*MLP**150**DN*
SP 8200DN
LP150dn
Aficio SP 8200DN

Operating Instructions
Software Guide

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read the Safety Information before using the machine.

Introduction

This manual contains detailed instructions and notes on the operation and use of this printer. For your safety and benefit, read this manual carefully before using the printer. Keep this manual in a handy place for quick reference.For safe and correct use, be sure to read the "Safety Information" before using the machine.

Manuals for This Printer

Refer to each manual as required.

Safety Information

Contains information about safe usage of this machine.

To avoid injury and prevent damage to the machine, be sure to read this.

Quick Installation Guide

Contains procedures for removing the printer from its box, connecting it to a computer, and installing its driver.

Hardware Guide

Contains information about paper and procedures such as installing options, replacing consumables, responding to error messages, and resolving jams.

Software Guide (this manual)

Contains information about using this machine, its software, and its security functions.

Security Guide

Contains information for administrators of the machine. It explains security functions that the administrators can use to prevent data tampering or unauthorized use of the machine. Also refer to this manual for the procedure for registering an administrator, as well as setting user and administrator authentication.

Note to Administrator

Contains administrators' notes, such as information about administrators' hidden menus and hard disk overwrite functions.

Administrators must store this manual carefully.

UNIX Supplement

For "UNIX Supplement", please visit our Web site or consult an authorized dealer.

This manual includes descriptions of functions and settings that might not be available on this printer.

Model-Specific Information

In this manual, the following symbols indicate information that relates to a specific printer model.

220-240V :

This indicates information about the 220 to 240 V model printer.
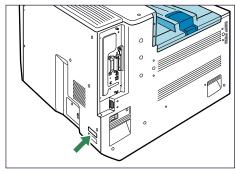
Read if you have purchased this model.

120V :

This indicates information about the 120 V model printer.

Read if you have purchased this model.

🔽Note

- Check the label on the rear of the printer to identify the printer's model.

BEK189S

How to Read This Manual

Symbols

This manual uses the following symbols:

⚠ WARNING

Indicates important safety notes.

Ignoring these notes could result in serious injury or death. Be sure to read these notes. They can be found in the "Safety Information" section of Safety Information.

⚠ CAUTION

Indicates important safety notes.

Ignoring these notes could result in moderate or minor injury, or damage to the printer or to property. Be sure to read these notes. They can be found in the "Safety Information" section of Safety Information.

⭐ Important

Indicates points to pay attention to when using the printer, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

⬇ Note

Indicates supplementary explanations of the printer's functions, and instructions on resolving user errors.

📄 Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the printer's display panel.
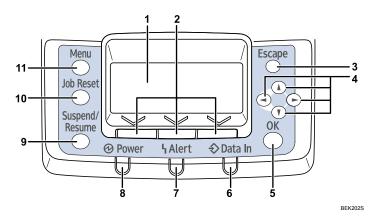
[ ]

Indicates the names of keys on the printer's control panel.

About IP Address

In this manual, "IP address" covers both IPv4 and IPv6 environments. Read the instructions that are relevant to the environment you are using.

Using Keys

This section explains names and usage of the parts of the control panel.

BEK202S

1. **Display**

   Displays current printer status and error messages.

   When the printer enters energy saver mode, the display back light turns off. For details about energy saver mode, see "System Menu".

2. **Selection Keys**

   Correspond to the function items shown on the bottom line of the display.

3. **[Escape] Key**

   Press this key to return to the previous display.

4. **Scroll Keys**

   Press to move the cursor in each direction.

   When the [▲] [▼] [◄] [►] keys appear in this manual, press the scroll key of the same direction.

5. **[OK] Key**

   Use this key to confirm settings or setting values, or move to the next menu level.

6. **Data In indicator**

   Blinks when the printer is receiving data from a computer. Lights up if there is data to be printed.

7. **Alert Indicator**

   Lights up in red or yellow when a printer error occurs.

   Red: printing is not possible/possible but print quality cannot be ensured.

   Yellow: printer requires maintenance, such as replacing consumables, shortly.

   Follow the instructions that appear on the display.

8. **Power Indicator**

   Remains lit while the power is on. It is unlit when the power is off or while the printer is in energy saver mode.

9. **[Suspend/Resume] Key**

   Press this key to suspend a print job. The key lights up while the job is suspended. To resume the job, press this key again.

10. **[Job Reset] Key**

    Press this key to cancel an ongoing print job.

11. **[Menu] Key**

    Press this key to configure and check the current printer settings.

    While configuring settings, press this key to return to the initial screen.

🗎 Reference

- p.151 "System Menu"

TABLE OF CONTENTS

2. Setting Up the Printer Driver

3. Other Print Operations

4. Using Paper Types that Have Unique Names

5. Making Printer Settings Using the Control Panel

6. Monitoring and Configuring the Printer

7. Using a Printer Server

8. Mac OS Configuration

9. Security Measures Provided by this Printer

10. Appendix

1. Preparing for Printing

Confirming the Connection Method

This printer supports network and local connections.

Before installing the printer driver, check how the printer is connected. Follow the driver installation procedure that is appropriate for the connection method.
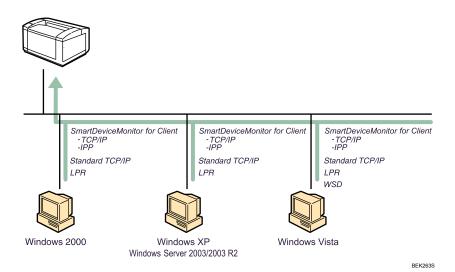
Network Connection

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

Using this printer as a Windows printing port

Network connections can be established through Ethernet and Wireless LAN.

Available ports are determined based on the combination of the Windows operating system version and connection method used.

SmartDeviceMonitor for Client
- TCP/IP
- IPP

Standard TCP/IP

LPR

SmartDeviceMonitor for Client
- TCP/IP
- IPP

Standard TCP/IP

LPR

SmartDeviceMonitor for Client
- TCP/IP
- IPP

Standard TCP/IP

LPR

WSD

Windows 2000

Windows XP
Windows Server 2003/2003 R2

Windows Vista

BEK263S

Windows 2000/XP

Connection Method	Available Ports
• Ethernet	• SmartDeviceMonitor for Client port
• Wireless LAN	• Standard TCP/IP port

Connection Method	Available Ports
	• LPR port

Windows Vista

Connection Method	Available Ports
• Ethernet • Wireless LAN	• SmartDeviceMonitor for Client port • Standard TCP/IP port • LPR port • WSD port

Windows Server 2003/2003 R2

Connection Method	Available Ports
• Ethernet • Wireless LAN	• SmartDeviceMonitor for Client port • Standard TCP/IP port • LPR port

🔻 Note
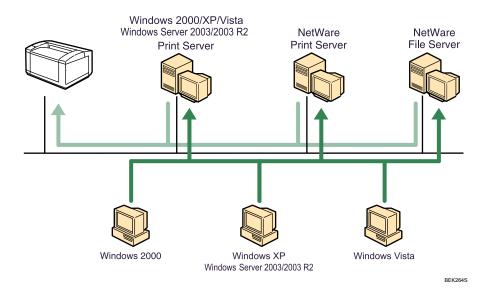
- See the explanation about how to install the printer driver for each type of ports.
- For details about the SmartDeviceMonitor for Client port, see "Installing the Printer Driver".
- For details about the Standard TCP/IP port, see "Installing the Printer Driver".
- For details about the LPR port, see "Installing the Printer Driver".
- For details about the WSD port, see "Installing the Printer Driver".

🔖 Reference

- p.21 "Installing the Printer Driver"

Using as a network printer

This printer can be used as a Windows network printer, a NetWare print server, or a NetWare remote printer.

1

Windows 2000/XP/Vista
Windows Server 2003/2003 R2
Print Server

NetWare
Print Server

NetWare
File Server

Windows 2000

Windows XP
Windows Server 2003/2003 R2

Windows Vista

BEK264S

Note

- In an IPv6 environment, NetWare servers cannot be used.

- See the explanation about how to install the printer driver for each type of network printers.

- For details about Windows network printer, see "Using as a Windows Network Printer".

- For details about a NetWare print server and remote printer, see "Using as a NetWare Print Server/ Remote Printer".

Reference

- p.39 "Using as a Windows Network Printer"

- p.42 "Using as a NetWare Print Server / Remote Printer"

Local Connection

Local connections can be established via parallel and USB connections.

Available connection methods are determined based on the Windows operating system version used.

Windows 2000/XP/Vista:

- USB connection

- Parallel connection

Windows Server 2003/2003 R2:

- USB connection

- Parallel connection

⬇ Note

- See the explanation about how to install the printer driver for each connection method.

- For details about USB connections, see "Installing the Printer Driver Using USB".

- For details about parallel connections, see "Printing with Parallel Connection".

🗎 Reference

- p.45 "Installing the Printer Driver Using USB"

- p.48 "Printing with Parallel Connection"

Installing the Printer Driver

This section explains how to install the printer driver. There are two ways to install the printer driver: using Quick Install, which installs the settings at once, or installing the appropriate driver according to the port you want to use.

Downloading the Printer Driver

You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

If your operating system is Windows XP Pro x64, Windows Vista x64, or Windows Server 2003/2003 R2 x64, you must download the printer driver from the supplier's Web site. Select this printer and the operating system you are using, and then download it.

Quick Install

Users of Windows 2000/XP/Vista, and Windows Server 2003/2003 R2 can install this software easily using the supplied CD-ROM.

Using Quick Install, the PCL and RPCS printer drivers and DeskTopBinder- SmartDeviceMonitor for Client are installed under the network environment, and the TCP/IP port will be set.

⭐ **Important**

- To install the printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrator.

- If this printer is connected using USB, see "Installing the Printer Driver Using USB" and install the printer driver.

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

4. **Click [Quick Install].**

   The software license agreement appears in the [License Agreement] dialog box.

5. **After reading the agreement, click [I accept the agreement.] and then click [Next >].**

6. **Select the printer model you want to use in the [Select Printer] dialog box.**

   For network connection via TCP/IP, select the printer whose IP address is displayed in [Connect To].

   For parallel connection, select the printer whose printer port is displayed in [Connect To].

7. **Click [Install].**

The printer driver installation starts.

8. **Click [Finish].**

A message about restarting the computer appears. Restart the computer to complete the installation.

9. **Click [Exit] in the first dialog box of the installer, and then take out the CD-ROM.**

🔽 Note

- To stop installation of the selected software, click [Cancel] before the installation is complete.

- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

- Select a printer to whose IP address is displayed in [Connect To] to install SmartDeviceMonitor for Client when using TCP/IP.

- Quick Install is not available unless bidirectional communication between the printer and computer is enabled via parallel connection. For details about bidirectional communication between the printer and computer, see "Making Option Settings for the Printer".

📖 Reference

- p.45 "Installing the Printer Driver Using USB"

- p.54 "Making Option Settings for the Printer"

Installing the Printer Driver for the Selected Port

Using the SmartDeviceMonitor for Client port

⭐ Important

- To install SmartDeviceMonitor for Client under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrator.

- Install SmartDeviceMonitor for Client before installing the printer driver when using the SmartDeviceMonitor for Client port.

Installing SmartDeviceMonitor for Client

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

The installer starts.

3. **Select an interface language, and then click [OK].**

The default interface language is English.

4. **Click [DeskTopBinder - SmartDeviceMonitor for Client].**

5. **The message to quit all other applications appears. Quit all applications, and then click [Next >].**

6. **The software license agreement appears in the [License Agreement] dialog box. After reading through its contents, click [Yes].**

7. **Click [Full install] or [Custom install].**

   [Full install] installs all required applications: DeskTopBinder Lite and SmartDeviceMonitor for Client.

   [Custom install] installs selected applications.

8. **Follow the instructions on the display and then click [Next >] to proceed to the next step.**

9. **After the installation is completed, select one of the options to restart the computer either now or later, and click [Complete].**

   Restart the computer to complete the installation.

🔸 **Note**

- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

Changing the port settings for SmartDeviceMonitor for Client

Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP timeout, recovery/parallel printing, and printer groups.

Windows 2000:

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use. On the [File] menu, click [Properties].**

3. **On the [Ports] tab, click [Configure Port].**

   The [Configuration] dialog box appears.

Windows XP, Windows Server 2003/2003 R2:

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use. On the [File] menu, click [Properties].**

3. **Click the [Ports] tab, and then click [Configure Port].**

   The [Port Configuration] dialog box appears.

1

Windows Vista:

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.

2. **Click [Printer].**

   The [Printers] window appears.

3. **Right-click the icon of the printer you want to use, and then click [Properties].**

4. **Click the [Ports] tab, and then click [Configure Port].**

   The [Port Configuration:] dialog box appears.

⬇️**Note**

- For TCP/IP, timeout setting can be configured.

- User, proxy, and timeout settings can be configured for IPP.

- If no settings on the [Recovery/Parallel Printing] tab are available, follow the procedure below.

  1. Click [Cancel] to close the [Port Configuration:] dialog box.

  2. Start SmartDeviceMonitor for Client, and then right-click the SmartDeviceMonitor for Client icon on the tasktray.

  3. Point to [Properties], and then click Extended Features Settings.

  4. Select the Set [Recovery/Parallel Printing] for each port check box.

  5. Click [OK] to close the [Extended Features] dialog box.

- For details about these settings, see "Using SmartDeviceMonitor for Client", or SmartDeviceMonitor for Client Help.

📘**Reference**

- p.206 "Using SmartDeviceMonitor for Client"

Installing the PCL /RPCS printer drivers (TCP/IP)

⭐**Important**

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

4. Click [PCL/RPCS Printer Drivers].

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 >].

6. Select the printer driver you want to use in the [Select Program] dialog box.

You can select several printer drivers.

7. Click [Next >].

8. Select the printer model you want to use.

The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. Double-click the printer name to display the printer settings.

The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

10. Click [Port], and then click [Add].

11. Click [SmartDeviceMonitor], and then click [OK].

12. Click [TCP/IP], and then click [Search].

A list of printers using TCP/IP appears.

13. Select the printer you want to use, and then click [OK].

Only printers that respond to a broadcast from the computer appear. To use a printer not listed here, click [Specify Address], and then enter the IP address or host name of the printer.

14. Check that the port of the selected printer is displayed in [Port].

15. Set a user code, if necessary.

Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

16. Select the [Default Printer] check box to configure the printer as default.

17. Click [Continue].

Installation starts.

18. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

⬇ Note

- Setting a user code allows a SmartDeviceMonitor for Admin user to display and check statistics about the number of sheets which each user prints. For details, see SmartDeviceMonitor for Admin Help.

- Auto Run may not work with certain operating system settings. If this happens, launch "Setup.exe" on the CD-ROM root directory.

- 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 "Messages Displayed When Installing the Printer Driver".

⊟ Reference

- p.51 "Messages Displayed When Installing the Printer Driver"

1

Installing the PostScript 3 printer driver (TCP/IP)

⭐ Important

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

- If your operating system is Windows XP Pro x64, Windows Server 2003/2003 R2 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.

   Step *5* does not apply for Windows Vista users.

5. **Click [Next >].**

6. **Click [Local printer] or [Local printer attached to this computer.], and then click [Next >].**

   If you are using Windows Vista, you do not need to click [Next>].

7. **Click [Create a new port:].**

8. **Click [DeskTopBinder - SmartDeviceMonitor], and then click [Next >].**

9. **Click [TCP/IP], and then click [Search].**

   A list of printers using TCP/IP appears.

10. **Select the printer you want to use, and then click [OK].**

    Only printers that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.

11. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**

12. **Change the printer name if you want, and then click [Next >].**

    Select the [Yes] check box to configure the printer as default.

    Step **13** does not apply for Windows Vista users.

13. **Specify whether or not to share the printer, and then click [Next >].**

14. **Specify whether or not to print a test page.**

    If you are using other than Windows Vista, click [Next].

15. **Click [Finish].**

    The printer driver installation starts.

🔻 **Note**

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Installing the PCL/RPCS printer drivers (IPP)

⭐ **Important**

- To install printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.

3. **Select an interface language, and then click [OK].**

    The default interface language is English.

4. **Click [PCL/RPCS Printer Drivers].**

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 >].

6. **Select a printer driver you want to use in the [Select Program] dialog box.**

    You can select several printer drivers.

7. **Select the printer model you want to use.**

    The printer name can be changed in the [Change settings for 'Printer Name'] box.

1

8. **Double-click the printer name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

9. **Click [Port], and then click [Add].**

10. **Click [SmartDeviceMonitor], and then click [OK].**

11. **Click [IPP].**

12. **In the [Printer URL] box, enter "http://printer's IP address/printer" as the printer's address.**

    If the server authentication is issued, to enable SSL (a protocol for encrypted communication), enter "https://printer's IP address/printer" (Internet Explorer 5.01, or a higher version must be installed). (example IP address: 192.168.15.16)

    ```
    http://192.168.15.16/printer
    ```
    ```
    https://192.168.15.16/printer
    ```

    You can enter "http://printer's IP address/ipp" as the printer's address.

13. **Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing ports.**

    If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

14. **Click [Detailed Settings] to make necessary settings.**

    For details about the settings, see SmartDeviceMonitor for Client Help.

