lenovo

CS2010DW

Operating Instructions

Driver Installation Guide

For safe and correct use, be sure to read "Safety Information" before using the machine.

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1. Introduction

This chapter explains the software included on the provided CD-ROM.

Start Installer

To connect this machine to a client computer and use its printer functions, the software included on the provided CD-ROM must be installed on the client computer.

The installer starts automatically when you insert the provided CD-ROM into the CD-ROM drive of a client computer running under Windows or Windows Server. You can then install the various software included on the CD-ROM.

The contents (display item) of the installer are as follows:

PCL 6 Printer Driver

Installs the PCL 6 printer drivers.

For details about installing the driver, see page 11 "Installing the Printer Driver for a Network Connection" or page 17 "Installing the Printer Driver for a Local Connection".

PCL 5c Printer Driver

Installs the PCL 5c printer drivers.

For details about installing the driver, see page 11 "Installing the Printer Driver for a Network Connection" or page 17 "Installing the Printer Driver for a Local Connection".

PostScript 3 Printer Driver

Install the PostScript 3 printer driver.

For details about installing the driver, see page 11 "Installing the Printer Driver for a Network Connection" or page 17 "Installing the Printer Driver for a Local Connection".

Select Language

Change the interface language.

Browse This CD-ROM

Browse the contents of this CD-ROM.

Readme

Display the Readme file.

Driver Installation Guide

Display the Driver Installation Guide.

Read PDF manuals

Display PDF manuals.

Exit

Quit Installer.

Note

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- Auto Run might not work automatically with certain OS settings. If this is the case, double-click "SETUP.EXE", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay] dialog box.
- If you want to cancel Auto Run, hold down the left [Shift] key while inserting the CD-ROM. Keep the [Shift] key held down until the computer stops reading the CD-ROM.

Software and Utilities Included on the CD-ROM

This section explains the software and utilities CD-ROM provided with this machine.

Note

- For the latest information on the corresponding operating system, see "Readme.txt" file in the root directory of the CD-ROM drive.
- For the latest information on Windows terminal service, Citrix Presentation Server, and Citrix Xen App, see the manufacturer's Web site.

Printer Drivers

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM.

Operating System *1	Printer Language		
	PCL 5c	PCL 6	PostScript 3
Windows Vista *2	OK	OK	OK
Windows 7 *3	OK	OK	OK
Windows 8 *4	OK	OK	OK
Windows 8.1 *5	OK	OK	OK
Windows Server 2003 *6	OK	OK	OK
Windows Server 2008 *7	OK	OK	OK
Windows Server 2012 *8	OK	OK	OK
Mac OS X *9	–	–	OK

*1 Windows operating system supports both versions (32/64 bit)

*2 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic

*3 Microsoft Windows 7 Home Premium/Microsoft Windows 7 Professional/Microsoft Windows 7 Ultimate/Microsoft Windows 7 Enterprise

*4 Microsoft Windows 8/Microsoft Windows 8 Pro/Microsoft Windows 8 Enterprise

*5 Microsoft Windows 8.1/Microsoft Windows 8.1 Pro/Microsoft Windows 8.1 Enterprise

*6 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise Edition

*7 Microsoft Windows Server 2008 Standard/Microsoft Windows Server 2008 Enterprise/Microsoft Windows Server 2008 R2 Standard/Microsoft Windows Server 2008 R2 Enterprise

*8 Microsoft Windows Server 2012 Foundation/Microsoft Windows Server 2012 Essentials/Microsoft Windows Server 2012 Standard/Microsoft Windows Server 2012 Datacenter/Microsoft Windows Server 2012 R2 Foundation/Microsoft Windows Server 2012 R2 Essentials/Microsoft Windows Server 2012 R2 Standard

*9 Mac OS X 10.6 or later

PCL printer drivers

Two kinds of PCL printer driver (PCL 5c and PCL 6) are included. These drivers allow your computer to communicate with this machine via a printer language.

Adobe® PostScript® printer driver and PPD files

Adobe PostScript printer driver allows the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions.

