be duplicated in a single PC.
・When using a shared setting printer installed in a server PC on a client PC, the maximum number of shared printers that can be installed in the client PC is 30.
・The status monitor of the shared printer installed in the client PC is registered in the server PC.

[Server PC restrictions]
・A Printer ID is assigned to each of the 16 PCs from 0 to 15 so there are 16 units in which installation is possible.
・The server PC does not only register the number of PCs with printer driver installed but also registers a status monitor for just 1 PC.

[Client PC restrictions]
・A Printer ID is assigned to each of the 16 PCs from 0 to 15, so there are 16 units in all, including local and shared printers, in which installation is possible.
・One or more local printers is needed for 1 PC.
・There is only 1 server PC connected to a client PC.

### 3.5.2 An example of a shared connection

■Local printers(enclosed in blue)         ・・・ Printers installed through the usual USB connection.
■Shared setting printer (enclosed in green)  ・・・ Printer with shared settings for local printers installed server PCs.
■Shared connection printer (enclosed in red)  ・・・ Shared printer installed in client PCs.



When a printer is used as a shared connection printer using Printer ID = 15, it cannot be used as local printer.
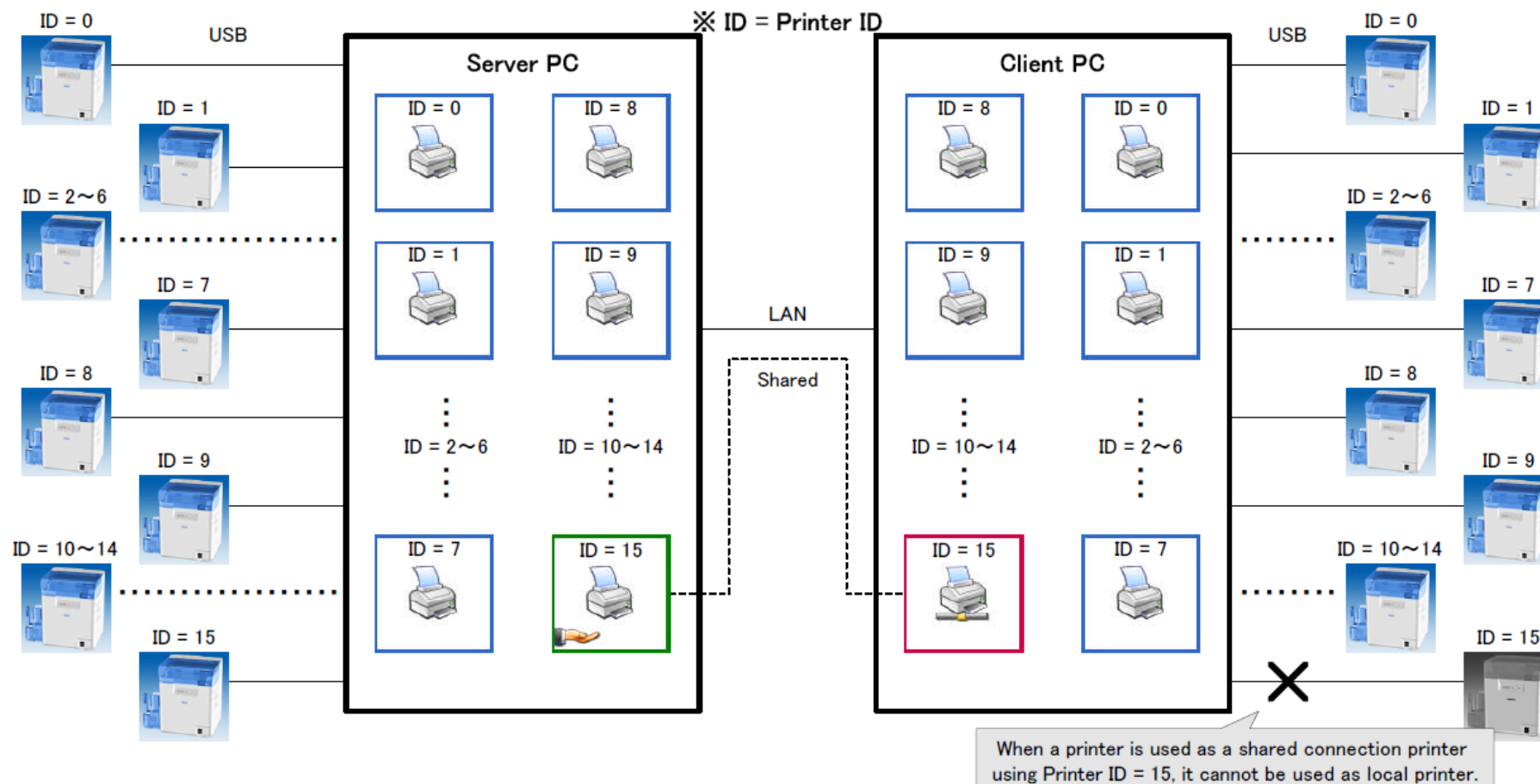
&lt;Restrictions&gt;
    1.Up to 16 printers can be installed on each PC including the local printer, and shared connection printer.
    2.There must not be duplicate Printer IDs in 1PC.

## 4 Standard uninstallation procedure of the printer driver

**Important**

   Implement the uninstallation by the Administrator (a manager) authority.

### 4.1 USB printer driver

(1) Open "All programs" >> "Nisca" >> "PR-C201" >> "Uninstall" from the Start Menu.

(2) Click "Next" on the initial screen of "Un-Installation for PR-C201 Printer" dialog window.

(3) Confirm "Nisca PR-C201" is selected in the "Printer Model" window, and then click "Next" button.

(4) Confirm "Nisca PR-C201" is listed as the "Printer Model" and "Printer Name", and then click "Start" button.

(5) If the following dialog window is popped up after the start, select "Continue" and then click "Next" button.

(6) Click "Finish" button.

(7) Reboot the PC.

### 4.2 Network printer driver

(1) Open "All programs" >> "Nisca" >> "PR-C201 Network" >> "Uninstall" from the Start Menu.

(2) Click "Next" on the initial screen of "Un-Installation for PR-C201 Printer" dialog window.

(3) Confirm "Nisca PR-C201 Network" is selected in the "Printer Model" window, and then click "Next" button.

(4) Confirm "Nisca PR-C201 Network" is listed as the "Printer Model" and "Printer Name", and then click "Start" button.

(5) If the following dialog window is popped up after the start, select "Continue" and then click "Next" button.

(6) Click "Finish" button.

(7) Reboot the PC.