15. **Click [OK].**

16. **Check that the port of the selected printer is displayed in [Port].**

17. **Set a user code, if necessary.**

    Up to 8 numeric characters can be entered. No alphabetic characters or symbols can be entered.

18. **Select the [Default Printer] check box to configure the printer as default.**

19. **Click [Continue].**

    Installation starts.

20. **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 the installation.

Note

- To stop installation of the selected software, click [Cancel] before the installation is complete.
- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.
- Setting a user code allows a SmartDeviceMonitor for Admin user to display and check the number of sheets each user prints. For details, see SmartDeviceMonitor for Admin Help.

- 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 "Messages Displayed When Installing the Printer Driver".

📑 Reference

- p.51 "Messages Displayed When Installing the Printer Driver"

Installing the PostScript 3 printer driver (IPP)

⭐ Important

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

- If your operating system is Windows XP Pro x64, Windows Server 2003/2003 R2 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.

3. **Select an interface language, and then click [OK].**

    The default interface language is English.

    The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

    Add Printer Wizard starts.

    Step *5* does not apply for Windows Vista users.

5. **Click [Next >].**

6. **Click [Local printer attached to this computer.], and then click [Next >].**

    If you are using Windows Vista, you do not need to click [Next >].

7. **Click [Create a new port:].**

8. **Click [DeskTopBinder - SmartDeviceMonitor], and then click [Next >].**

9. **Click [IPP].**

1

10. **In the [Printer URL] box, enter "http://(machine's IP address or host name)/printer" as the printer's address.**

If the server authentification is issued, to enable SSL (a protocol for encrypted communication), enter "https://(machine's IP address or host name)/printer" (Internet Explorer 5.01, or a higher version must be installed).

(example IP address: 192.168.15.16)

```
http://192.168.15.16/printer
```

```
https://192.168.15.16/printer
```

You can enter "http://machine's IP address or host name/ipp" as the printer's address.

If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

11. **Enter a name for identifying the printer in [IPP Port Name]. Use a name different from the one of any existing port.**

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

12. **Click [Detailed Settings] to make necessary settings.**

If you are using Windows 2000, click [OK] after making necessary settings.

For information about the settings, see DeskTopBinder-SmartDeviceMonitor for Client Help.

13. **Click [OK].**

14. **Check that the name of the printer driver you want to install is selected, and then click [Next >].**

15. **Change the name of the printer if you want, and then click [Next >].**

Select the [Yes] check box to configure the printer as default.

Step **17** does not apply for Windows Vista users.

16. **Specify whether or not to share the printer, and then click [Next >].**

17. **Specify whether or not to print a test page, and then click [Next >].**

If you are using other than Windows Vista, click [Next].

18. **Click [Finish].**

The printer driver installation starts.

⬇ Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

Using the Standard TCP/IP port

This describes how to install the PCL/ RPCS or PostScript 3 printer drivers using the TCP/IP port.

⭐ **Important**

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

- In an IPv6 environment, you cannot use the Standard TCP/IP Port. Use the SmartDeviceMonitor for Client port.

- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

- If your operating system is Windows XP Pro x64, Windows Server 2003/2003 R2 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

Installing the PCL/RPCS Printer Drivers

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

4. **Click [PCL/RPCS Printer Drivers].**

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 >].

6. **Select a printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

7. **Click [Next >].**

8. **Select the printer model you want to use.**

   The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. **Double-click the printer name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

10. **Click [Port], and then click [Add].**

11. **Click [Standard TCP/IP Port], and then click [OK].**

    Configure the Standard TCP/IP port settings. See Windows Help if [Standard TCP/IP Port] does not appear.

12. **Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**

13. **Enter the printer name or IP address in the [Printer Name or IP Address] box.**

    The [Port Name] text box automatically obtains a port name. Change this name if necessary.

    When the device selection appears, select "RICOH NetworkPrinter Driver C Model".

14. **Click [Next >].**

15. **Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**

    The installation start dialog box reappears.

16. **Check that the port of the selected printer is displayed in [Port].**

17. **Configure the default printer as necessary.**

18. **Click [Continue].**

    The printer driver installation starts.

19. **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 the installation.

Installing the PostScript 3 Printer Driver

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.

3. **Select an interface language, and then click [OK].**

    The default interface language is English.

    The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

    Add Printer Wizard starts.

    Step **5** does not apply for Windows Vista users.

5. **Click [Next >].**

6. **Click [Local printer] or [Local printer attached to this printer], and then click [Next >].**

    If you are using Windows Vista, you do not need to click [Next].

7. **Click [Create a new port:].**

1

8. **Click [Standard TCP/IP Port], and then click [Next >].**

   If you are using other than Windows 2000, [Standard TCP/IP Port] in [Create a new port].

9. **Click [Next >] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**

10. **Enter the printer name or IP address in the [Printer Name or IP Address] box.**

    The [Port Name] text box automatically obtains a port name. Change this name if necessary.

    When screen for Device selection appears, select "RICOH NetworkPrinter Driver C Model".

11. **Click [Next >].**

12. **Click [Finish] in the [Add Standard TCP/IP Printer Port Wizard] dialog box.**

13. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**

14. **Change the printer name if you want, and then click [Next >].**

    Select the [Yes] check box to configure the printer as default.

    Step **15** does not apply for other than Windows 2000 users.

15. **Click [Next >].**

16. **Specify whether or not to share the printer, and then click [Next >].**

17. **Specify whether or not to print a test page.**

    If you are using other than Windows Vista, click [Next >].

18. **Click [Finish].**

    The printer driver installation starts.

⬇ Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- To stop installation of the selected software, click [Cancel] before the installation is complete.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

- 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 "Messages Displayed When Installing the Printer Driver".

🔗 Reference

- p.51 "Messages Displayed When Installing the Printer Driver"

Using the LPR port

This describes how to install the PCL/RPCS or PostScript 3 printer drivers using the LPR port.

1

⭐ **Important**

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- If you are using other than Windows 2000 in an IPv6 environment, you cannot use the LPR Port. Use the DeskTopBinder-SmartDeviceMonitor port.

- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

- If your operating system is Windows XP Pro x64, Windows Server 2003/2003 R2 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

Installing the PCL/RPCS Printer Drivers

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

4. **Click [PCL/RPCS Printer Drivers].**

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 >].

6. **Select a printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

7. **Select the printer model you want to use.**

   The printer name can be changed in the [Change settings for 'Printer Name'] box.

8. **Click [Next >].**

9. **Double‑click the printer name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

10. **Click [Port], and then click [Add].**

11. **Click [LPR Port], and then click [OK].**

    If [LPR Port] does not appear, see Windows Help and install it.

12. **Enter the printer's IP address in the [Name or address of server providing lpd] box.**

1

13. **Enter "lp" in the [Name of printer or print queue on that server] box, and then click [OK].**

    The port is added.

14. **Check that the port of the selected printer is displayed in [Port].**

15. **Configure the default printer as necessary.**

16. **Click [Continue].**

    The printer driver installation starts.

17. **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 the installation.

Installing the PostScript 3 Printer Driver

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.

3. **Select an interface language, and then click [OK].**

    The default interface language is English.

    The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

    Add Printer Wizard starts.

    Step *5* does not apply for Windows Vista users.

5. **Select [My Computer], and then click [Next >].**

    If you are using Windows 2000, you can click [Next >] without selecting [My Computer].

6. **Click [Local printer] or [Local Printer attached to this computer], and then click [Next >].**

    If you are using other than Windows Vista, click [Next >]

7. **Click [Create a new port:].**

8. **Click [LPR Port], and then click [Next >].**

    If you are using other than Windows 2000, [Standard TCP/IP Port] in [Create a new port].

9. **Enter the printer's IP address in the [Name or address of server providing lpd] box.**

10. **Enter "Ip" in the [Name of printer or print queue on that server box], and then click [OK].**

11. **Check that the name of the machine whose driver you want to install is selected, and then click [Next >].**

12. **Change the printer name if you want, and then click [Next >].**

    Select the [Yes] check box to configure the printer as default.

1

Step **13** does not apply for Windows Vista users.

13. **Specify whether or not to share the printer, and then click [Next >].**

14. **Specify whether or not to print a test page.**

If you are using other than Windows Vista, click [Next >].

15. **Click [Finish].**

The printer driver installation starts.

🔽Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- To stop installation of the selected software, click [Cancel] before the installation is complete.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

- 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 "Messages Displayed When Installing the Printer Driver".

🔖Reference

- p.51 "Messages Displayed When Installing the Printer Driver"

Using the WSD port

This section explains installation when using the WSD port.

⭐Important

- The WSD port can be used only under Windows Vista.

- To install under Windows Vista, you must have an account that has Manage Printers permission. Log on as an Administrator.

- If the printer is connected using the WSD port, bidirectional communication is not possible. For details about bidirectional communication, see "Making Option Settings for the Printer".

- You can connect to the printer only if both the printer and computer are on the same network segment, or Windows Vista "Network discovery" is enabled. For details, see Windows Help.

Installing the PCL/RPCS Printer Drivers

1. **Quit all applications currently running.**

2. **On the [Start] menu, click [Network].**

The [Network] window appears, and the device search begins automatically.

3. **Right-click the printer's icon, and then click [Install].**

If the [User Account Control] dialog box appears, click [Continue].

The [Found New Hardware] dialog box appears.

4. **Click [Locate and install driver software (Recommended)].**

   If the [User Account Control] dialog box appears, click [Continue].

5. **Click [Don't search online].**

6. **Click [Browse my computer for driver software (advanced)].**

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

   If the [AutoPlay] dialog box appears, click the [close] button and then proceed to step **8**.

8. **Click [Browse...], and then specify a location for the printer driver.**

   If the CD-ROM drive letter is D, the printer driver's source files are stored in "D: \DRIVERS\RPCS \XP_VISTA\(Language)\DISK1".

9. **Click [Next].**

   If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

10. **Click [Close].**

    If installation is successful, the icon of the printer connected to the "WSD" port is added to the [Printers] window.

Installing the PostScript 3 Printer Driver

1. **Quit all applications currently running.**

2. **Click [Start], and then click [Network].**

   The [Network] window appears, and the device search begins automatically.

3. **Using as the NetWare Print Server / Remote Printer**

   If the [User Account Control] dialog box appears, click [Continue].

   The [Found New Hardware] dialog box appears.

4. **Click [Locate and install driver software (Recommended)].**

   If the [User Account Control] dialog box appears, click [Continue].

   The [Found New Hardware] window appears.

5. **Click [Don't search online].**

6. **Click [Browse my computer for driver software (advanced)].**

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

   If the [AutoPlay] dialog box appears, click the [close] button and then proceed to step **8**.

8. **Click [Browse...], and then specify a location for the printer driver.**

   If the CD-ROM drive letter is D, the printer driver's source files are stored in "D:\DRIVERS\PS\ (Language) \XP_VISTA\DISK1".

9. **Click [Next].**

   If the [Windows can't verify the publisher of this driver software] message appears, click [Install this driver software anyway].

10. **Click [Close].**

    If installation is successful, the icon of the printer connected to the "WSD" port is added to the [Printers] window.

    ⬇️ **Note**

    - The port name that follows "WSD" uses random character strings. It cannot be changed freely.

    - To stop the installation, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the printer's icon in the [Network] window, and then click [Uninstall].

    📖 **Reference**

    - p.54 "Making Option Settings for the Printer"

Using as a Windows Network Printer

This describes how to install the PCL, RPCS or PostScript 3 printer driver when using the printer as a Windows network printer.

To use the print server, install the printer driver by selecting "Network printer server", and then select the Windows 2000/XP/Vista, or Windows Server 2003/2003 R2 shared printer.

This section assumes that the client has already been configured to communicate with a Windows 2000/XP/Vista, or Windows Server 2003/2003 R2 print server. Do not begin the following procedure before the client is set up and configured correctly.

⭐ **Important**

- To install the printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.
- If you print with a print server connected to the printer using the SmartDeviceMonitor port, Recovery Printing and Parallel Printing cannot be used from the client.
- If you print under Windows XP/Vista or Windows Server 2003/2003 R2 print server, notification functions of SmartDeviceMonitor may not be used with the client.
- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.
- If you print from a print server connected to the printer using the DeskTopBinder-SmartDeviceMonitor port, the client cannot use Recovery Printing and Parallel Printing.
- If you print with a Windows XP or Windows Server 2003/2003 R2 print server, DeskTopBinder-SmartDeviceMonitor notification functions may not be possible for the client.
- You can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.
- If your operating system is Windows XP Pro x64, Windows Server 2003/2003 R2 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

Installing the PCL or RPCS Printer Driver

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**
   The installer starts.
3. **Select an interface language, and then click [OK].**
   The default interface language is English.
4. **Click [RPCS Printer Driver] or [PCL Printer Driver].**

1

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 >].

6. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

7. **Click [Next >].**

8. **Select the [Printer Name] check box to select the printer models you want to use.**

   The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. **Double-click the printer name to display the printer settings.**

   The details shown in [Comment], Driver, and [Port] vary depending on the operating system, printer model, and port.

10. **Click [Port], and then click [Add].**

11. **Click [Network Printer], and then click [OK].**

12. **Double-click the computer name you want to use as a print server in the [Browse for Printer] window.**

13. **Select the printer you want to use, and then click [OK].**

14. **Check that the port of the selected printer is displayed in [Port].**

15. **Configure the user code as necessary.**

    For an RPCS printer driver, a user code can be set after the printer driver installation.

    For details about user code, see the printer driver Help.

16. **Select the [Default Printer] check box to configure the printer as default.**

17. **Click [Continue].**

    The printer driver installation starts.

18. **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.

Installing the PostScript 3 Printer Driver

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

   The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

1

4. **Click [PostScript 3 Printer Driver].**

   Add Printer Wizard starts.

   Step **5** does not apply for Windows Vista users.

5. **Click [Next >].**

6. **Click [Network printer] or [A network printer, or a printer attached to another computer].**

   If you are using other than Windows Vista, click [Next >].

7. **Select [Browse for a printer], and then click [Next >].**

   If you are using Windows 2000, select the location method from the [Locate Your Printer] screen before clicking [Next >].

8. **Double-click the computer name you want to use as a print server in the [Shared printers] window.**

9. **Select the printer you want to use, and then click [Next >].**

10. **The printer driver installation starts.**

11. **Click [Next >].**

    Select the [Yes] check box to configure the printer as default.

12. **Click [Finish].**

    Restart the computer to complete installation.

🔽 Note

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- To stop installation of the selected software, click [Cancel] before installation is complete.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

- 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 "Messages Displayed When Installing the Printer Drive".

📄 Reference

- p.51 "Messages Displayed When Installing the Printer Driver"

Using as a NetWare Print Server / Remote Printer

This describes how to set up the Windows computer used as a NetWare client.

⭐ **Important**

- **To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.**

- **In an IPv6 environment, NetWare servers cannot be used.**

The following explanation assumes NetWare Client is installed on the client computer and the NetWare server environment is correctly set up. Install all necessary client applications before following this procedure.

Set up the printer driver while logging on to the NetWare file server.

The following values are used in the example:

- NetWare version: 4.1

- File server name: CAREE

- Queue name: R-QUEUE

1. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

   Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

2. **Select an interface language, and then click [OK].**

   The default interface language is English.

3. **Click [RPCS Printer Driver] or [PCL Printer Driver].**

4. **The software license agreement appears in the [License Agreement] dialog box.**

   After reading the agreement, click [I accept the agreement.], and then click [Next >].

5. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

6. **Click [Next >].**

7. **Select the [Printer Name] check box to select the printer model you want to use.**

   The printer name can be changed in the [Change settings for 'Printer Name'] box.

8. **Double-click the printer name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

1

9. **Click [Port], and then click [Add].**

10. **Click [Network Printer], and then click [OK].**

11. **Double-click the name of the NetWare file server on the network tree.**

   The created queue is displayed.

12. **Select the print queue, and then click [OK].**

13. **Check that the port of the selected printer is displayed in [Port].**

14. **Click [Continue].**

   The printer driver installation starts.

15. **Click [Finish] in the [Select Program] dialog box.**

16. **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.

17. **After restarting the computer, open the printer properties from the [Printers and Faxes] window.**

   Under Windows 2000 or Windows Server 2003 R2, launch the [Printers] window, and then open the printer properties.

18. **Click the [NetWare setting] tab.**

   Under Windows Vista or Windows Server 2003 R2, on the [Printer Settings] tab, 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.

19. **Click [OK] to close the printer properties dialog box.**

⬇️ **Note**

- To stop installation of the selected software, click [Cancel] before installation is complete.

- The protocol is set to inactive as default. Enable it using SmartDeviceMonitor or Telnet.

When using the PostScript 3 Printer Driver

⭐ **Important**

- **In an IPv6 environment, Netware servers cannot be used.**

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

1. **In the [Printers] or [Printers and Faxes] window, open the printer properties.**

2. **Click the [PostScript] tab.**

   When using Windows 2000/XP/Vista, Windows Server 2003/2003 R2, click the [Device Settings] tab, and then proceed to step to clear the check box.