Depending on the machine you are using, PostScript 3 unit must be installed.

Note

- Some applications may require installation of the PCL 5c printer driver. In this case, you can install PCL 5c without having to install PCL 6.
- For details about installing the driver, see page 11 "Installing the Printer Driver for a Network Connection" or page 17 "Installing the Printer Driver for a Local Connection".

Supported languages

The interface language is supported in English or Simplified Chinese.

For Mac OS X Users

If you are using Mac OS X, the following limitations apply to each function:

- When using the printer function, use the printer driver for Mac OS X.

  For details, see page 29 "Installing the Driver Under Mac OS X".

2. Installing the Printer Driver

This chapter explains how to install and configure the printer drivers for use on the Windows operating system.

Confirming the Connection Method

This machine supports network and local connection.

Before installing the printer driver, check how the machine is connected. Follow the driver installation procedure that is appropriate to the connection method.

Network Connection

This machine can be used as a Windows printing port or network printer.

Using the Windows printing port

Network connections can be established over Ethernet and Wireless LAN.

Connection Method	Available Ports
• Ethernet • Wireless LAN	• Standard TCP/IP port • IPP port

Note

- For details about how to install the printer driver for each type of port, see page 11 "Installing the Printer Driver for the Selected Port".

Using as a network printer

This machine can be used as a remote printer using the Windows or NetWare print server function.

Client OS	Using Server
• Windows Server 2003/2003 R2	• Windows Vista print server • Windows 7 print server • Windows 8 print server • Windows 8.1 print server • Windows Server 2003/2003 R2 print server • Windows Server 2008/2008 R2 print server • Windows Server 2012/2012 R2 print server • NetWare print server (using IPv4 only) • NetWare file server (using IPv4 only)
• Windows Vista • Windows 7 • Windows 8 • Windows 8.1 • Windows Server 2008/2008 R2 • Windows Server 2012/2012 R2	• Windows Vista print server • Windows 7 print server • Windows 8 print server • Windows 8.1 print server • Windows Server 2003/2003 R2 print server • Windows Server 2008/2008 R2 print server • Windows Server 2012/2012 R2 print server

Note

- For details about how to install the printer driver to print server, see page 13 "Using as a Network Printer".

Local Connection

Local connections can be established over USB.

Note

- For details about how to install the printer driver for each method of connections, see page 17 "Installing the Printer Driver for a Local Connection".

Installing the Printer Driver for a Network Connection

This section describes the installation procedure of the printer drivers for network connection.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

Note

- If the [User Account Control] dialog box appears during the driver installation procedure, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears during the driver installation procedure, click [Install this driver software anyway].
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See page 25 "Messages Displayed When Installing the Printer Driver".

Installing the Printer Driver for the Selected Port

Describes the driver installation procedure for each printer port. See the installation procedure for the printer port you are using.

Port Type	Printer Driver Type	Reference
Standard TCP/IP port	PCL PS3	page 11 "Using the Standard TCP/IP port"
IPP port	PCL PS3	page 12 "Using the IPP port"

Using the Standard TCP/IP port

PCL PS3

1. **Quit all applications. (Do not close this manual.)**
2. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].
3. **Select an interface language, and then click [OK].**

   For details about the languages supported in the printer drivers, see page 6 "Supported languages".
4. **Click [PCL 6 Printer Driver], [PCL 5c Printer Driver] or [PostScript 3 Printer Driver].**

5. **The software license agreement appears in the [License Agreement]] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

   If installing the PostScript 3 printer driver, click [Add a network, wireless or Bluetooth printer]. And then follow the instructions on the screen.

6. **Select the method to install a printer driver, and then click [Next].**
7. **Select the method to add a printer driver, and then click [Next].**

   Make sure select [Connect to a printer port or LAN] and [Search for printers automatically].

   You can select the other Items.

8. **Make sure the machine is turned on and connected to the network, and then click [Next].**
9. **Select the printer, and then click [Next].**
10. **Make sure the printer settings, and then click [Continue].**
11. **Click [Install this driver software anyway].**
12. **Click [Finish].**

    When you are prompted to restart your computer, restart it by following the instructions that appear.