3. **Click [Advanced].**

4. **Clear the [Send CTRL+D before job] and [Send CTRL+D after job] check boxes, and then click [OK].**

5. **Click [OK] to close the printer properties dialog box.**

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:

- Under Windows 2000/XP/Vista, or Windows Server 2003/2003 R2, 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 a banner page.

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

- Under Windows 2000/XP/Vista, or Windows Server 2003/2003 R2, clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

Printing after Resetting the Printer

Printer to print server connection requires 30 to 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 a 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 Using USB

This section explains how to install printer drivers using USB.

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

The printer drivers can be installed from the CD-ROM provided with this printer.

Windows 2000/XP, Windows Server 2003/2003 R2 - USB

⭐ **Important**

- **Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.**

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

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

1. **Check that the power of the printer is off.**
2. **Connect the printer and computer using the USB cable.**

   Connect the USB cable firmly.
3. **Turn on the power of the printer.**

   Found New Hardware Wizard starts, and USB Printing Support is installed automatically.
4. **In the Found New Hardware Wizard display, click [Search for a suitable driver for my device [recommended]], and then click [Next >].**
5. **Select the [Specify location] check box, and then click [Next >].**
6. **Insert the CD-ROM into the CD-ROM drive.**

   When Auto Run starts, click [Exit].
7. **Specify the location where the source files of the printer driver is stored.**

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

   - RPCS

     D:\DRIVES\RPCS\WIN2K_XP\(Language)\DISK1
   - PCL 5c

     D:\DRIVES\PCL5C\WIN2K_XP\(Language)\DISK1
   - PCL 6

     D:\DRIVES\PCL6\WIN2K_XP\(Language)\DISK1

- PostScript 3

  D:\DRIVES\PS3\WIN2K_XP\(Language)\DISK1

8. **Check the printer driver location, and then click [OK].**

9. **Click [Next >].**

10. **Click [Finish].**

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

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.

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

Windows Vista - USB

Important

- Installing a printer driver requires Administrators permission. Log on using an account that has Administrators permission.

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

The printer drivers can be installed from the CD-ROM provided with this printer.

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

1. **Check that the power of the printer is off.**

2. **Connect the printer and computer using a USB cable.**

   Connect the USB cable firmly.

3. **Turn on the power of the printer.**

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

4. **In the Found New Hardware Wizard display, click [Search for a suitable driver for my device [recommended]], and then click [Next >].**

5. **Insert the CD-ROM into the CD-ROM drive.**

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

6. **Select the [Include this location in the search] check box under [Search for the best driver in these location], and then click [Browse] to 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:

   - RPCS

D:\DRIVES\RPCS\WIN2K_XP\(Language)\DISK1

- PCL 5c

    D:\DRIVES\PCL5C\WIN2K_XP\(Language)\DISK1

- PCL 6

    D:\DRIVES\PCL6\WIN2K_XP\(Language)\DISK1

- PostScript 3

    D:\DRIVES\PS3\WIN2K_XP\(Language)\DISK1

7. **Check the printer driver location, and then click [Next >].**

8. **Click [Continue].**

9. **Click [Finish].**

    If the installation is successful, the icon of the printer connected to the "USB001" port is added to the [Printers and Faxes] window.

↓ 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.

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

Troubleshooting USB

Problem	Solutions
The printer is not recognized automatically.	Turn off the power of the printer, reconnect the USB cable, and then turn it on again.
Windows has already configured the USB settings.	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. When using Windows 2000/XP or Windows Server 2003, an erroneous device is displayed under [USB Controller] in the [Device Manager] dialog box.

1

Printing with Parallel Connection

This describes how to install the PCL, RPCS or PostScript 3 printer driver when using a parallel port.

To use a printer connected using a parallel interface, click [LPT1] when installing the printer driver.

⭐ **Important**

- To install this printer driver under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, you must have an account that has Manage Printers permission. Log on as an Administrators or Power Users group member.

- Installing this printer driver requires Administrators permission. Log on using an account that has Administrators permission.

- If you are using Windows 2000, you can install the printer driver from the CD-ROM provided with this printer or download it from the supplier's Web site.

- If your operating system is Windows XP Pro x64, Windows Server 2003/2003 R2 x64, you must download the printer driver from the manufacturer's Web site. Select this printer and the operating system you are using, and then download it.

Installing the PCL or RPCS Printer Driver

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

3. **Select an interface language, and then click [OK].**

   The default interface language is English.

4. **Click [RPCS Printer Driver] or [PCL 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 >].

6. **Select the printer driver you want to use in the [Select Program] dialog box.**

   You can select several printer drivers.

7. **Click [Next >].**

8. **Select the [Printer Name] check box to select the printer model you want to use.**

   The printer name can be changed in the [Change settings for 'Printer Name'] box.

9. **Double-click the printer name to display the printer settings.**

   The details shown in [Comment], [Driver], and [Port] vary depending on the operating system, printer model, and port.

10. **Check that [LPT1:] is shown in [Port].**

11. **Select the [Default Printer] check box to configure the printer as default.**

12. **Click [Finish].**

    The printer driver installation starts.

13. **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.

Installing the PostScript 3 Printer Driver

1. **Quit all applications currently running.**

2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.

3. **Select an interface language, and then click [OK].**

    The default interface language is English.

    The printer driver with the selected language will be installed. The English printer driver is installed when the following language is selected: Suomi, Magyar, Cestina, Polski, Portugues, Russian, Catala, Turkce.

4. **Click [PostScript 3 Printer Driver].**

    Add Printer Wizard starts.

    Step *5* does not apply for Windows Vista users.

5. **Click [Next >].**

    The following procedure depends on your operation system.

    Windows 2000:

    1. **[Local printer], and then click [Next >].**

        A dialog box for selecting the printer manufacturer and model name appears.

    2. **Select [LPT1] at the [Printer Port] dialog box, and then click [Next >].**

    3. **Select whether or not to share the printer, and then click [Next >].**

    4. **Select the name of the machine whose driver you want to install, and then click [Next >].**

    5. **Specify whether or not to print a test page, and then click [Finish].**

        The printer driver installation starts.

        Restart the computer to complete installation.

    Other than Windows 2000:

    1. **Click [Local printer attached to this computer].**

        If you are using other than Windows Vista, click [Next].

2. **Select the port you want to use, and then click [Next >].**

   A dialog box for selecting the printer manufacturer and model name appears.

3. **Select the name of the machine whose driver you want to install, and then click [Next >].**

4. **Click [Close] to close the [Printer Port] dialog box.**

5. **Click [Next >].**

6. **Change the printer name if you want, and then click [Next >].**

   Step **7** does not apply for Windows Vista users.

7. **Select whether or not to share the printer, and then click [Next >].**

8. **Specify whether or not to print a test page, and then click [Finish].**

   The printer driver installation starts.

   Restart the computer to complete installation.

🔽 **Note**

- A user code can be set after the printer driver installation. For information about user code, see the printer driver Help.

- To stop installation of the selected software, click [Cancel] before installation is complete.

- Auto Run may not work with certain operating system settings. In that case, launch "Setup.exe" on the CD-ROM root directory.

- 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 "Messages Displayed When Installing the Printer Driver".

📑 **Reference**

- p.51 "Messages Displayed When Installing the Printer Driver"

Messages Displayed When Installing the Printer Driver

1

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] or [Install Printer].

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

Windows 2000

This section describes the procedure under Windows 2000.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

2. **Double-click the Add Printer icon.**

3. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, or PCL5E)\XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

4. **Specify a port.**

🔻Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

📘Reference

- p.21 "Installing the Printer Driver"

Windows XP Professional or Windows Server 2003/2003 R2

This section describes the procedure under Windows XP Professional or Windows Server 2003/2003 R2.

1. **On the [Start] menu, click [Printers and Faxes].**

2. **Click [Add a printer].**

3. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, or PCL5E)\XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

4. **Specify a port.**

1

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

- p.21 "Installing the Printer Driver"

Windows XP Home Edition

This section describes the procedure under Windows XP Home Edition.

1. **On the [Start] menu, click [Control Panel].**
2. **Click [Printer and Other Hardware].**
3. **Click [Printers and Faxes].**
4. **Click [Add a Printer].**
5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, or PCL5E) \XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

6. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

- p.21 "Installing the Printer Driver"

Windows Vista

This section describes the procedure under Windows Vista.

1. **On the [Start] menu, click [Control Panel].**
2. **Click [Hardware and Sound].**
3. **Click [Printers].**
4. **Click [Add a printer].**
5. **Follow the instructions in Add Printer Wizard.**

   If the printer driver is on a CD-ROM, the location of the driver is \DRIVERS\(RPCS, PCL6, or PCL5E) \XP_VISTA\(language)\DISK1. If the installer starts, click [Cancel] to quit.

6. **Specify a port.**

Note

- Available ports vary according to your Windows operating system or the type of interface. For details, see "Installing the Printer Driver".

Reference

- p.21 "Installing the Printer Driver"

Making Option Settings for the Printer

Make option settings for the printer using the printer driver when bidirectional communication is disabled.

Conditions for Bidirectional Communication

Bidirectional communication allows information about paper size and feed direction settings to be automatically sent to the printer. You can check printer status from your computer.

- Bidirectional communication is supported by Windows 2000/XP/Vista, and Windows Server 2003/2003 R2.

- If you use the RPCS printer driver and bidirectional communication is enabled under Windows 2000, the [Change Accessories] tab is unavailable.

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

When connected with parallel cables

- The computer must support bidirectional communication.

- The printer must support bidirectional communication.

- The interface cable must support bidirectional communication.

- The printer must be connected to a computer using the standard parallel cables and parallel connectors.

- Under Windows 2000, [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the RPCS printer driver.

When connected with a network

- The printer must support bidirectional communication.

- SmartDeviceMonitor for Client included on the CD-ROM must be installed, and TCP/IP must be used.

- Under Windows 2000/XP/Vista, Windows Server 2003/2003 R2, [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the RPCS printer driver.

- In addition to the above, one of the following conditions must also be met:

    - The SmartDeviceMonitor for Client port and the TCP/IP protocol must be used.

    - IPP port name must include the IP address when using the IPP protocol.

When connected with USB

- The printer must be connected to the computer's USB port using a USB interface cable (for Windows 2000/XP/Vista, Windows Server 2003/2003 R2).

- The computer must support bidirectional communication.

↓Note

- The RPCS printer driver supports bidirectional communication and updates the printer status automatically.

- The PCL printer driver supports bidirectional communication. You can update the printer status manually.

- Install SmartDeviceMonitor for Client from the supplied CD-ROM.

If Bidirectional Communication Is Disabled

Set up option settings when bidirectional communication is disabled.

⭐Important

- Under Windows 2000/XP/Vista, and Windows Server 2003/2003 R2, Manage Printers permission is required to change the printer properties in the [Printers] folder. Log on as an Administrators or Power Users group member.

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

   When using Windows 2000, point to [Settings] on the [Start] menu, and then click [Printers]. The [Printers] window appears.

   When using Windows Vista, click [Control Panel] on the [start] menu, and then click [Printer]. The [Printers] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Properties].**

   When using Windows Vista, right-click the icon of the printer you want to use, and then click [Properties].

4. **Click the [Change Accessories] tab.**

   If options in the [Change Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.

   If you are using the RPCS printer driver, click the [Change Accessories] tab.

5. **Select options installed from the [Select printer options:] area, and then make the necessary settings.**

6. **Select the total amount of the memory in [Total memory:] when the optional SDRAM module is added.**

7. **Under [Paper source tray settings:], click the tray to be used, and then select the appropriate size, position, and type for the tray. Select the [Do not use Auto Tray Select] check box to exclude the tray from the targets of automatic tray selection.**

8. **Click [OK] to close the printer properties dialog box.**

Installing Font Manager

⭐ **Important**

1

- Under Windows 2000 /XP/Vista, and Windows Server 2003/2003 R2, installing applications by Auto Run requires Administrator privilege. To install a printer driver by Auto Run, log on using an account that has Administrator privilege.

1. **Quit all applications currently running.**
2. **Insert the "Font Manager" CD-ROM into the CD-ROM drive.**

   The installer starts.
3. **Click [Font Manager].**
4. **Follow the instructions on the display.**

Using Adobe PageMaker Version 6.0, 6.5, or 7.0

1

Under Windows 2000/XP, or Windows Server 2003/2003 R2 with Adobe PageMaker, you need to copy PPD files to the PageMaker folder.

PPD files have the .ppd extension in the folder "DRIVERS＼PS＼XP_VISTA＼(Language)＼DISK1" on the CD-ROM.

The "XP_VISTA" folder inside the "PS" folder is for Windows 2000/XP, Windows Server 2003/2003 R2. Use the folder that is appropriate for the operating system you are currently using.

The third folder "(Language)" may be substituted by an appropriate language name.

Copy the .ppd file to the PageMaker folder.

- **For PageMaker 6.0 default installation**

  The directory is "C:＼PM6＼RSRC＼PPD4".

- **For PageMaker 6.5 default installation**

  The directory is "C:＼PM65＼RSRC＼USENGLISH＼PPD4".

  The "USENGLISH" may vary depending on your language selection.

- **For PageMaker 7.0 default installation**

  The directory is "C:＼PM7＼RSRC＼USENGLISH＼PPD4".

  The "USENGLISH" may vary depending on your language selection.

🔸Note

- If the driver is not set correctly after copying the ".ppd" file, printing may not be performed properly.

- When using PageMaker, the optional features that can be selected by the printer driver will not be active. The following procedure describes how to activate the optional printer features.

  1. On the [File] menu, click [Print].

     The [Print Document] dialog box appears.

  2. Make the necessary settings in the [Features] box.

1

Memory Capacity and Paper Size

Additional memory apart from the standard memory may be required depending on the paper size and data type.

⭐**Important**

- When printing from the bypass tray, duplex printing will not be supported regardless of the memory capacity, and only one-side will be printed.

One-sided printing (600 × 600 dpi)

Memory Capacity	Printable paper sizes
256 MB (standard)	A3, B4 JIS, A4, B5 JIS, A5, 11"×17", $8^1/_2$"×14", $8^1/_2$"×11", Postcard sized paper, 305 × 600 mm (12.2 × 24 inches), 297 × 432 mm (11.7 × 17 inches), 305 × 1260 mm (12.2 × 50.4 inches) *1
384 MB (standard and 128 MB)	A3, B4 JIS, A4, B5 JIS, A5, 11"×17", 81/2"×14", 81/2"×11", Postcard sized paper, and 305 × 600 mm (12.2 × 24 inches), 297 × 432 mm (11.7 × 17 inches), 305 × 1260 mm (12.2 × 50.4 inches)
512 MB (standard and 256 MB)	A3, B4 JIS, A4, B5 JIS, A5, 11"×17", $8^1/_2$"×14", $8^1/_2$"×11", Postcard sized paper, 305× 600 mm (12.2 × 24 inches), 297 × 432 mm (11.7 × 17 inches), 305 × 1260 mm (12.2 × 50.4 inches)

*1 The paper size may not be printed, depending on the printing data.

Duplex printing (600 × 600 dpi)

Memory Capacity	Printable paper sizes
256 MB (standard)	A3, B4 JIS, A4, B5 JIS, A5, and $8^1/_2$"×11", 11"×17", $8^1/_2$"×14"
384 MB (standard and 128 MB)	A3, B4 JIS, A4, B5 JIS, A5, $8^1/_2$"×14", $8^1/_2$"×11", 11"×17"
512 MB (standard and 256 MB)	A3, B4 JIS, A4, B5 JIS, A5, $8^1/_2$"×14", $8^1/_2$"×11", 11"×17"

2. Setting Up the Printer Driver

PCL - Accessing the Printer Properties

Windows 2000 - Accessing the Printer Properties

Making printer default settings - the printer properties

⭐ **Important**

- To change the printer's default settings (including settings for options), log on using an account that has Manage Printers permission. Members of the Administrator and Power Users groups have Manage Printers permission by default.

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Properties].**

   The [Printer Properties] dialog box appears.

4. **Make the settings you require, and then click [OK].**

🔽 **Note**

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer default settings - printing preferences

⭐ **Important**

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

⬇ Note

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

2 Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains how to make printer settings for a specific application using Windows 2000 Wordpad as an example.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **In the [Select Printer] list, select the printer you want to use.**

3. **Make the settings you require, and then click [OK].**

⬇ Note

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.

- Any settings you make using this procedure apply to the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from the application.

- For details, see the printer driver Help.

Windows XP, Windows Server 2003/2003 R2 - Accessing the Printer Properties

Making printer default settings - the printer properties

⭐ Important

- To change the printer's default settings (including settings for options), log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Properties].**

   The [Printer Properties] dialog box appears.

4. **Make the settings you require, and then click [OK].**

⬇ **Note**

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer default settings - printing preferences

⭐ **Important**

- You cannot change the printer default settings for individual user. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

⬇ **Note**

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains how to make printer settings for a specific application using Windows XP Wordpad as an example.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **In the [Select Printer] list, select the printer you want to use.**

3. **Click [Preferences].**

   The [Printing Preferences] dialog box appears.

4. Make the settings you require, and then click [OK].

⬇ **Note**

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.

- Any settings you make using this procedure apply to the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used the defaults when printing from the application.

- For details, see the printer driver Help.