Using the IPP port

PCL | PS3

Important

- Installation of the certificate is especially necessary for users who want to print via IPP-SSL from Windows Vista/7/8/8.1 or Windows Server 2008/2008 R2/2012/2012 R2. For details, consult your administrator.
- If a certificate authority issues a certificate that must be authenticated by an intermediate certificate authority, and the certificate is installed on this machine, an intermediate certificate must be installed on the client computer. Otherwise, validation by the certificate authority will not be performed correctly.
- If validation cannot be performed properly, a warning message informing you that installation is not possible might appear when you try to add a printer using IPP-SSL under Windows Vista/7/8/8.1 or Windows Server 2008/2008 R2/2012/2012 R2. To enable authentication from the client computer, install the intermediate certificate on the client computer, and then reestablish connection.
- Intermediate certificates cannot be installed on this machine.

1. **Quit all applications. (Do not close this manual.)**
2. **On the [Start] menu, click [Devices and Printers].**
3. **Click [Add a printer].**

4. **Click [Add a network, wireless or Bluetooth printer].**
5. **Click [The printer that I want isn't listed].**
6. **In the [Select a shared printer by name] box, enter "http://(machine's IP address or host name)/printer (or ipp)" as the printer's address, and then click [Next].**
7. **Click [Have Disk...].**
8. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click [Close].
9. **Click [Browse...], and then specify a location for the INF file.**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

   - PCL 5c

     32-bit driver D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL5C\X64\(Language)\DISK1
   - PCL 6

     32-bit driver D:\DRIVERS\PCL6\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL6\X64\(Language)\DISK1
   - PostScript 3

     32-bit driver D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PS\X64\(Language)\DISK1

   For details about the languages supported in the printer drivers, see page 6 "Supported languages".
10. **Click [Open].**
11. **Click [OK] to close the [Install From Disk] window.**
12. **Select the manufacturer and model name of the machine you want to use, and then click [Next].**

    The installation starts.
13. **Follow the instructions that appear. Modify settings such as printer name and default printer configuration, as necessary. You can also print a test page.**
14. **Click [Finish].**

    If a check box for setting the machine as a default printer appears, configure as necessary.

Using as a Network Printer

Describes the driver installation procedure for each print server. See the installation procedure for the print server you are using.

Important

- When using NetWare, an optional NetWare unit is required.

Server OS	Client OS	Printer Driver Type	Reference
Windows Server	Windows	PCL PS3	page 14 "Using Windows print server"
NetWare	Windows	PCL PS3	page 15 "Using NetWare print server"

Using Windows print server

PCL PS3

1. **Quit all applications. (Do not close this manual.)**
2. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].
3. **Select an interface language, and then click [OK].**

   For details about the languages supported in the printer drivers, see page 6 "Supported languages".
4. **Click [PCL 6 Printer Driver], [PCL 5c Printer Driver] or [PostScript 3 Printer Driver].**
5. **The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

   If installing the PostScript 3 printer driver, click [Add a network, wireless or Bluetooth printer]. And then follow the instructions on the screen.
6. **Select the method to install a printer driver, and then click [Next].**
7. **Make sure select [Connect to a printer port or LAN], and select [Select a port or specify a new port], and then click [Next].**
8. **Click [Specify a new port], and then click [Next].**
9. **Click [Network Printer], and then click [Next].**
10. **Double-click the computer name you want to use as a print server in the [Browse for Printer] window.**
11. **Select the printer you want to use, and then click [OK].**
12. **Check that the port of the selected printer is displayed in [Port :].**
13. **Configure the user code, default printer, and shared printer as necessary.**
14. **Click [Continue].**

    The installation starts.

15. **Click [Finish].**

    Select one of the options to restart the computer either now or later, and then click [Finish].

Using NetWare print server

PCL PS3

1. **Quit all applications. (Do not close this manual.)**
2. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].
3. **Select an interface language, and then click [OK].**

   For details about the languages supported in the printer drivers, see page 6 "Supported languages".
4. **Click [PCL 6 Printer Driver], [PCL 5c Printer Driver] or [PostScript 3 Printer Driver].**
5. **The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

   If installing the PostScript 3 printer driver, click [Add a network, wireless or Bluetooth printer]. And then follow the instructions on the screen.
6. **Select the method to install a printer driver, and then click [Next].**
7. **Make sure select [Connect to a printer port or LAN], and select [Select a port or specify a new port], and then click [Next].**
8. **Click [Specify a new port], and then click [Next].**
9. **Click [Network Printer], and then click [Next].**
10. **Double-click the name of the NetWare file server on the network tree.**

    The created queue is displayed.
11. **Select the print queue, and then click [OK].**
12. **Check that the port of the selected printer is displayed in [Port :].**
13. **Click [Continue].**

    The installation starts.
14. **Click [Finish] in the [Select Program] dialog box.**
15. **After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].**

    Restart the computer to complete installation.
16. **After restarting the computer, on the [Start] menu, open the printer window.**
17. **Right-click the machine's icon, and then open the printer properties dialog box.**
18. **Click the [NetWare Settings] tab.**

19. **Clear the [Form Feed] and [Enable Banner] check boxes.**

    Do not select these check boxes since they are automatically selected by the printer driver. If you select the check boxes, the printer may not print correctly.

20. **Click [OK].**

Note

- The protocol is set to inactive as default. Enable the protocol on the control panel, using Web Image Monitor or telnet.

Notes when using NetWare

Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Follow the procedure below to disable form feed according to the operating system used:

- Clear the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

Banner Page

Do not use NetWare to configure banner page.

Follow the procedure below to disable banner page according to the operating system used:

- Clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

When using the PostScript 3 Printer Driver

Follow the procedure below to set up the PostScript 3 printer driver.

1. On the [Start] menu, select [Printers and Faxes].
2. Right-click the printer's icon, and then click [Properties].
3. Click the [Device Settings] tab.
4. Select [No] on the [Send CTRL-D Before Each Job:] and [Send CTRL-D After Each Job:], and then click [Apply].
5. Click [OK].

Printing after Resetting the Printer

Printer to print server connection requires 30–40 seconds to resume after the printer is reset. During this period, jobs may be accepted (depending on NetWare specifications) but not printed.

To print after resetting the printer as the remote printer, check on the print server that the remote printer is disconnected, or wait for two minutes before trying to print.

Installing the Printer Driver for a Local Connection

This section describes the installation procedure of the printer drivers for USB connection.

Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

Note

- If the [User Account Control] dialog box appears in driver installation procedure, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears in driver installation procedure, click [Install this driver software anyway].
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See page 25 "Messages Displayed When Installing the Printer Driver".

USB Connection

This section explains how to install the printer drivers using USB.

Before installing, check that only the operating system is running on the computer and no print jobs are in progress.

If the printer driver has already been installed, and plug and play is enabled, the icon of the printer connected to the "USB" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

Note

- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

Windows Server 2003/2003 R2

1. **Quit all applications. (Do not close this manual.)**
2. **Check that the power of the machine is off.**
3. **Connect the machine and computer using the USB cable.**

   Connect the USB cable firmly.

4. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

5. **Select [No, not this time], and then click [Next].**
6. **Click [Install from a list or specific location [Advanced]], and then click [Next].**
7. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If Auto Run starts, click [Cancel] and then [Exit].

8. **Select the [Search removable media (floppy, CD-ROM...)] check box under [Search for the best driver in these locations.], and then click [Next].**
9. **Select the name of the machine whose driver you want to install.**

   Check the location where the source files of the printer driver is stored.

   If the CD-ROM drive is D, the source files are stored in the following locations:

   - PCL 5c

     32-bit driver D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL5C\X64\(Language)\DISK1

   - PCL 6

     32-bit driver D:\DRIVERS\PCL6\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL6\X64\(Language)\DISK1

   - PostScript 3

     32-bit driver D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PS\X64\(Language)\DISK1

   For details about the languages supported in the printer drivers, see page 6 "Supported languages".