Windows Vista - Accessing the Printer Properties

Making printer default settings - the printer properties

⭐ **Important**

- To change the printer's default settings (including settings for options), log on using an account that has Manage Printers permission. Members of the Administrators group have Manage Printers permission by default.

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. On the [Start] menu, click [Control Panel].
2. The [Control Panel] window appears.
3. In "Hardware and Sound", click [Printer].
4. Right-click the icon of the printer you want to use, and then click [Properties].

   The [Printer Properties] dialog box appears.

5. Make the settings you require, and then click [OK].

⬇ **Note**

- The settings you make here are used as the default settings for all applications.
- For details, see the printer driver Help.

Making printer default settings - printing preferences

⭐ **Important**

- You cannot change the printer default settings for individual user. Settings made in the [Printing Preferences] dialog box are applied to all users.

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.

2. **Click [Printer] in "Hardware and Sound".**

3. **Right-click the icon of the printer you want to use, and then click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

🔸 **Note**

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains how to make printer settings for a specific application using Windows Vista Wordpad as an example.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **In the [Select Printer] list, select the printer you want to use.**

3. **Click [Preferences].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

🔸 **Note**

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.

- Any settings you make using this procedure apply to the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used the defaults when printing from the application.

- For details, see the printer driver Help.

RPCS - Accessing the Printer Properties

There are two dialog box types of the [Printer Properties] dialog box.

"Multi-tab" is used as an example in this manual. For details about changing the dialog box types, see the printer driver Help.

Multi-tab

This dialog box type is designed for users who often change print settings to perform various printing operations.

Custom Setting

This dialog box type is designed for users who rarely change print settings. This type of dialog box may vary depending on the installed options.

Windows 2000 - Accessing the Printer Properties

Making printer default settings - the printer properties

⭐ Important

- To change the printer's default settings (including settings for options), log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Properties].**

   The [Printer Properties] dialog box appears.

   When you open the [Printer Properties] dialog box for the first time after installing the RPCS printer driver, a confirmation message appears. After you click [OK], the [Printer Properties] dialog box appears.

4. **Make the settings you require, and then click [OK].**

⬇ Note

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer default settings - printing preferences

⭐ **Important**

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

🔽 **Note**

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains making printer settings for Windows 2000 WordPad as an example of how to make printer settings for a specific application.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **Select the printer you want to use in the [Select Printer] list.**

3. **Make the settings you require, and then click [OK].**

🔽 **Note**

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.

- Any settings you make using this procedure apply to the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used the defaults when printing from the application.

- For details, see the printer driver Help.

Windows XP, Windows Server 2003/2003 R2 - Accessing the Printer Properties

Making printer default settings - the printer properties

⭐ **Important**

- To change the printer's default settings (including settings for options), log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Printers and Faxes].**

    The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Properties].**

    The [Printer Properties] dialog box appears.

    When you open the [Printer Properties] dialog box for the first time after installing the RPCS printer driver, a confirmation message appears. After you click [OK], the [Printer Properties] dialog box appears.

4. **Make the settings you require, and then click [OK].**

🔽 **Note**

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer default settings - printing preferences

⭐ **Important**

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Printers and Faxes].**

    The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Printing Preferences...].**

    The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

Note

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains making printer settings for Windows XP WordPad as an example of how to make printer settings for a specific application.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **In the [Select Printer] list, select the printer you want to use.**

3. **Click [Preferences].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

Note

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.

- Any settings you make using this procedure apply to the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used the defaults when printing from the application.

- For details, see the printer driver Help.

Windows Vista - Accessing the Printer Properties

Making printer default settings - the printer properties

Important

- To change the printer's default settings (including settings for options), log on using an account that has Manage Printers permission. Members of the Administrators group have Manage Printers permission by default.

- You cannot change the printer default settings for individual users. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.

2. **Click [Printer] in "Hardware and Sound".**

3. **Right-click the icon of the printer you want to use, and then click [Properties].**

   The [Printer Properties] dialog box appears.

   When you open the [Printer Properties] dialog box for the first time after installing the RPCS printer driver, a confirmation message appears. After you click [OK], the [Printer Properties] dialog box appears.

4. **Make the settings you require, and then click [OK].**

⬇Note

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer default settings - printing preferences

⭐Important

- You cannot change the printer default settings for individual users. Settings made in the [Pinter Preferences] dialog box are applied to all users.

1. **On the [Start] menu, click [Control Panel].**

   The [Control Panel] window appears.

2. **Click [Printer] in "Hardware and Sound".**

3. **Right-click the icon of the printer you want to use, and then click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

⬇Note

- The settings you make here are used as the default settings for all applications.

- For details, see the printer driver Help.

Making printer settings from an application

You can make printer settings for a specific application.

To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following procedure explains making printer settings for Windows Vista WordPad as an example of how to make printer settings for a specific application.

1. **On the [File] menu, click [Print...].**

   The [Print] dialog box appears.

2. **In the [Select Printer] list, select the printer you want to use.**

3. **Click [Preferences].**

   The [Printing Preferences] dialog box appears.

4. **Make the settings you require, and then click [OK].**

↓Note

- Procedures for opening the [Printing Preferences] dialog box vary depending on the application. For details, see the manuals provided with the application.

- Any settings you make using this procedure apply to the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used the defaults when printing from the application.

- For details, see the printer driver Help.

PostScript 3 - Setting Up for Printing

Windows 2000/XP, Windows Server 2003/2003 R2 - Accessing the Printer Properties

Making Printer Default Settings - The Printer Properties

⭐ **Important**

- To change the printer default settings including option configuration settings, log on using an account that has Manage Printers permission. Members of the Administrators and Power Users groups have Manage Printers permission by default.

- You cannot change the printer default settings for each user. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Properties].**

   The [Printer Properties] dialog box appears.

4. **Make the necessary settings, and then click [OK].**

⬇ **Note**

- Settings you make here are used as the default settings for all applications.

- Do not make a setting for [Form to Tray Assignment].

- For details about settings, see the printer driver Help.

Making Printer Default Settings - Printing Preferences

⭐ **Important**

- You cannot change the printer default settings for each user. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, click [Printers and Faxes].**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Printing Preferences...].**

   The [Printing Preferences] dialog box appears.

4. Make the necessary settings, and then click [OK].

🔽 **Note**

- Settings you make here are used as the default settings for all applications.

- For details about settings, see the printer driver Help.

Making Printer Settings from an Application

You can make printer settings for a specific application. To make printer settings for a specific application, open the [Printing Preferences] dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows XP.

1. On the [File] menu, click [Print...].

The [Print] dialog box appears.

2. Select the printer you want to use in the [Select Printer] list.

3. Make the necessary settings, and then click [Print] to start printing.

🔽 **Note**

- The procedure to open the [Printing Preferences] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.

- Any settings you make in the following procedure are valid for the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.

- For details about settings, see the printer driver Help.

Windows Vista - Accessing the Printer Properties

Making Printer Default Settings - The Printer Properties

⭐ **Important**

- To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.

- You cannot change the printer default settings for each user. Settings made in the [Printer Properties] dialog box are applied to all users.

1. On the [Start] menu, point to [Settings], and then click [Printers].

The [Printers] window appears.

2. Click the icon of the printer you want to use.

3. **On the [File] menu, click [Properties].**

   The [Printer Properties] dialog box appears.

4. **Make the necessary settings, and then click [OK].**

⬇️**Note**

- Settings you make here are used as the default settings for all applications.

- Do not make a setting for [Form to Tray Assignment].

- For details about settings, see the printer driver Help.

Making Printer Default Settings - Default

⭐**Important**

- To change the printer default settings including option configuration settings, log on using an account that has Full Control permission. Members of the Administrators, Server Operators, Print Operators, and Power Users groups have Full Control permission by default.

- You cannot change the printer default settings for each user. Settings made in the [Printer Properties] dialog box are applied to all users.

1. **On the [Start] menu, point to [Settings], and then click [Printers].**

   The [Printers] window appears.

2. **Click the icon of the printer you want to use.**

3. **On the [File] menu, click [Document Defaults...].**

   The [Default] dialog box appears.

4. **Make the necessary settings, and then click [OK].**

⬇️**Note**

- Settings you make here are used as the default settings for all applications.

- For details about settings, see the printer driver Help.

Making Printer Settings from an Application

You can make printer settings for a specific application. To make printer settings for a specific application, open the [Printer Properties] dialog box from that application. The following explains how to make settings for the WordPad application provided with Windows Vista.

1. **On the [File] menu, click [Print].**

   The [Print] dialog box appears.

2. **Select the printer you want to use in the [Name:] list, and then click [Properties].**

   The [Printer Properties] dialog box appears.

3. **Make the necessary settings, and then click [OK].**

4. **Click [OK] to start printing.**

⬇️ **Note**

- The procedure to open the [Printer Properties] dialog box may vary depending on the application. For details, see the manuals provided with the application you use.

- With some applications, the printer driver settings are not used, and the application's own default settings are applied.

- Any settings you make in the following procedure are valid for the current application only.

- General users can change the properties displayed in the [Print] dialog box of an application. Settings made here are used as defaults when printing from this application.

- For details about settings, see the printer driver Help.

Mac OS - Setting Up for Printing

Making Paper Settings from an Application

1. **Open the file you want to print.**

2. **On the [File] menu, click [Page Setup].**

3. **Check that the printer you want to use is displayed in [Printer:], and then select the paper size you want to use in [Paper:].**

   Under Mac OS X, select the paper size in [Paper Size].

   If the printer you want to use is not displayed in [Printer:], select the printer you want to use.

4. **Configure the settings, and then click [OK].**

⬇️ **Note**

- The [Page Setup] dialog box varies depending on the application you use. For details, see the manuals provided with the Mac OS.

Setting up for Printing from an Application

1. **Open the file you want to print.**

2. **On the [File] menu, click [Print].**

3. **Check that the printer is selected in the [Printer] list, and then make the printer settings.**

4. **Configure the settings, and then click [OK].**

5.

2

3. Other Print Operations

Printing a PDF File Directly

You can send PDF files directly to the printer for printing, without having to open a PDF application.

⭐**Important**

- This function is possible only when the optional PostScript 3 unit is installed.

- This function is possible for genuine Adobe PDF files only.

- Version 1.3, 1.4, 1.5, and 1.6 PDF files are compatible.

- PDF files created using PDF version 1.5 Crypt Filter functions or more than eight DeviceN Color Space components cannot be printed.

- PDF files created using PDF version 1.6 watermark note functions, extended optional contents, or page size exceeds 5.08 m cannot be printed.

- PDF version 1.7 (Acrobat 8.0) files created without any functions that are exclusive to PDF version 1.7 can be printed.

- Some types of High Compression PDF files may not be printed.

⬇**Note**

- Paper size errors may occur when printing on custom size paper.

Printing Method

There are the two methods of printing the PDF files directly, either using the DeskTopBinder Lite, or entering commands.

Using DeskTopBinder Lite

Installing DeskTopBinder Lite

Use this procedure to install DeskTopBinder Lite.

1. **Quit all applications currently running.**

2. **Insert the "Printer Driver and Utilities" CD-OM into the CD-OM drive.**

   The installer starts.

   Auto Run may not work under certain operating system settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.

3. **Click [DeskTopBinder Lite].**

The [DeskTopBinder Lite] dialog box appears.

4. **Click [DeskTopBinder Lite], and then click [OK].**

5. **Follow the instructions on the display to install DeskTopBinder Lite.**

If you are required to restart the computer after installing DeskTopBinder Lite, restart the computer and continue the configuration.

DeskTopBinder Lite enhancements

Follow the DeskTopBinder Lite enhancement procedure to print PDF files directly.

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Extended Features Wizard].**

The [Extended Features Wizard] dialog box appears.

2. **Click [Start], and then click [Next>] repeatedly until the [Printing Function2] dialog box appears.**

3. **In the [Printing Function2] dialog box, click [Add...].**

The [PDF Direct Print Properties] dialog box appears.

4. **Select the driver for this printer, and then click [OK].**

The [PDF Direct Print Properties] dialog box closes.

5. **Click [Next>] repeatedly until [Finish] appears.**

6. **Click [Finish].**

Function palette

The Function palette contains buttons for functions that are already configured through DeskTopBinder Lite enhancement. Using these buttons, you can print Windows files, preview printouts, convert images, and register scanners for documents without having to open DeskTopBinder Lite. You can also use these functions simply by dragging a target file to the button corresponding to the required function and dropping it there.

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Function Palette].**

An icon for the Function palette is added to the task tray displayed at the bottom right of the screen.

2. **Right-click the new icon that has been added to the task tray, and then click [Properties].**

The [Properties] dialog box appears.

3. **Click the [Contents] tab, select the [PDF Direct Print] check box at the center, and then click [OK].**

   The [Properties] screen closes and the [PDF Direct Print] icon is added to the palette.

PDF direct printing

Follow the procedure below to print PDF files directly.

1. **Drag the PDF file you want to print to the PDF Direct Printing icon in the palette and drop it there.**

   The [Output File List-PDF Direct Print] dialog box appears.

2. **Highlight the PDF you want to print, and then click [OK].**

   The PDF file is printed.

Printing PDF password-protected documents

Follow the procedure below to print password- protected PDF files.

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], and then click [Extended Features Wizard].**

   The [Extended Features Wizard] dialog box appears.

2. **Click [Start], and then click [Next>] repeatedly until the [Printing Function2] dialog box appears.**

3. **In the [Printing Function2] dialog box, click [Properties].**

   The [PDF Direct Print Properties] dialog box appears.

4. **Select the [Use PDF Password] check box at the bottom right of the dialog box, and then click [OK].**

5. **Click [Next>] repeatedly until [Finish] appears.**

6. **Click [Finish].**

   The [Extended Features Wizard] dialog box closes.

7. **Drag the PDF file you want to print over the PDF Direct Printing icon on the Function Palette and drop it there.**

   The [Output File List-PDF Direct Print] dialog box appears.
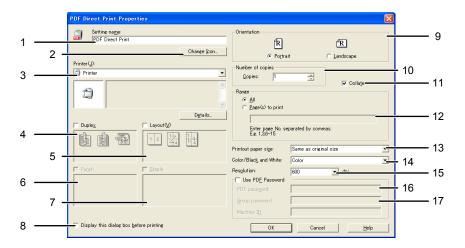
8. **Click on the PDF file you want to print, making it appear highlighted, and then click [OK].**

   The [PDF Direct Print Properties] dialog box appears.

9. **In the [PDF password:] box at the bottom right of the dialog box, enter the password for the PDF file you want to print, and then click [OK].**

   The password-protected PDF file is printed.

Note

- Before printing a password-protected PDF file, perform one of the followings:

  - In the [PDF Direct Print Properties] dialog box, enter the password for the PDF file you want to print

  - Specify a password for the PDF file by selecting [Change PDF Password] in the [PDF Menu] on the printer's control panel.

- If a [PDF Group Password] for the [PDF Menu] has been specified using DeskTopBinder Lite or the printer's control panel, the same group password must be set on the other also.

PDF Direct Print Properties

BAC010S

1. **Setting name:**

   Displays the plug-in configuration name (up to 63 single byte characters)

2. **Change Icon...**

   Changes the icon displayed on the tool bar.

3. **Printer**

   Displays a list of RPCS drivers that support PDF direct printing.

4. **Duplex**

   Prints on both sides of sheets.

5. **Layout**

   Prints multiple pages on a single sheet.

6. **Punch**

   Punches holes in printed sheets.

7. **Staple**

   Staples together printed sheets.

8. **Display this dialog box before printing**

   Appears in PDF direct printing mode if this check box is selected.

9. **Orientation:**

   Specify the original's orientation.

10. **Number of copies**

    Specify the number of copies to print.

11. **Collate**

    Sorts printed sheets.

12. **Range**

    Specify which paper to print.

13. **Printout paper size:**

    Specify the paper size you want copies to be printed onto.

14. **Color/Black and White: (not available for this printer)**

    Specify color or black-and-white printing.

15. **Resolution:**

    Specify a print resolution.

16. **PDF password:**

    Enter the password for password-protected PDF files. A password-protected PDF file cannot be printed unless its password is entered here.

17. **Group password:**

    If a group password is assigned to DeskTopBinder Lite and this printer, enter the group password in this field. The group password must be entered for printing to start.

Using Commands

You can print PDF files directly, using commands such as "ftp", "sftp", and "lpr".

For details about UNIX commands, see UNIX supplement.

Unauthorized Copy Control

You can embed patterns and text under printed text to prevent unauthorized copying of the document. Unauthorized Copy Control consists of two functions: [Data security for copying] and [Mask type:].

⭐ **Important**

- This function is designed to discourage copying of confidential documents; it does not prevent unauthorized use of information.

Opening the Unauthorized Copy Control Window
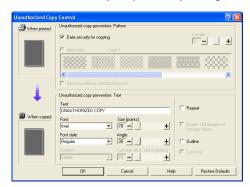
1. **In the RPCS printer driver, open the [Printing Preference] window.**

2. **Click [Add/Change Custom Settings...].**

3. **Select the [Unauthorized copy...] check box.**

4. **Click [Control Settings...].**

   The Unauthorized Copy Control window appears.