10. **Click [Next].**

    The installation starts.

11. **Click [Finish].**

    If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

    The number after "USB" varies depending on the number of printers connected.

Windows Vista, Windows Server 2008

1. **Quit all applications. (Do not close this manual.)**
2. **Check that the power of the machine is off.**

3. **Connect the machine and computer using a USB cable.**

   Connect the USB cable firmly.

4. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

5. **In the [Found New Hardware] window, click [Locate and install driver software (recommended)].**

6. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

   If the [AutoPlay] dialog box appears, click [Close].

7. **Select the name of the machine whose driver you want to install.**

   Check the location where the source files of the printer driver is stored.

   If the CD-ROM drive is D, the source files are stored in the following locations:

   - PCL 5c

     32-bit driver D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL5C\X64\(Language)\DISK1

   - PCL 6

     32-bit driver D:\DRIVERS\PCL6\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL6\X64\(Language)\DISK1

   - PostScript 3

     32-bit driver D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PS\X64\(Language)\DISK1

   For details about the languages supported in the printer drivers, see page 6 "Supported languages".

8. **Click [Next].**

   The installation starts.

9. **Click [Close].**

   If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

   The number after "USB" varies depending on the number of printers connected.

Windows 7, Windows Server 2008 R2

1. **Quit all applications. (Do not close this manual.)**
2. **Check that the power of the machine is off.**

3. **Connect the machine and computer using a USB cable.**

   Connect the USB cable firmly.

4. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

5. **Click [Devices and Printers] from the [Start] menu.**
6. **Double-Click the icon of machine you want to use in the [Unspecified] category.**
7. **Click the [Hardware] tab.**
8. **Click [Properties].**
9. **Click the [General] tab.**
10. **Click [Change settings].**
11. **Click [Driver] tab.**
12. **Click [Update Driver...].**
13. **Click [Browse my computer for driver software].**
14. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

    If the [AutoPlay] dialog box appears, click [Close].

15. **Click [Browse], and then select the printer driver location.**

    If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

    - PCL 5c

      32-bit driver D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

      64-bit driver D:\DRIVERS\PCL5C\X64\(Language)\DISK1

    - PCL 6

      32-bit driver D:\DRIVERS\PCL6\XP_VISTA\(Language)\DISK1

      64-bit driver D:\DRIVERS\PCL6\X64\(Language)\DISK1

    - PostScript 3

      32-bit driver D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

      64-bit driver D:\DRIVERS\PS\X64\(Language)\DISK1

    For details about the languages supported in the printer drivers, see page 6 "Supported languages".

16. **Click [Next].**

    The installation starts.

17. **Click [Close].**

    If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of printers connected.

Windows 8/8.1, Windows Server 2012/2012 R2

1. **Quit all applications. (Do not close this manual.)**
2. **Check that the power of the machine is off.**
3. **Connect the machine and computer using a USB cable.**

   Connect the USB cable firmly.
4. **Turn on the power of the machine.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.
5. **Click [Devices and Printers] from the [Start] menu.**
6. **Double-Click the icon of machine you want to use in the [Unspecified] category.**
7. **Click the [Hardware] tab.**
8. **Click [Properties].**
9. **Click the [General] tab.**
10. **Click [Change settings]**
11. **Click [Driver] tab.**
12. **Click [Update Driver...].**
13. **Click [Browse my computer for driver software].**
14. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

    If the [AutoPlay] dialog box appears, click [Close].
15. **Click [Browse], and then select the printer driver location.**

    If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

    - PCL 5c

      32-bit driver D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

      64-bit driver D:\DRIVERS\PCL5C\X64\(Language)\DISK1
    - PCL 6

      32-bit driver D:\DRIVERS\PCL6\XP_VISTA\(Language)\DISK1

      64-bit driver D:\DRIVERS\PCL6\X64\(Language)\DISK1
    - PostScript 3

      32-bit driver D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

      64-bit driver D:\DRIVERS\PS\X64\(Language)\DISK1

    For details about the languages supported in the printer drivers, see page 6 "Supported languages".

16. **Click [Next].**

    The installation starts.

17. **Click [Close].**

    If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

    The number after "USB" varies depending on the number of printers connected.

Configuring Option Settings for the Printer

When bidirectional communication works correctly, your computer obtains information about option, paper size and paper feed direction settings from the machine automatically. Bidirectional communication also allows you to monitor machine status.

When bidirectional communication is disabled, you have to set up option, paper size and paper feed direction settings on your computer manually.

Conditions for Bidirectional Communication

To support bidirectional communication, the following conditions must be met:

When connected with the network

- The Standard TCP/IP port must be used.
- In addition to the above, one of the following conditions must also be met:
  - The TCP/IP protocol or the IPP protocol is used. (When using the IPP protocol, the IPP port name must include the IP address.)

When connected with USB

- The machine must be connected to the computer's USB port using the USB interface cable.
- The computer must support bidirectional communication.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the printer driver.

Note

- The PCL 6 and PostScript 3 printer drivers support bidirectional communication and automatic printer status updates.
- To obtain printer information automatically using the bidirectional communication function of the PCL 6 or PostScript 3 printer driver, you must click the [Update Now] on the [Accessories] or [Paper Size Settings] tab in the printer driver's properties window.
- The PCL 5c printer driver supports bidirectional communication. You can update the printer status manually.

If Bidirectional Communication is Disabled

This section describes how to set up option and setting of paper size for each tray on your computer manually.

Important

- Manage Printers permission is required to change the printer properties. Log on as an Administrators group member.

1. **Open the printer window.**
   - Windows Server 2003:

     On the [Start] menu, select [Printers and Faxes].
   - Windows Vista, Windows Server 2008:

     On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
   - Windows 7, Windows Server 2008 R2:

     On the [Start] menu, select [Devices and Printers].
   - Windows 8/8.1, Windows Server 2012/2012 R2:

     On the desktop, point to the bottom-right corner, click [Settings], [Control Panel], and then [View devices and printers].
2. **Open the printer properties dialog box.**
   - Windows Vista, Windows Server 2003/2008:

     Right-click the machine's icon, and then click [Properties].
   - Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2:

     Right-click the machine's icon, and then click [Printer properties].
3. **Click the [Accessories] tab.**
4. **Select options installed from the [Options] area, and then make the necessary settings.**
5. **Click [Paper Size Settings] tab.**
6. **In [Input Tray:] select which trays to use, and then, in [Paper Size:] select the size of the paper that you want to load in each tray.**

   Click [Update] to apply the setting for each tray.
7. **Click [Apply].**
8. **Click [OK] to close the printer properties window.**

Note

- For details about making option settings for the machine using a Mac OS X, see page 32 "Configuring Option Settings for the Printer Under Mac OS X".

3. Troubleshooting

This chapter provides solutions for driver installation and USB connection problems.

Messages Displayed When Installing the Printer Driver

This section describes what to do if a message appears when installing the printer driver.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using Add Printer Wizard.

Message number 58 appears if there is a newer version of the printer driver already installed.

1. **Open the printer window.**
   - Windows Server 2003/2003 R2:

     On the [Start] menu, select [Printers and Faxes].
   - Windows Vista, Windows Server 2008:

     On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
   - Windows 7, Windows Server 2008 R2:

     On the [Start] menu, select [Devices and Printers].
   - Windows 8/8.1, Windows Server 2012/2012 R2:

     On the desktop, point to the bottom-right corner, click [Settings], [Control Panel], and then [View devices and printers].
2. **Click [Add a printer].**
3. **Follow the instructions in Add Printer Wizard.**

   If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:
   - PCL 5c

     32-bit driver D:\DRIVERS\PCL5C\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL5C\X64\(Language)\DISK1
   - PCL 6

     32-bit driver D:\DRIVERS\PCL6\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PCL6\X64\(Language)\DISK1
   - PostScript 3

     32-bit driver D:\DRIVERS\PS\XP_VISTA\(Language)\DISK1

     64-bit driver D:\DRIVERS\PS\X64\(Language)\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

4. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see page 9 "Confirming the Connection Method".