⬇ **Note**

- For details, see the printer driver Help.

Using [Data security for copying]

You can embed a print pattern by setting it in the printer driver.
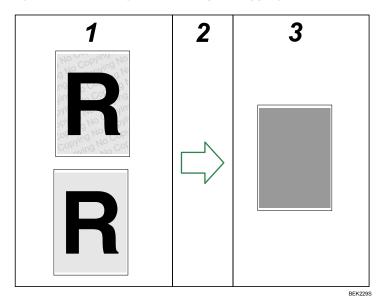
Setting [Data security for copying] in the printer driver

- Select the [Data security for copying] check box. You can also enter the text in the [Text:] box.

- You cannot select the [Mask type:] check box at the same time.

- To print a document protected by gray overprint, the printer must be set up correctly. Consult your administrator.

Printing a document using [Data security for copying]

BEK229S

1. **The pattern and text you have set is printed.**
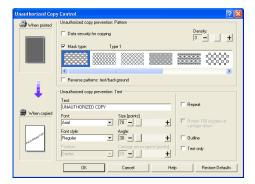
2. **The document is copied or stored in copiers / multifunction machines which the optional Copy Data Security unit is installed.**

3. **The document is blanked by vertical stripes overprint.**

⬇Note

- When printing a document that is set with [Data security for copying], the printer does not require the optional Copy Data Security unit to be installed. The Copy Data Security unit is required when copying or storing a document protected by vertical stripes overprint.

- Only the RPCS printer driver is supported.

- Printing at 200 $\times$ 200 dpi is not possible.

- You cannot partially embed a pattern and text in a document.

- To make the embedded pattern clear, set the character size at least 50 pt (preferably 70 to 80 pt) and character angle to between 30 and 40 degrees.

- Use 182 $\times$ 257 mm ($7^1/_4$ $\times$ $10^1/_2$ inches) or larger paper.

- Use ordinary or recycled paper of at least 70% whiteness.

- Duplex printing may interfere with this function as a result of text and patterns being visible through the paper.

- For details about setting [Data security for copying], see the printer driver Help.

Using [Mask type:]
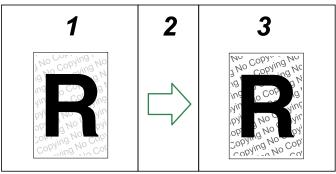
You can embed patterns and texts in a document by setting in the printer driver to prevent unauthorized copying.

Setting [Mask type:] in the printer driver

- Select a pattern from [Mask type:], and then enter texts in the [Text:] box.

- You can set only [Text:], but [Mask type:] and [Text:] must be set together.

Printing a document using [Mask type:]

BEK228S

1. **The pattern and text you have set is printed palely.**

2. **The document is copied, scanned, or stored in copiers/ multifunction machines.**

3. **The pattern and text you have set appear clearly.**

⬇ Note

- Only the RPCS printer driver is supported.

- Printing at 200 × 200 dpi is not possible.

- You cannot partially embed patterns and texts strings in a document.

- To make the embedded pattern clear, set the character size at least 50 pt (preferably 70 to 80 pt) and character angle to between 30 and 40 degrees.

- Due to the effects of the settings, the results of copying, scanning, and saving documents in the document server may vary depending on the printer model and setting conditions.

- Printing with background patterns and texts may be slower than normal printing.

- For details about setting [Mask type:], see the printer driver Help.

Important Notice

- The supplier does not provide warranty regarding the appearance of print patterns and other copy protection features. The appearance of the print patterns and the performance of Unauthorized Copy Control may vary depending on the quality of paper used and the printer model and settings.

- The supplier takes no responsibility for any damages sustained in connection with use of or inability to make use of Unauthorized Copy Control print patterns.

3

Using the Print Job Function

This describes how to print or delete files stored in the printer. There are following types of print files: Sample Print, Locked Print, Hold Print, and Stored Print.

Print files sent from computers can be stored in the hard disk of the printer. Using the Print Job function, you can print or delete the print files.

⭐**Important**

- **To use this function, the optional hard disk must be installed on the printer.**

Print Job screen

When the printer is turned on, the following screen appears if an optional hard disk is installed in the printer.

If you press [Prt.Jobs] on the initial screen, a screen prompting to select the type of print job appears.
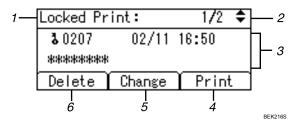
After selecting a type, you can select print files in the list by pressing:

- [Job List]

  Displays the Job List screen.

- [User ID]

  Displays the User ID screen.

If you select Sample Print, Locked Print, and Hold Print, the print files saved in the printer are deleted after printing is completed. If you select Stored Print, the files remain in the printer even after printing is finished.

Job List Screen

BEK216S

1. **The type of print jobs**

    Displays the type of the print job you select.

2. **Page number**

    Displays the current page number. Each time pressing the [▲] or [▼] key, the screen switches.

3. **User ID, Date/Time, and File Name display**

    - User ID shows the user's ID set by the printer driver.

    - Date and Time show the time at which the print job was stored in the printer.

    - File name shows the name of the file. However, "＊＊＊＊" is shown instead of the file name for a Locked Print file.

4. **[Print]**

    Prints a selected file.

5. **[Change]**

    Changes or clears the password of a file if a password is set. To change the password of a Locked/Stored Print job, press [Change], enter the current password, and then enter the new password on the confirmation screen. To clear the password, press [Change], leave the entering/confirming a new password box blank, and then press the [OK] key.

    You can also set passwords to the Stored Print files that do not currently have passwords.
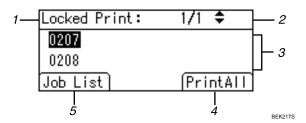
6. **[Delete]**

    Deletes a selected file.

Note

- When you press [Change] to change or clear a password, you must first enter the existing password. If the password you entered is incorrect, you cannot change or clear any current passwords.

- You can use [Change] to set or clear passwords only Stored Print files are saved in the printer.

3

User ID Screen

BEK217S

1. **The type of print jobs**

   Displays the type of the print job you select.

2. **Page number**

   Displays the current page number. Each time pressing the [▲] or [▼] key, the screen switches.

3. **User ID**

   - User ID shows the ID of the user who stored the selected type of files.

   - User ID set by the printer driver is shown.

4. **[PrintAll]**

   Prints all files stored by the user whose user ID has been selected.

5. **[Job List]**

   Switches the screen to the [Job List] screen.

   Displays the print jobs of the selected user only.

🔸**Note**

- To cancel selecting a file, press the [JobReset] key.

- The display is not updated if a new file is stored while the list of stored files is displayed. To update the display, press the [Menu] key to return to the initial screen, and then press [Prt.Jobs] again.

- If a large number of print jobs are stored in the printer, processing may slow temporarily, depending on which functions are used.

🔖**Reference**

- For details about printing each type of print job, see the followings:

- p.87 "Sample Print"

- p.90 "Locked Print"

- p.93 "Hold Print"

- p.96 "Stored Print"

Printing from the Print Job Screen

This section gives instruction about Sample Print, Locked Print, Hold Print, and Stored Print.

Sample Print

Use this function to print only the first set of a multiple-set print job. After you have checked the result, remaining sets can be printed or canceled using the printer's control panel. This can reduce misprints due to mistakes in content or settings.

⭐ **Important**

- A Sample Print file cannot be stored if:
    - the optional hard disk is not installed in the printer.
    - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
    - the file contains over 1,000 pages.
    - sent or stored files in the printer contain over 9,000 pages in total.

⬇ **Note**

- If a Sample Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Del. Temp. Print Jobs] or [Auto Del Stored Print Jobs] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. By default, Sample Print jobs are automatically collated by the printer driver. If a collate option is selected from the application's Print dialog box, more prints than intended may be produced.
- If the first set of the Sample Print files is not as you expected and you do not want to print remaining sets, delete the Sample Print file using the display panel. If you print the remaining sets of the Sample Print file, the job in the printer is deleted automatically.
- Sample Print files printed or deleted using Web Image Monitor, after you select [Sample Print Jobs] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Sample Print files.
- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily.

📄 **Reference**

- For details about the error log on the display panel, see p.109 "Checking the Error Log".
- For details about [Auto Del. Temp. Print Jobs] and [Auto Del Stored Print Jobs], see p.151 "System Menu".

Printing a sample print file

The following procedure describes how to print a Sample Print file with the PCL 6/5e, RPCS or PostScript 3 printer driver.

⭐**Important**

- Applications with their own drivers, such as PageMaker, do not support this function.

1. **From an application, select a command to print.**

   The Print dialog box appears.

2. **Select the printer you want to use in the [Name] list, and then click [Properties].**

   The printer properties dialog box appears.

3. **In the [Job Type:] box, click [Sample Print].**

   When printing with the PostScript 3 printer driver, click [Sample Print] in the [Job Type:] box on the [Job Log] tab.

4. **Click [Details...], and then enter a user ID in the [User ID:] box.**

   This is used to identify the user. The user ID can be entered using up to eight alphanumeric (a-z, A-Z, 0-9) characters.

5. **Execute a command to print.**

   Make sure to set more than two copies.

   The Sample Print job is sent to the printer, and the first set is printed.

6. **On the printer's control panel, press [Prt.Jobs].**

7. **Select [Sample Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

   A list of Sample Print files stored in the printer appears.

   Depending on the security settings, certain print jobs may not be displayed.

   You can print files also by pressing [User ID].

8. **Select the file you want to print using the [▲] or [▼] key, and then press [Print].**

```
Sample Print:        1/8  ⬍
    0208      02/11 17:03
  Document
 [ Delete ]           [ Print ]
```

Enter the new number of sets using the scroll keys. You can enter up to 999 sets.

Press the [Escape] key to correct any entry mistakes.

9. **Press [Print].**

The remaining sets are printed.

Press [Cancel] to cancel printing.

⬇ **Note**

- When the number of set quantity is changed, the changed quantity is applied to all selected files.

- When printing is completed, the stored file will be deleted.

- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.

🔖 **Reference**

- For details about [User ID], see p.101 "Printing from the User ID Screen".

Deleting sample print files

If you are not satisfied with the sample printout, you can delete the Sample Print file, revise it and print it again until the settings are suitable.

1. **Press [Prt.Jobs].**

```
Ready
Toner        1⊔  2⊔  3⊔
     █       4⊔  T⊔  ⬇
[ Option ][ Prt.Jobs ][ Supplies ]
```

2. **Select [Sample Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

```
▤Print Jobs     1/2  ⬍
 ▮Sample Print Jobs▮
  Locked Print Jobs
[ Job List ]        [ User ID ]
```

A list of Sample Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

3. **Select the file you want to delete using the [▲] or [▼] key, and then press [Delete].**

```
Sample Print:        1/3  ↕
     0208      02/11 17:03
Document
 Delete              Print
```

The delete confirmation screen will appear.

4. **Press [Delete].**

The selected file is deleted.

If you do not want to delete the file, press [Cancel].

Locked Print

Use this function to maintain privacy when printing confidential documents on the printer over a shared network. Usually, it is possible to print data using the display panel once it is stored in this printer. When using Locked Print, it is not possible to print unless a password is entered on the printer's display panel. Your confidential documents will be safe from being viewed by other people.

⭐ **Important**

- A Locked Print file cannot be stored if:
  - the optional hard disk is not installed in the printer.
  - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
  - the file contains over 1,000 pages.
  - sent or stored files in the printer contain over 9,000 pages in total.

⬇ **Note**

- If a Locked Print file has not been stored properly, check the error log on the control panel.
- Even after you turn off the printer, stored documents remain. However, the [Auto Del. Temp. Print Jobs] or [Auto Del Stored Print Jobs] settings are applied first.
- If the application has a collate option, make sure it is not selected before sending a print job. Locked Print jobs are automatically collated by the printer driver as default. If a collate option is selected in the application print dialog box, more sets than intended may be printed.
- After the Locked Print file is printed, the job is automatically deleted.
- Locked Print files printed or deleted using Web Image Monitor, after you select [Locked Print Jobs] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Locked Print files.

Reference

- For details about the error log on the display panel, see p.109 "Checking the Error Log".

- For details about the [Auto Del. Temp. Print Jobs] and [Auto Del Stored Print Jobs], see p.151 "System Menu".

Printing a locked print file

The following procedure describes how to print a Locked Print file with the PCL 6/5e, RPCS or PostScript 3 printer driver.

Important

- Applications with their own drivers, such as PageMaker, do not support this function.

1. **Configure the Locked Print in the printer driver's properties.**

   For details about configuring the printer drivers, see the corresponding Help files.

2. **Start printing from the application's Print dialog box.**

   The Locked Print job is sent to the printer.

3. **On the printer's control panel, press [Prt.Jobs].**

4. **Select [Locked Print Jobs] using the [▲] or [▼] key, and then press [Job List].**
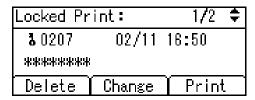
   A list of Locked Print files stored in the printer appears.

   Depending on the security settings, certain print jobs may not be displayed.

   You can print files also by pressing [User ID].

5. **Select the file you want to print using the [▲] or [▼] key, and then press [Print].**

The password screen appears.

6. **Enter the password using the [▲], [▼],[◀] or [▶] key, and then press the [OK] key.**

```
Enter the password with
 ♦, then press OK.
 ┌──────────────────┐
 │ _                │ ◀▶
 └──────────────────┘
                  ┌───────┐
                  │ Clear │
                  └───────┘
```

The print confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

If you forget your password, ask your network administrator for help.

7. **Press [Print].**

The remaining sets are printed.

Press [Cancel] to cancel printing.

⬇ Note

- When printing is completed, the stored file will be deleted.
- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.

📄 Reference

- For details about [User ID], see p.101 "Printing from the User ID Screen".

Deleting locked print files

1. **Press [Prt.Jobs].**
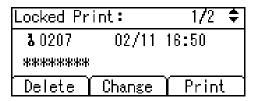
```
┌──────────────────────────┐
│ Ready                    │
│ Toner    1⊔  2⊟  3⊟      │
│        ▮  4⬇  T⊔   ⬇     │
│ ┌──────┐┌────────┐┌────────┐
│ │Option││Prt.Jobs││Supplies││
│ └──────┘└────────┘└────────┘
```

2. **Select [Locked Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

```
┌──────────────────────────┐
│ ▤Print Jobs    1/2  ♦    │
│  Sample Print Jobs        │
│ ▐Locked Print Jobs▌       │
│ ┌────────┐      ┌────────┐│
│ │Job List│      │User ID ││
│ └────────┘      └────────┘│
```

A list of Locked Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

3. **Select the file you want to delete using the [▲] or [▼] key, and then press [Delete].**

```
Locked Print:        1/2  ⬍
  🔒 0207      02/11 16:50
  ********
 ┌───────┬────────┬────────┐
 │Delete │ Change │ Print  │
 └───────┴────────┴────────┘
```

The password screen appears.

4. **Enter the password using the [▲], [▼], [◀] or [▶] key, and then press the [OK] key.**

```
Enter the password with
 ⬍, then press OK.
 ┌─────────────┐    ◀▶
 │ _           │
 └─────────────┴──────────┐
                  │ Clear  │
                  └────────┘
```

The delete confirmation screen appears.

A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

If you forget your password, ask your network administrator for help.

5. **Press [Delete].**

The selected file is deleted.

If you do not want to delete the file, press [Cancel].

Hold Print

Use this function to temporarily hold a file in the printer, and print it from the computer or the printer's control panel later.

⭐ **Important**

- A Hold Print file cannot be stored if:
    - the optional hard disk is not installed in the printer.
    - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
    - the file contains over 1,000 pages.
    - sent or stored files in the printer contain over 9,000 pages in total.

🔽 **Note**

- If a Hold Print file has not been stored properly, check the error log on the control panel.

- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Del. Temp. Print Jobs] or [Auto Del Stored Print Jobs] settings are applied first.

- If the application has a collate option, make sure it is not selected before sending a print job. By default, Hold Print jobs are automatically collated by the printer driver. If a collate option is selected from the application's Print dialog box, more prints than intended may be produced.

- Hold Print files printed or deleted using Web Image Monitor, after you select [Hold Print Jobs] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Hold Print files.

- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily. If you enter the document name on the printer driver's [Details...], that name appears on the display panel.

- It is possible, but not required, to set a file name or a password to a Hold Print file.

🔖 Reference

- For details about the error log on the display panel, see p.109 "Checking the Error Log".

- For details about the [Auto Del. Temp. Print Jobs] and [Auto Del Stored Print Jobs], see p.151 "System Menu".

Printing a hold print file

The following procedure describes how to print a Hold Print file with the PCL 6/5e or RPCS printer driver. For information about how to print a Hold Print file with the PostScript 3 printer driver, see Postscript 3 Supplement.

⭐ Important

- Applications with their own drivers, such as PageMaker, do not support this function.

1. **Configure Hold Print in the printer driver's properties.**

   For details about configuring the printer drivers, see the relevant Help files.

2. **Click [Details...], and then enter a User ID in the [User ID:] box.**

   You can also set a file name. The file name you set will be displayed on the printer's Job List screen.

3. **Start printing from the application's Print dialog box.**

   The Hold Print job is sent to the printer and stored.