If USB Connection Fails

This section describes how to troubleshoot a problem related to USB connections.

Problem	Causes	Solutions
The machine is not automatically recognized.	The USB cable is not connected properly.	Disconnect the USB cable from the computer, and then turn off the main power switch. Turn on the main power switch again. When the machine has fully booted up, reconnect the USB cable.
Windows has already configured the USB settings.	Check whether the computer has identified the machine as an unsupported device.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.
The machine does not recognize the USB connection even when a USB cable is inserted.	If the USB cable is connected while the machine is off, the machine might not recognize the USB connection.	Press the operation switch, and then disconnect the USB cable from the computer. When the machine has returned to the ready condition, reconnect the USB cable.

4. Installing the Driver Under Mac OS X

This chapter explains how to install and configure the printer drivers for use on the Mac OS X operating system using Mac OS X 10.6 as an example.

Installing the PPD Files

To print using the printer specific features under Mac OS X, install the PPD files.

Important

- You need an administrator name and a password (phrase). For details, consult your network administrator.
- For the latest information on the corresponding operating system, see the "Readme.txt" file in the root directory of the CD-ROM drive.

1. Quit all applications. (Do not close this manual.)
2. Insert the provided CD-ROM into the computer's CD-ROM drive.
3. Double-click the CD-ROM drive icon.
4. Double-click the [Mac OS X] folder.
5. Double-click the [PS Driver] folder.
6. Double-click the [(brand name)] folder.
7. Double-click the package file icon.
8. Follow the instructions on the screen.

Note

- The PPD files will be automatically installed in the following location: \Library\Printers\PPDs\Contents\Resources\

Registering the Device

To use the machine, the device must be registered in the printer list.

Make sure the machine and computer are connected and turned on, and perform the following procedure.

Note

- The operating procedure under Mac OS X differs depending on the version of the operating system. Consult the procedure described in this manual, and make the necessary settings according to the manual of each version.

USB Connection

This section explains how to register devices via a USB connection.

Important

- **Make sure the computer and the printer are connected using the USB cable, and the power of the devices are turned on beforehand.**

1. **Start System Preferences.**
2. **Click [Print & Fax] or [Print & Scan].**

   Check that the machine automatically recognized by plug-and-play appears in the printers list.
3. **Click the [+] button.**
4. **Click [Default].**
5. **Select the printer that has "USB" indicated in the [Kind] column.**
6. **Select the printer you are using from the [Print Using:] pop-up menu.**

   If the printer you are using is not selected in [Print Using:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 29 "Installing the PPD Files".
7. **Click [Add].**

   If the option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.
8. **Quit System Preferences.**

Network Connection

This section explains how to register devices over a network.

1. **Start System Preferences.**

2. **Click [Print & Fax] or [Print & Scan].**
3. **Click the [+] button.**
4. **Click [Default].**
5. **Select the printer that has "Bonjour" indicated in the [Kind] column.**

   If the printer name is not displayed, select the icon that corresponds to your network environment (TCP/IP, etc.).
6. **Select the printer you are using from the [Print Using:] pop-up menu.**

   If the printer you are using is not selected in [Print Using:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 29 "Installing the PPD Files".
7. **Click [Add].**

   If the option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.
8. **Quit System Preferences.**

Configuring Option Settings for the Printer Under Mac OS X

This section explains how to configure the printer driver.

1. **Start System Preferences.**
2. **Click [Print & Fax] or [Print & Scan].**
3. **Select the printer you are using, and then click [Options & Supplies...].**
4. **Click [Driver], and then configure settings as needed.**
5. **Click [OK].**
6. **Quit System Preferences.**

Note

- If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

5. Appendix

Updating or Deleting the Driver

Important

- Administrator permission is required to update or delete the driver in use. Log on as an Administrators group member.
- For driver updates, select a driver that is compatible with the printer and driver type you are using. An error may result if you select a driver that is not compatible with the printer and driver type.

Note

- If the [User Account Control] dialog box appears, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears, click [Install this driver software anyway].

Updating the Driver

Printer driver

You can download the most recent version of the driver from the manufacturer's Web site. Download the latest driver, and then perform the following procedure.

1. **Open the printer window.**
   - Windows Server 2003:

     On the [Start] menu, select [Printers and Faxes].
   - Windows Vista, Windows Server 2008:

     On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
   - Windows 7, Windows Server 2008 R2:

     On the [Start] menu, select [Devices and Printers].
   - Windows 8/8.1, Windows Server 2012/2012 R2:

     On the desktop, point to the bottom-right corner, click [Settings], [Control Panel], and then [View devices and printers].
2. **Open the printer properties dialog box.**
   - Windows Vista, Windows Server 2003/2008:

     Right-click the machine's icon, and then click [Properties].
   - Windows 7/8/8.1, Windows Server 2008 R2/2012/2012 R2:

Right-click the machine's icon, and then click [Printer properties].

3. **Click the [Advanced] tab.**
4. **Click [New Driver...], and then click [Next].**
5. **Click [Have Disk...].**
6. **Click [Browse...], and then select the driver location.**
7. **Click [OK].**
8. **Select the machine model, and then click [Next].**

   The driver update starts.
9. **Click [Finish].**
10. **Click [OK] to close the printer properties window.**
11. **Restart the computer.**

PPD files(Mac OS X)

You can download the most recent version of the drivers from the manufacturer's Web site.

Delete the old version of the driver first, and then install the new driver. For details about how to delete the driver, see page 34 "Deleting the Driver".

Deleting the Driver

Printer driver

Windows Server 2003/2003 R2

1. **On the [Start] menu, click [Printers and Faxes].**
2. **Right-click the icon of the machine you want to delete, and then click [Delete].**
3. **Click [Server Properties] on the [File] menu.**
4. **Click the [Drivers] tab.**
5. **Select the driver you want to delete, and then click [Remove].**
6. **Click [Yes].**
7. **Click [Close] to close the print server properties window.**

Windows Vista, Windows Server 2008

1. **On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.**
2. **Right-click the icon of the machine you want to delete, and then click [Delete].**

3. On the [File] menu, point to [Run as administrator], and then click [Server Properties...].
4. Click the [Drivers] tab.
5. Select the driver you want to delete, and then click [Remove...].
6. Select [Remove driver and driver package.], and then click [OK].
7. Click [Yes].
8. Click [Delete].
9. Click [OK].
10. Click [Close] to close the print server properties window.

Windows 7, Windows Server 2008 R2

1. On the [Start] menu, click [Devices and Printers].
2. Right-click the icon of the machine you want to delete, and then click [Remove Device].
3. Click [Yes].
4. Click any machine icon, and then click [Print server properties].
5. Click the [Drivers] tab.
6. Click the [Change Driver Settings] button if it is displayed.
7. Select the driver you want to delete, and then click [Remove...].
8. Select [Remove driver and driver package.], and then click [OK].
9. Click [Yes].
10. Click [Delete].
11. Click [OK].
12. Click [Close] to close the print server properties window.

Windows 8/8.1, Windows Server 2012/2012 R2:

1. On the desktop, point to the bottom-right corner, and then click [Settings].
2. Click [Control Panel].
3. Click [View devices and printers].
4. Right-click the icon of the machine you want to delete, and then click [Remove device].
5. Click [Yes].
6. Click any machine icon, and then click [Print server properties].
7. Click the [Drivers] tab.
8. Click the [Change Driver Settings] button if it is displayed.
9. Select the driver you want to delete, and then click [Remove...].
10. Select [Remove driver and driver package.], and then click [OK].

11. Click [Yes].
12. Click [Delete].
13. Click [OK].
14. Click [Close] to close the print server properties window.

PPD files(Mac OS X)

1. Start System Preferences.
2. Click [Print & Fax] or [Print & Scan].
3. Select the printer you want to delete, click the [−] button.

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