4. **On the printer's control panel, press [Prt.Jobs].**

5. **Select [Hold Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

```
┌─────────────────────────────┐
│▤Print Jobs      2/2   ↕     │
│ Hold Print Jobs             │
│ Stored Print Jobs           │
│ Job List          User ID   │
└─────────────────────────────┘
```

A list of Hold Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

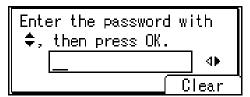You can print files also by pressing [User ID].

6. **Select the file you want to print using the [▲] or [▼] key, and then press [Print].**

```
┌─────────────────────────────┐
│Hold Print:          1/2   ↕ │
│   0208      02/11 16:50     │
│ 2345                        │
│ Delete             Print    │
└─────────────────────────────┘
```
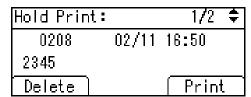
The confirmation screen appears.

7. **Press [Print].**

The Hold Print file is printed.

Press [Cancel] to cancel printing.

⬇Note

- When printing is completed, the stored file will be deleted.

- To stop printing after printing has started, press the [Job Reset] key. The file will be deleted.

- For details about setting printer drivers, see the printer driver Help. You can also print or delete a Hold Print file from Web Image Monitor. For details, see Web Image Monitor Help.

🗐Reference

Deleting hold print files

1. **Press [Prt.Jobs].**

```
┌─────────────────────────────┐
│Ready                        │
│Toner    █    1⊔  2⊑  3⊑      │
│              4⊎  T⊔   ⬇      │
│ Option  Prt.Jobs Supplies   │
└─────────────────────────────┘
```

2. **Select [Hold Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

```
 ▤Print Jobs      2/2  ↕
 Hold Print Jobs
 Stored Print Jobs
 Job List            User ID
```

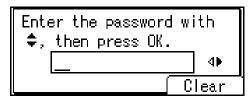A list of Hold Print files stored in the printer appears.

Depending on the security settings, certain print jobs may not be displayed.

3. **Select the file you want to delete using the [▲] or [▼] key, and then press [Delete].**

```
 Hold Print:      1/2  ↕
   0208       02/11 16:50
 2345
 Delete             Print
```

The confirmation screen appears.

4. **Press [Delete].**

The selected file is deleted.

If you do not want to delete the file, press [Cancel].

Stored Print

Use this function to store a file in the printer, and then print it from the computer or the printer's control panel later.

Jobs are not deleted after they are printed, so the same job need not be resent in order to print multiple copies.

⭐ Important

- A Stored Print file cannot be stored if:
    - the optional hard disk is not installed in the printer.
    - the total number of Sample Print, Locked Print, Hold Print, and Stored Print files in the printer is over 100. (The maximum number varies depending on the volume of data in files.)
    - the file contains over 1,000 pages.
    - sent or stored files in the printer contain over 9,000 pages in total.

🔽 Note

- If a Stored Print file has not been stored properly, check the error log on the control panel.

- Even after you turn off the printer, stored documents in the printer remain. However, the [Auto Del. Temp. Print Jobs] or [Auto Del Stored Print Jobs] settings are applied first.

- If the application has a collate option, make sure it is not selected before sending a print job. By default, Stored Print jobs are automatically collated by the printer driver. If a collate option is selected from the application's Print dialog box, more prints than intended may be produced.

- Stored Print files printed or deleted using Web Image Monitor, after you select [Stored Print Jobs] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Stored Print files.

- If stored files have similar and long file names, recognizing the file you want to print on the display panel may be difficult. Print the file you want to print either by checking the user ID or the time the file is sent, or by changing the file name to something that can be recognized easily.

- If you enter the document name on the printer driver's [Details...], that name appears on the display panel.

🗐 Reference

- For details about the error log on the display panel, see p.109 "Checking the Error Log".

- For details about the [Auto Del. Temp. Print Jobs] and [Auto Del Stored Print Jobs], see p.151 "System Menu".

Printing a stored print file

The following procedure describes how to print a Stored Print file with the PCL 6/5e or RPCS printer driver. For information about how to print a Stored Print file with the PostScript 3 printer driver, see Postscript 3 Supplement.

⭐ Important

- Applications with their own drivers, such as PageMaker, do not support this function.

1. **Configure the Stored Print in the printer driver's properties.**

   You can select two ways for Stored Print:

   - [Stored Print]

     Stores the file in the printer and print it later using the control panel.

   - [Store and Normal Print] (or [Store and Print])

     Prints the file at once and also stores the file in the printer.

   For details about configuring the printer drivers, see the relevant Help files.

2. **Click [Details...], and then enter a User ID in the [User ID:] box.**

   You can also set a password. The same password must be entered when printing or deleting.

   You can also set a file name. The file name you set will be displayed on the printer's Job List screen.

3. **Start printing from the application's Print dialog box.**

The Stored Print job is sent to the printer.

4. **On the printer's control panel, press [Prt.Jobs].**

```
Ready
Toner    ▐     1▭  2▭  3▭
               4▭  T▭     ▭
 Option  Prt.Jobs Supplies
```

5. **Select [Stored Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

```
▤Print Jobs      2/2  ▲▼
 Hold Print Jobs
 Stored Print Jobs
Job List          User ID
```

A list of Stored Print files stored in the printer appears.

You can print files also by pressing [User ID].

6. **Select the file you want to print using the [▲] or [▼] key, and then press [Print].**

```
Stored Print:     1/2  ▲▼
 ▓0207      02/11 16:51
 0055
 Delete  Change   Print
```

The confirmation screen appears.

If you set a password in the printer driver, a password confirmation screen appears. Enter the password.

7. **Press [Print].**

The Stored Print file is printed.

Press [Cancel] to cancel printing.

✎Note

- When multiple files are selected without setting a quantity, one set less than the minimum number of all settings is applied. If the least number of settings is one set, all selected files will be printed at one set.

- When the number of set quantity is changed, the changed quantity is applied to all selected files.

- To stop printing after printing has started, press the [Job Reset] key. A Stored Print file is not deleted even if the [Job Reset] key is pressed.

- The Stored Print file that sent to the printer is not deleted unless you delete a file or select [Auto Del Stored Print Jobs].

- You can set or delete a password after sending files to the printer. Select the file and press [Change] in the Print Job List screen. To set a password, enter the new password. To delete the password, leave the password box blank on entering or confirming the new password, and press the [OK] key.

- For details about setting printer drivers, see the printer driver Help. You can also print or delete a Stored Print file from Web Image Monitor. For details, see Web Image Monitor Help.

🗉 Reference
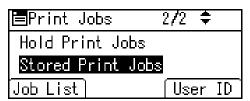
- For details about the [Auto Del Stored Print Jobs], see p.151 "System Menu".

- For details about [User ID], see p.101 "Printing from the User ID Screen".

Deleting stored print files

1. **Press [Prt.Jobs].**
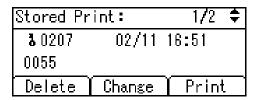
2. **Select [Stored Print Jobs] using the [▲] or [▼] key, and then press [Job List].**

   A list of Stored Print files stored in the printer appears.

   Depending on the security settings, certain print jobs may not be displayed.

3. **Select the file you want to delete using the [▲] or [▼] key, and then press [Delete].**

   The delete confirmation screen will appear.

   If you set the password in the printer driver, enter the password to delete.

   If you forget your password, ask your network administrator for help.

4. Press [Delete].

The selected file is deleted.

If you do not want to delete the file, press [Cancel].

Printing from the User ID Screen

This describes how to print the files saved in the printer from the User ID screen.

Printing the Selected Print Job

⭐ **Important**

- If you print a Sample, Locked, or Hold Print file, the print file saved in the printer is deleted after printing is completed.

1. **On the initial screen, press [Prt.Jobs].**

```
Ready
Toner         1⊔  2⊔  3⊔
              4⊔  T⊔  ⊔
Option  Prt.Jobs  Supplies
```

2. **Press [User ID].**

```
☰Print Jobs      1/2  ⬍
 Sample Print Jobs
 Locked Print Jobs
Job List          User ID
```

A list of user IDs whose files are stored in the printer appears.

3. **Select the user ID whose file you want to print using the [▲] or [▼] key, and then press [Job List].**

```
Sample Print:    1/1  ⬍
 0208
 5011
Job List          PrintAll
```

The print job list of the selected user ID appears.

4. **Select the file you want to print using the [▲] or [▼] key, and then press [Print].**

```
Sample Print:    1/1  ⬍
    5011     02/11 17:02
 Document
 Delete            Print
```

3

The confirmation screen appears.

5. **Press [Print].**

   The selected file is printed.

   Press [Cancel] to cancel printing.

📘**Reference**

- For details about printing each type of print job, see the followings:
- p.87 "Sample Print"
- p.90 "Locked Print"
- p.93 "Hold Print"
- p.96 "Stored Print"

Printing All Print Jobs

1. **On the initial screen, press [Prt.Jobs].**
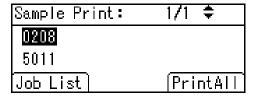
2. **Select a type of print jobs you want to print using the [▲] or [▼] key, and then press [User ID].**

   A list of user IDs whose files are stored in the printer appears.

3. **Select the user ID whose file you want to print using the [▲] or [▼] key, and then press [PrintAll].**

   The confirmation screen appears.

4. **Press [Print].**

   The selected files are printed.

   To cancel printing, press [Cancel].

↓ Note

- After printing is completed, Sample Print, Locked Print, and Hold Print files are deleted.

- You cannot select a print job that is not stored under the selected user ID.

- When printing multiple Sample Print files without specifying the number of sets on the confirmation screen, one set less than the least number of set specified on the computer is applied for every selected document. If the number of sets specified on the computer is "1", one set each is printed for every document.

- When printing multiple Stored Print files without specifying the number of sets on the confirmation screen, the least number of set specified on the computer is applied for every selected document.

- If you select [Locked Print Jobs], enter the correct password. If there are multiple passwords, the printer prints only files that correspond to the entered password.

- If you select Stored Print files, and some of these require a password, the printer prints files that correspond to the entered password and files that do not require a password.

▤ Reference

- For details about printing each type of print job, see the followings:
- p.87 "Sample Print"
- p.90 "Locked Print"
- p.93 "Hold Print"
- p.96 "Stored Print"

Form Feed

This section gives instructions for operating the printer when there is no tray for the selected paper size or type, or when paper loaded in the printer has run out.

⭐ **Important**

- **The tray cannot be changed if the following functions are set:**
    - **Duplex Print to a tray that does not support duplex printing**
    - **Cover Sheet**
    - **Slip Sheet**

🔽 **Note**

- If form feed is selected for a tray with the following settings, you can change the tray by canceling the settings:
    - Duplex Print
    - Staple

📑 **Reference**

- If [Auto Continue] is selected, form fed paper is printed after a set interval. For details, see p.151 "System Menu".

Printing from a Selected Tray

If the printer does not have a tray for the selected paper size or paper type, or if the selected paper loaded in the printer has run out, a caution message appears. If this message appears, do the following procedure.

1. **When the caution message appears, press [FormFeed].**
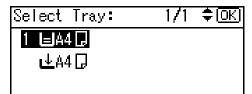
   ```
   Paper size/type mismatch.
   Change settings to:
   8½×11□Plain/Recycled

   Change  JobReset  FormFeed
   ```

   A confirmation message appears.

2. **Press the [OK] key.**

3. **Select the tray for form feed using the [▲] or [▼] key from those that appear on the display panel, and then press the [OK] key.**

```
Select Tray:      1/1  ≑ OK
 1 ▤A4 🔁
   ⤓A4 🔁
```

The printer prints using the selected tray.

◆Note

- If a tray with a smaller paper size is selected, the print job may be cut short, or other problems may occur.

Canceling a Print Job

Follow this procedure for canceling the print job if the message prompting form feed appears.

1. **Press [JobReset].**

```
Paper size/type mismatch.
Change settings to:
8½×11 🔁 Plain/Recycled
 Change  JobReset  FormFeed
```

2. **Press [Current].**
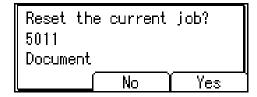
```
Reset job(s):
5011
Document
 Current  All Jobs  Resume
```

The confirmation message appears.

To resume printing jobs, press [Resume].

3. **Press [Yes] to cancel the print job.**

```
Reset the current job?
5011
Document
          No        Yes
```

Press [No] to return to the previous display.

↓Note

- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.
- Under Windows, If the printer is connected to the computer using a parallel cable, sent print jobs may be canceled if [JobReset] is pressed while "Waiting..." is displayed on the control panel. After the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print job sent from a different client computer will not be canceled in this case.
- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press [JobReset].
- A print job containing a large volume of data may take considerable time to stop.

Reference

- To stop data printing, see p.107 "Canceling a Print Job".

Canceling a Print Job

You can cancel printing from either the printer or a client computer. Since canceling procedures vary depending on the print job status, check the job status and cancel printing according to the following procedure.

Canceling a Print Job Using the Control Panel

1. **Press [JobReset].**

   A confirmation message appears.

2. **Press [Current].**

   ```
   Reset job(s):
   5011
   Document
   Current  All Jobs  Resume
   ```

   To resume printing jobs, press [Resume].

3. **Press [Yes] to cancel the print job.**

   ```
   Reset the current job?
   5011
   Document
                No      Yes
   ```

   Press [No] to return to the previous display.

Windows - Canceling a Print Job from the computer

You can cancel a print job from the computer if transferring print jobs is not completed.

1. **Double-click the printer icon on the Windows task tray.**

   A window appears, showing all print jobs currently queued for printing. Check the current status of the job you want to cancel.

2. **Select the name of the job you want to cancel.**

3. **On the [Document] menu, click [Cancel].**

⬇️**Note**

- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.

- If the printer is connected to the computer using a parallel cable, sent print jobs may be canceled if [JobReset] is pressed while "Waiting..." is displayed on the control panel. After the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print job sent from a different client computer will not be canceled in this case.

- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press [JobReset].

- A print job containing a large volume of data may take considerable time to stop.

Mac OS - Canceling a Print Job from the computer

1. **Double-click the printer icon on the desktop.**

   A window appears showing all print jobs that are currently queuing to be printed. Check the current status of the job you want to cancel.

   Under Mac OS X, start Print Center.

2. **Select the name of the job you want to cancel.**

3. **Click the pause icon, and then click the trash icon.**

⬇️**Note**

- If the printer is shared by multiple computers, be careful not to accidentally cancel someone else's print job.

- If the printer is connected to the computer using a parallel cable, sent print jobs may be canceled if [JobReset] is pressed while "Waiting..." is displayed on the control panel. After the interval set in [I/O Timeout] in Printer Features has passed, the next print job can be sent. A print job sent from a different client computer will not be canceled in this case.

- You cannot stop printing data that has already been processed. For this reason, printing may continue for a few pages after you press [JobReset].

- A print job containing a large volume of data may take considerable time to stop.

Checking the Error Log

If files could not be stored due to printing errors, identify the cause of the errors by checking the error log on the control panel.

Important
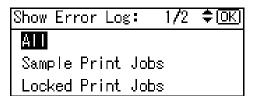
- The most recent 30 errors are stored in the error log. If a new error is added when there are 30 errors already stored, the oldest error is deleted. However, if the oldest error belongs to one of the following print jobs, it is not deleted. The error is stored separately until the number of those errors reaches 30. You can check any of these print jobs for error log information.
    - Sample Print
    - Locked Print
    - Hold Print
    - Stored Print
- If the main power switch is turned off, the log is deleted.

1. **Press [Option].**

2. **Select [Show Error Log] using the [▲] or [▼] key, and then press the [OK] key.**

3. **Select a type of print jobs using the [▲] or [▼] key, and then press the [OK] key.**

   If you select [All], all error logs appears.

4. Select the error log you want to check using the [▲] or [▼] key.

```
Error Log:All        1/4  ⬍
   21 0208      02/11 18:15
 Document
▶Job Reset
```

⬇Note

- Press the [Menu] key until the initial screen appears after checking the log.

- To print files that appear in the error log, resend them after stored files have been printed or deleted.

Collate
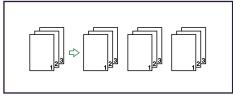
The Collate function allows you to print while sorting printouts into page-ordered sets, such as when printing multiple copies of meeting materials.

⭐**Important**

- To use this function, at least 384 MB of RAM (256 MB standard + 128 MB optional) or the optional hard disk is required.

- Up to 100 pages can be stored using RAM. If the optional hard disk is installed, up to 1,000 pages can be stored.

Collate

Output can be assembled as sets in sequential order.

BAS053S

⬇**Note**
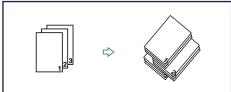
- If Auto Continue occurs on the first set, Collate will be canceled.

- If forced printing occurs on the first set, Collate will be canceled.

- When setting Collate in the printer driver settings, make sure that a collate option is not selected in the application's print settings. If a collate option is selected, printing will not be as intended.

- For details about printing method, see the printer driver Help.

Shift Collate

The optional finisher is required for this function. The finisher shift tray moves backward or forward when a job or set is output, causing the next to shift, so you can separate them.

BAS055S

Spool Printing

With Spool Printing, the print data is saved in the hard disk before printing. To use this function, set it from the menu. See "Remote Maintenance by telnet".

⭐ **Important**

- To use this function, the optional hard disk must be installed on the printer.
- Use the "spoolsw clear job" telnet command to clear a spooled print job. Do not turn off the printer or computer while a print job is being spooled and the Data In is flashing. Print jobs that are interrupted in this way remain on the printer's hard disk and will finish printing out when the printer is turned back on.
- The Spool Printing function is available for data received using diprint, lpr, ipp, ftp, and sftp (TCP/IP (IPv6)).
- When using diprint, the Spool Printing function cannot be used with bidirectional communication.
- The domain reserved for spool printing is about 1 GB.
- When Spool Printing is on, the size of a single print job cannot exceed 500 MB.
- When receiving jobs from multiple computers, the printer can spool a maximum of ten lpr jobs, and only one diprint, ipp, ftp, sftp, or smb job. If the printer's spooling capacity is exceeded, newer jobs cannot be printed. You must wait before sending further jobs.

🔽 **Note**

- Printing the first page with Spool Printing will be slow.
- The computer requires less print processing time when large amounts of data are spooled.
- Stored spool jobs can be viewed or deleted using Web Image Monitor.
- The list of spool jobs cannot be viewed from the printer's control panel.

📑 **Reference**

- For information about the "spoolsw clear job" command on the telnet, see p.216 "Remote Maintenance by telnet".

Setting Spool Printing

Spool printing settings can be made using telnet or Web Image Monitor.

- Using Web Image Monitor

  In [System] on the [Configuration] menu, click [Active] in [Spool Printing].

- Using telnet

  Enter "spoolsw spool on".

Note

- For details about Web Image Monitor, see Web Image Monitor Help.

Reference

- For details about "spoolsw spool on", see p.216 "Remote Maintenance by telnet".

Viewing or Deleting spooled jobs using Web Image Monitor

Follow the procedure below to check or delete spooled jobs using Web Image Monitor.

1. **Open a Web browser.**

2. **Enter "http://(printer's address)/" in the address bar to access the printer whose settings you want to change.**

   Top Page of Web Image Monitor appears.

3. **Click [Login].**

   The window for entering the login user name and password appears.

4. **Enter the login user name and password, and then click [Login].**

   Contact your administrator for information about the settings.

5. **In the menu area, click [Job].**

   A submenu will appear.

6. **On the [Printer] menu, click [Spool Printing].**

   A list of spooled jobs appears.

7. **To delete a job, select the check box of the job you want to delete, and then click [Delete].**

   The selected job is deleted.

8. **Click [Logout].**

9. **Quit Web Image Monitor.**

Note

- For details about Web Image Monitor, see Web Image Monitor Help.

Cover

Using this function, you can insert cover and back sheets fed from a different tray to that of the main paper, and print on them.

⭐ **Important**

- To use this function, Collate must be set.

🔽 **Note**

- The cover sheets should be the same size and orientation as the body of the paper.

- If Auto Tray Select is set for the body paper feed tray, body paper will be delivered from a tray that contains paper set in portrait orientation. Therefore, if the cover paper is set to landscape orientation, the orientation of the cover and body paper will be different.

- For printing methods, see the printer driver Help.

Printing with the Finisher

You can staple or punch holes in printed paper by installing the optional finisher. Make sure you read the following precautions when using the optional finisher.

⭐**Important**

- **Make option settings for the printer using the printer driver when bidirectional communication is disabled.**
- **Be sure to set the paper size and paper orientation in the printer driver when using duplex printing, staple and punch functions.**

🔽**Note**

- When printing restarts after removing jammed paper, the printing position may be different, depending on the location of the jam.
    - If the paper jam occurred in the optional finisher, printing will restart from the top page of the data currently being printed, or from the page where the paper jam occurred.
    - If the paper jam occurred in the printer, printing will restart from the page where the paper jam occurred.
    - Even if the paper jam occurred in the printer, the error will not be cleared unless the cover of the finisher is opened and closed.
    - For information about optional finishers, see Hardware Guide.

Staple

With the optional Finisher SR3030 or Finisher SR790 installed, sets can be stapled individually when printing multiple sets.

Staple position

The specified staple position varies depending on paper size, type, quantity and feed orientation. The following table shows staple positions:

Staple Position

Paper Orientation on the Printer	Print Data Direction	Staple Position	
		Finisher SR790	Finisher SR3030
	Portrait	R R R R R R R	R R R R R R R
	Landscape	R R R R R R R	R R R R R R R
	Portrait	R R R R R R R	R R R R R R R
	Landscape	R R R R R R R	R R R R R R R

BEK220S

Staple Capacity (Finisher SR790)

Paper Size	Staple Capacity
A3⤵, B4 JIS⤵, 12" × 18"⤵, 11" × 17"⤵, $8^1/_2$" × 14" (Legal)⤵, $8^1/_2$" × 13" (Foolscap)⤵, $8^1/_4$" × 13" (Folio)⤵, 8" × 13" (F/GL)⤵	30
A4⤵⤵, B5 JIS⤵⤵, $8^1/_2$" × 11" (Letter)⤵⤵, $7^1/_4$" × $10^1/_2$" (Executive)⤵⤵	50

Staple Capacity (Finisher SR3030)

Paper Size	Staple Capacity
A3⤵, B4 JIS⤵, 12" × 18"⤵, 11×17⤵, $8^1/_2$" × 14" (Legal)⤵, $8^1/_2$" × 13" (Foolscap)⤵, $8^1/_4$" × 13" (Folio)⤵, 8" × 13" (F/GL)⤵	30
A4⤵⤵, B5 JIS⤵⤵, $8^1/_2$" × 11" (Letter)⤵⤵, $7^1/_4$" × $10^1/_2$" (Executive)⤵⤵	50

Mixed Size (Finisher SR3030)

Mixed Paper Size	Staple Capacity
A3▽ and A4▽	30
B4 JIS▽ and B5 JIS▽	30
11" × 17"▽ and 8$^1/_2$" × 11" (Letter)▽	30

😈 **Note**

- When two-sided printing is selected, adjust the staple position to the binding direction.

- If you are punching at the same time, specify the same side.

- For printing methods, see the printer driver Help.

Stapling Precautions

⭐ **Important**

- Stapling can be done only with the optional finisher installed.

- Staple printing will be canceled under the following conditions:

    - If the number of pages to staple exceeds maximum.

    - If a paper size that cannot be stapled is selected.

    - If a paper type that cannot be stapled is selected.

    - If positions other than those fixed for stapling are specified.

    - If there are inconsistencies between the orientation in the duplex mode and the staple position.

    - If there are inconsistencies between the orientation in letterhead mode and the staple position.

    - When staples have run out and Auto Continue is set (Printing will continue without stapling after the message has been displayed).

    - When only 1 page is printed when staples have run out.

    - If paper sizes are mixed when a different paper size is specified during a print job.

😈 **Note**

- When printing on letterhead, stapling may not be at the specified position.

- If you cannot make staple settings even with Finisher installed, options may not be set correctly in the printer driver. Correct option settings in the printer driver. For details, see the printer driver Help.

- When duplex printing is selected, adjust staple positions to the binding orientation.

- Depending on the software you are using, print settings may not be saved and the printed result may not be as expected.

- When setting Staple in the printer driver settings, make sure that a collate option is not selected in the print settings of the application. If a collate option is selected in the application, printing will not be as intended.

- When using tracing paper, the vertical/horizontal position of the staples is opposite to the vertical/ horizontal position specified in the printer driver settings.

- Also, staples on the front cover sheet come out reversed.

Punch

By installing an optional punch unit to the optional finisher, Finisher SR3030, holes can be punched into printed output.

Punch position

The specified punch position varies depending on paper feed and print data orientation. The following table shows punch positions:

Punch Position

BEK218S

Holes Type (Finisher SR3030)

Type	Paper Size
2 holes	A3$\square$, A4$\square\square$, A5$\square\square$, A6$\square$, B4 JIS$\square$, B5 JIS$\square\square$, B6 JIS $\square$, 11" × 17"$\square$, $8^1/_2$" × 14" (Legal)$\square$, $8^1/_2$ " × 13" (Foolscap)$\square$, 12" ×

Type	Paper Size
	18"▯, $8^1/_2$" × 11" (Letter)▯▯, $8^1/_4$" × 13" (Folio)▯, 8" × 13" (F/GL)▯, $7^1/_4$" × $10^1/_2$" (Executive)▯▯, $5^1/_2$" × $8^1/_2$" (Half Letter)▯▯
3 holes	A3▯, A4▯, B4 JIS▯, B5 JIS▯, 12" × 18"▯, 11" × 17"▯, $8^1/_2$" × 11" (Letter)▯, $7^1/_4$" × $10^1/_2$" (Executive)▯
EU 4 holes	A3▯, A4▯, B4 JIS▯, B5 JIS▯, 12" × 18"▯, 11" × 17"▯, $8^1/_2$" × 11" (Letter)▯, $7^1/_4$" × $10^1/_2$" (Executive)▯
Northern EU 4 holes	A3▯, A4▯▯, A5▯▯, B4 JIS▯, B5 JIS▯▯, B6 JIS▯, 12" × 18"▯, 11" × 17"▯, $8^1/_2$" × 14" (Legal)▯, $8^1/_2$" × 13" (Foolscap)▯, $8^1/_2$" × 11" (Letter)▯▯, $8^1/_4$" × 13" (Folio)▯, 8" × 13" (F/GL)▯, $7^1/_4$" × $10^1/_2$" (Executive)▯▯, $5^1/_2$" × $8^1/_2$" (Half Letter)▯▯

🔽 **Note**

- Punch positions will vary slightly from page to page as holes are punched into each sheet individually.

- For printing methods, see the printer driver Help.

Punching Precautions

Follow these precautions when using the punch function.

⭐ **Important**

- To use this function, an optional punch unit must be installed to the optional Finisher attached to the printer.

- Punch printing will be canceled under the following conditions:
  - When a paper type that cannot be punched is selected.
  - When a paper size that cannot be punched is selected.
  - If positions other than those fixed for punching are specified.
  - If there are inconsistencies between the orientation in duplex mode and the punch position.
  - If there are inconsistencies between the orientation in letterhead mode and the punch position.
  - When the punch receptacle has become full and Auto Continue is set (Printing will continue without punching after the message appears).
  - If there are inconsistencies between the staple position and the punch position, when using with staple function.

🔽 **Note**

- Punching might not be in the specified position when printing on letterhead paper.

- If you cannot make punch settings even with the optional finisher installed, options may not be set correctly in the printer driver. Correct option settings in the printer driver. For details, see the printer driver Help.

- When duplex print is selected, adjust the punch position to the binding direction.

- Be sure to set the punch position the same as the staple position when using it with the staple function.

- Be sure to set paper size and orientation in the printer driver when punching.

- Depending on the application, print settings may not be enabled and printed output may not be as expected.

- When setting Punch in the printer driver settings, make sure that a collate option is not selected in the print settings of the application.

- If a collate option is selected in the application, printing will not be as intended.

- When using tracing paper, the vertical/horizontal position of the punches is opposite to the vertical/ horizontal position specified in the printer driver settings.

Using the Virtual Printer

This section explains virtual printer functions.

A virtual printer is a pseudo printer that can only be recognized on a network. The virtual printer has various print options, such as feeding tray selection and duplex printing, which you can set in advance. You can also use the interrupt printing function. This function suspends the ongoing job and gives priority to a new job. The optional hard disk must be installed to use this function.

If you use the virtual printer under UNIX, Solaris, and other operating systems, various print functions are possible without having you manually enter usual print commands.

Adding a Virtual Printer

Use this procedure to add a virtual printer.

⭐ **Important**

- Adding a virtual printer requires Administrators privilege. Log on using an account that has Administrators privilege.
- The following Virtual Printer protocols are available: "TCP/IP (Unspecified, Normal)", "TCP/IP (DIPRINT)", "TCP/IP (RHPP)", "Apple Talk", and "NetWare".

1. **Log on to Web Image Monitor as an administrator.**
2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   A list of the available virtual printers appears.
3. **Click [Add].**

   The screen for adding virtual printers appears.
4. **In [Virtual Printer Name], enter a name for the new printer, and then select the protocol in the [Protocol] list.**
5. **Click [OK].**

   The virtual printer is added.

⬇ **Note**

- If you select [AppleTalk] or [NetWare] in the [Protocol] list, you cannot specify a virtual printer name.
- You can specify a virtual printer name using up to 47 characters.
- You can add up to 50 virtual printers. After 50 virtual printers have been added, [Add] will no longer be displayed.

📄 **Reference**

- For details about login user names and passwords, see p.185 "Using Web Image Monitor".

3. Other Print Operations

Changing a Virtual Printer Configuration

Use this procedure to change a virtual printer configuration.

⭐ **Important**

- You must have Administrators privilege to change the configuration of a virtual printer. Log on using an account that has Administrators privilege.

1. **Log on to Web Image Monitor as an administrator.**

2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   A list of the available virtual printers appears.

3. **Select the virtual printer whose configuration you want to change, and then click [Change].**

   If you want to configure this virtual printer for an interrupt printer, select [TCP/IP (Unspecified, Priority)] in the protocol list.

4. **Change the configuration as required.**

5. **Click [OK].**

⬇ **Note**

- For details about virtual printer configuration, see Web Image Monitor Help.

📄 **Reference**

- For details about login user names and passwords, see p.185 "Using Web Image Monitor".

Confirming a Virtual Printer Configuration

Use this procedure to confirm a virtual printer configuration.

1. **Start Web Image Monitor.**

2. **In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.**

   A list of available virtual printers appears.

3. **Select the virtual printer whose configuration details you want to confirm, and then click [Details].**

   A configuration list for the selected virtual printer appears.

⬇ **Note**

- [Details] is not displayed if you log on to Web Image Monitor as an administrator. To confirm a virtual printer configuration, click [Change].

🔖 Reference

- For details about login user names and passwords, see p.185 "Using Web Image Monitor".

Deleting a Virtual Printer

Use this procedure to delete a virtual printer.

⭐ Important

- You must have Administrators privilege to delete a virtual printer. Log on using an account that has Administrators privilege.

1. Log on to Web Image Monitor as an administrator.
2. In the menu area, click [Configuration], and then click [Virtual Printer Settings] in the "Printer" category.

   The list of available virtual printers appears.

3. Select the virtual printer that you want to delete, and then click [Delete].

   The delete confirmation screen appears.

4. Click [OK].

⬇ Note

- You cannot delete this printer's default virtual printer.
- [Delete] appears only if you have already added a virtual printer.

🔖 Reference

- For details about login user names and passwords, see p.185 "Using Web Image Monitor".

Printing Using a Virtual Printer

To print directly from a specified virtual printer, assign the virtual printer in the print command. If you use the interrupt printing function, enter the name of the virtual printer that you configured for interrupt printing. Before printing for the first time, specify the virtual printer you want to use.

1. Log on to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration], and then click [Basic Settings] in the "Printer" category.
3. Select [Active] in [Virtual Printer], and then click [OK].
4. Send a command from your computer.

lpr

   C:\>lpr -S "printer's IP address" [-PVirtual Printer Name] [-ol] \path name\file name

rcp

> c:> rcp [-b] \path name\file name [\path name\file name...] printer's host name:["Virtual Printer Name"]

ftp

> ftp> put \path name\ file name Virtual Printer Name

↓ Note

- When the ongoing job meets any of the following conditions, interrupt printing is not possible even if you print with the virtual printer that is configured for interrupt printing. The printer waits to print a new job until it finishes printing the current job.

  - When the staple function is specified for the ongoing print jog

  - When the ongoing print job is performed using the bypass tray

  - When a function related to cover or slip paper is specified for the ongoing print job

- If a large amount of memory is used for the ongoing print job or a large number of sheets are being printed, there may not be enough memory to process an interrupt print job, or only part of the interrupt job may be printed. If this happens, certain functions for the interrupt job, such as stapling or storing data onto the printer, can be canceled or sheets can be sorted in a number smaller than the standard maximum capacity.

■ Reference

- For details about login user names and passwords, see p.185 "Using Web Image Monitor".

4. Using Paper Types that Have Unique Names

From Registration of User Paper Types to Use

This section explains the procedures for selecting the paper type according to usage, registering the paper type under a unique name, and printing a file using the registered paper type.

⭐ **Important**

- This function can be used
    - when the printer is operating in a network,
    - in conjunction with the RPCS printer driver, and
    - under Windows 2000 or higher (under earlier systems, registered paper types appear as [Plain] in the printer driver).
- This function cannot be used
    - with the printer driver's [Save/Restore Settings] function (registered paper types appear as [Plain] in the printer driver) and
    - if the printer and computer are not using bi-directional communication.
- Also, be aware that
    - the printer driver might not display the paper type name correctly if it is registered using an unsupported language,
    - the control panel might not display the paper type name correctly if it is registered using nonalphanumeric characters (i.e., other than a-z, A-Z, or 0-9), and
    - the printer's logs do not record names of user paper types.

The example below explains setting a custom size paper under the name "Invoice A" and feeding it from a bypass tray.

1. **Using Web Image Monitor, register the name under [User Paper Type].**
    - Enter "Invoice A" for [Paper Name] and select [Plain Paper] for [Paper Type].
    - When printing a file, the paper type is automatically set by selecting [User Paper Type] on the printer driver setting screen.
    - For details about this procedure, see "Registering Names to Paper Types".
2. **In Web Image Monitor, set [User Paper Type] for the bypass tray.**
    - Set [Paper Type] for the tray to "Invoice A".
    - For details about this procedure, see "Setting User Paper Types to Trays".

3. Load the paper you want to use on the bypass tray.

- Set an unprinted paper on the bypass tray.

- For details about this procedure, see "Loading Paper", Hardware Guide.

4. Using RPCS Printer Driver, print a document on the registered custom size paper.

- Select [Invoice A] for [Paper type:], then proceed with the printing. When [Paper type:] is set to [Invoice A], Plain paper that is suitable for "Invoice A" is selected automatically. Registering a descriptive name makes selecting a paper type from the [Paper type:] list easier.

- For details about this procedure, see "Printing Using Registered Paper Types".

Note

- You can register up to eight user paper types.

Reference

- p.127 "Registering Names to Paper Types"
- p.128 "Setting User Paper Types to Trays"
- p.129 "Printing Using Registered Paper Types"

Registering Names to Paper Types

Log on to Web Image Monitor in the administrator mode.

⭐ **Important**

- The control panel might not display the paper type name correctly if it is registered using nonalphanumeric characters (i.e., other than a-z, A-Z, or 0-9).

1. **Start your Web browser.**

2. **Enter "http://(printer's address)/" in the address bar of the Web browser.**

   The Top of Web Image Monitor appears.

   If the printer's host name has been registered on the DNS or WINS server, you can enter it in the address bar.

   If SSL (encrypted HTTP) is running in a server authentication environment, enter "https://(printer's address)".

3. **On the Top Page, click [Login].**

   A dialog box for entering the user name and password appears.

4. **Enter your login user name and password, and then click [Login].**

   For details about the login user name and password, consult your administrator.

5. **In the menu area, click [Configuration].**

6. **On the [Device Settings], click [User Paper Type], and then change the settings as necessary.**

   The screen for selecting [User Paper Type] appears.

7. **Make changes to the following settings:**

   Paper Name: Enter a descriptive name for easier recognition.

   Paper Type: Select a suitable paper type from the list.

   The example below is for printing invoices.

- Enter "Invoice A" for [Paper Name].

- Select [Plain Paper] for [Paper Type]. If the setting is incorrect, the paper might become jammed or print quality could be affected.

- For details about combinations of paper sizes types, paper type, see "Paper and Other Media", Hardware Guide.

1. **Click [OK].**

🔽 **Note**

- You can register up to eight user paper types.

Setting User Paper Types to Trays

Before printing, set the paper registered on the user paper type to the paper tray, and then set the paper type already registered. Paper types can be set either from Web Image Monitor or from the printer's control panel.

1. **Log on to Web Image Monitor in administrator mode.**

2. **In the menu area, click [Configuration].**

3. **On the [Device Settings], click [Paper].**

4. **Set the paper tray you want to use as a user paper type, and then select the registered paper type.**

   The example below is for printing invoices.

   The registered paper type "Invoice A" is displayed as [+ Invoice A (Custom x)] on this screen. Select [+ Invoice A (Custom x)] for [User Paper Type]. Make the appropriate changes to other settings as required.

5. **Click [OK].**

6. **Click [Logout].**

7. **Quit Web Image Monitor.**

Note

- For details about loading paper, see "Loading Paper", Hardware Guide.
- For details about setting the paper type from control panel, see "Loading Paper", Hardware Guide

Printing Using Registered Paper Types

Select a registered paper type to print onto.

⭐ **Important**

- This function can be used when the printer is operating in a network, in conjunction with the RPCS printer driver, and under Windows 2000 or higher (under earlier systems, registered paper types appear as [Plain] in the printer driver).
- This function cannot be used with the printer driver's [Save/Restore Settings] function (registered paper types appear as [Plain] in the printer driver) and if the printer and computer are not using bidirectional communication.
- Also, be aware that the printer driver might not display the paper type name correctly if it is registered
- using an unsupported language, the control panel might not display the paper type name correctly if it is registered using non-alphanumeric characters (i.e., other than a-z, A-Z, or 0-9), and the printer's logs do not record names of user paper types

1. **Select your application's print command.**

2. **On the tab in the properties dialog box that appears, select a registered paper type under [Paper type:].**

   If you select Custom Setting, click the [Print Settings] tab.

3. **Execute the print command.**

   The preregistered settings are applied and print is performed.

⬇ **Note**

- For details about printer driver settings, see the printer driver Help.

4

5. Making Printer Settings Using the Control Panel

Menu Chart

This section explains how to change the default settings of the printer and provides information about the parameters included in each menu.

Memory Erase Status

Displays data status inside the memory.

This menu can be selected only when the optional security card is installed.

Paper Input

Menu
Paper Size: Bypass Tray
Paper Size: Tray 1
Paper Size: Tray 2
Paper Size: Tray 3
Paper Size: Tray 4
Paper Type: Bypass Tray
Paper Type: Tray 1
Paper Type: Tray 2
Paper Type: Tray 3
Paper Type: Tray 4
Paper Type: LCT
Duplex Tray
Auto Tray Select
Tray Priority

⬇ **Note**

• Only installed trays appear on the display panel.

Maintenance

Menu
Quality Maintenance
General Settings
Timer Settings
HD Management

Note

- [HD Management] appears only when the optional hard disk is installed.

List/Test Print

Menu
Multiple Lists
Config. Page
Error Log
Network Summary
Supply Info List
Menu List
PCL Config./Font Page
PS Config./Font Page
PDF Config./Font Page
IPDS Font List
Hex Dump
Operations Test
Card save (ADD)
Card save (NEW)

Note

- [IPDS Font List] appears only when the optional IPDS unit is installed.

System

Menu
Print Error Report
Auto Continue
Memory Overflow
Printer Language
Sub Paper Size
Default Printer Language
Energy Saver
Memory Usage
Spool Printing
RAM Disk
Auto Email Notify

Note

- [Spool Printing] appears only when the optional hard disk is installed.
- [RAM Disk] appears only when the optional hard disk is not installed.

Print Settings

Menu
Machine Modes
PCL Menu
PS Menu
PDF Menu
IPDS Menu

⬇️Note

- [IPDS Font List] appears only when the optional IPDS unit is installed.

Security Options
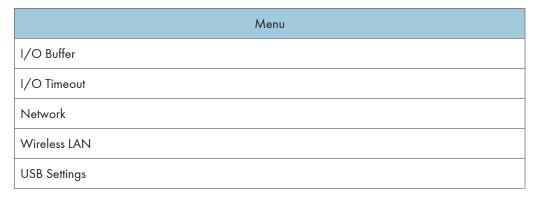
Menu
Extended Security
Service Mode Lock
Firmware Version
Network Security Level
Auto Erase Memory Setting
Erase All Memory
Transfer Log Setting
Machine Data Encryption

⬇️Note

- [Service Mode Lock] may not appear depending on the setting of the printer.
- [Auto Erase Memory Setting] and [Erase All Memory] appear when the optional security card is installed.
- [Machine Data Encryption] appears only when the optional HDD encryption unit is installed.

Host Interface

Menu
I/O Buffer
I/O Timeout
Network
Wireless LAN
USB Settings

⬇️Note

- [Wireless LAN] appears when the optional wireless LAN interface unit is installed.

Language
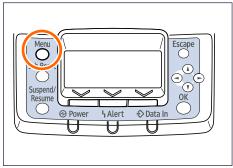
Menu
English
German
French
Italian
Dutch
Swedish
Norwegian
Danish
Spanish
Finnish
Portuguese
Czech
Polish
Hungarian
Russian

5

Memory Erase Status Menu

Displays data status inside the memory.

⭐ **Important**

- The Memory Erase Status menu appears only when the optional security card is installed.

1. **Press the [Menu] key.**

BEK204S

The menu screen appears.

2. **Press the [▲] or [▼] key to display [Memory Erase Status], and then press the [OK] key.**

3. **The current memory status is displayed.**

   [Data to erase remaining.] : Data remain inside the memory.

   [Currently no data to erase.] : No data remain inside the memory.

   [Erasing Data...] : Data are being deleted.

4. **Press the [OK] key.**

   The menu screen appears.

5. **Press the [Menu] key.**

   The initial screen appears.

Paper Input Menu
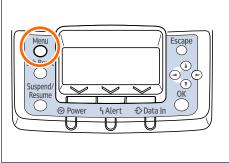
This section explains about paper settings on the paper input menu such as paper sizes and types on each tray.

Changing the Paper Input Menu

Automatic tray selection

Follow the procedure below to change the automatic tray selection setting.

1. **Press the [Menu] key.**
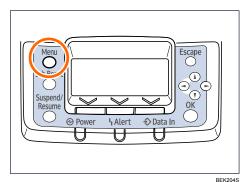
BEK204S

The menu screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.**

3. **Press the [▲] or [▼] key to display [AutoTray Select], and then press the [OK] key.**

4. **Press the [▲] or [▼] key to display the tray you want to select, and then press the [OK] key.**

5. **Press the [▲] or [▼] key to display [On], and then press the [OK] key.**

Wait for one second. The [Auto Tray Select] screen appears.

6. **Press the [Menu] key.**

The initial screen appears.

Tray priority

Follow the procedure below to change the tray priority.

1. **Press the [Menu] key.**

BEK204S

The menu screen appears.

2. **Press the [▲] or [▼] key to display [Paper Input], and then press the [OK] key.**

3. **Press the [▲] or [▼] key to display [Tray Priority], and then press the [OK] key.**

4. **Press the [▲] or [▼] key to select a tray you want to use, and then press the [OK] key.**

   Wait for one second. The [Paper Input] screen appears.

5. **Press the [Menu] key.**

   The initial screen appears.

Paper Input Menu Parameters

This section explains about parameters that can be set on the paper input menu.

Paper Size: Bypass Tray

You can specify the paper size for Bypass Tray.

- 220-240V : Auto Detect, A3▭, A4▯▭, A5▯▭, A6▭ B4 JIS▭, B5 JIS▯▭, B6 JIS▭, C5 Env. ▭, C6 Env.▭, DL Env.▭, 12" × 18"▭, 11" × 17"▭, $8^1/_2$" × 14"▭, $8^1/_2$" × 13"▭, $8^1/_2$" × 11"▯▭, $8^1/_4$" × 13"▭, 8" × 13"▭, $7^1/_4$" × $10^1/_2$"▯▭, $5^1/_2$" × $8^1/_2$"▯▭, $4^1/_8$" × $9^1/_2$"▭, $3^7/_8$" × $7^1/_2$"▭, Custom Size

- 120V : Auto Detect, 12" × 18"▭, 11" × 17"▭, $8^1/_2$" × 14"▭, $8^1/_2$" × 13"▭, $8^1/_2$" × 11"▯▭, $8^1/_4$" × 13"▭, 8" × 13"▭, $7^1/_4$" × $10^1/_2$"▯▭, $5^1/_2$" × $8^1/_2$"▯▭, $4^1/_8$" × $9^1/_2$"▭, $3^7/_8$" × $7^1/_2$"▭, A3▭, A4▯▭, A5▯▭, A6▭, B4 JIS▭, B5 JIS▯▭, B6 JIS▭, C5 Env. ▭, C6 Env.▭, DL Env.▭, Custom Size

⬇Note

- Default:
  - 220-240V : Auto Detect
  - 120V : Auto Detect

Paper Size: Tray 1 to 4

You can specify the paper size for Tray 1 to 4.

- 220-240V : Auto Detect, A3▷, A4▷▷, A5▷, B4 JIS▷, B5 JIS▷▷, 11" × 17"▷, $8^1/_2$" × 14"▷, $8^1/_2$" × 13"▷, $8^1/_2$" × 11"▷▷, $8^1/_4$" × 13"▷, 8" × 13"▷, $7^1/_4$" × $10^1/_2$"▷▷, Custom Size

- 120V : Auto Detect, 11" × 17"▷, $8^1/_2$" × 14"▷, $8^1/_2$" × 13"▷, $8^1/_2$" × 11"▷▷, $8^1/_4$" × 13"▷, 8" × 13"▷, $7^1/_4$" × $10^1/_2$"▷▷, A3▷, A4▷▷, A5▷, B4 JIS▷, B5 JIS▷▷, Custom Size

⬇ Note

- Default:
    - 220-240V : Auto Detect
    - 120V : Auto Detect
- Only installed trays appear on the display panel.

5

Paper Type: Bypass Tray

No Display (Plain Paper), Recycled Paper, Special Paper 1, Special Paper 2, Special Paper 3, Colour Paper, Letterhead, Label Paper, OHP (Transparency), Envelope, Preprinted Paper, Bond Paper, Cardstock, Thin Paper, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, Thick 1: Dup.Back, Thick 2: Dup.Back, Thick 3:Dup.Back, +Custom1, +Custom2, +Custom3, +Custom4, +Custom5, +Custom6, +Custom7, +Custom8

⬇ Note

- Default : No Display (Plain Paper)
- For details about the types of paper that can be loaded in the Bypass Tray, see Hardware Guide.
- Be sure to set a paper type using the control panel. If you do not set it, the printing result might not be proper.

Paper Type: Tray 1 to 4/LCT

No Display (Plain Paper), Recycled Paper, Special Paper 1, Special Paper 2, Special Paper 3, Colour Paper, Letterhead, Label Paper, Preprinted Paper, Bond Paper, Cardstock, Thin Paper, Middle Thick, Thick Paper 1, Thick Paper 2, Thick Paper 3, Thick 1:Dup.Back, Thick 2:Dup.Back, Thick 3:Dup.Back, +Custom1, +Custom2, +Custom3, +Custom4, +Custom5, +Custom6, +Custom7, +Custom8

⬇ Note

- Default : No Display (Plain Paper)
- For details about the types of paper that can be loaded in each tray, see Hardware Guide.
- Be sure to set a paper type using the control panel. If you do not set it, the printing result might not be proper.
- Only installed trays appear on the display panel.

Duplex Tray

You can set each tray for duplex printing.

- Tray 1 to Tray 4/LCT

    - On

    - Off

🔽Note

- Default : On

- Only installed trays appear on the display panel.

Auto Tray Select

You can select whether to assign each tray to automatically print the paper size and type set by printer driver.

🔽Note

- Default : On

- When using custom size paper, if automatic tray selection is enabled, the size selected on the control panel has priority. If this setting is disabled, the size selected from the printer driver has priority.

- Only installed trays appear on the display panel.

- You can select multiple trays.

- If you need to have a tray locked, you must select the tray using both printer driver and control panel.

Tray Priority

You can set a tray to be checked first when automatic tray selection is enabled from the printer driver. The tray selected here is used when no tray is selected for a print job.

🔽Note

- Default : Tray 1

- Only installed trays appear on the display panel.

- It is recommended that you load paper of the size and orientation you use most frequently in the tray selected in this setting.

🔽Note

- JIS stands for "Japanese Industrial Standard".

Maintenance Menu

You can set printing conditions such as density and calibration, and printer management such as deleting temporary print jobs from the hard disk.
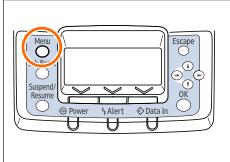
Changing the Maintenance Menu

This section explains changing the maintenance menu using examples.

Automatic deletion of temporary jobs in the hard disk

Follow the procedure below to set automatic deletion of temporary jobs stored in the hard disk.

1. **Press the [Menu] key.**

BEK204S

    The menu screen appears.

2. **Press the [▼] or [▲] key to display [Maintenance], and then press the [OK] key.**

3. **Press the [▼] or [▲] key to display [HD Management], and then press the [OK] key.**

4. **Press the [▼] or [▲] key to display [Auto Del. Temp. Print Jobs], and then press the [OK] key.**

5. **Press the [▼] or [▲] key to select [On], and then press the [OK] key.**

6. **Press the [▼] or [▲] key to set automatic deletion timer in hours between 1 through 200.**

7. **Press the [OK] key.**

    Wait for one second. The hard disk management screen appears.

8. **Press the [Menu] key.**

    The initial screen appears.

Maintenance Menu Parameters
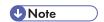
This section explains about parameters that can be set on the maintenance menu.

Quality Maintenance

Image Density Adjustment

You can select the print image density.

- -3 to 3

    ⬇ Note

    - For details, see Hardware Guide.

Registration

You can adjust the starting position of the printing page.

- Print Test Sheet

    You can print the registration test sheet.

    Tray 1, Tray 2, Tray 3, Tray 4, LCT, Bypass Tray, Duplex Unit

    ⬇ Note

    - Only the installed trays appear on the display panel.

- Adjustment

    You can select the start position for printing on a page.

    Vertical:Tray1, Vertical:Tray2, Vertical:Tray3, Vertical:Tray4, Vertical:LCT, Vertical:Bypass Tray, Vertical:Duplex Back Side, Horizontal:All Trays, Horizontal:Bypass Tray, Horizontal:Duplex Back

    ⬇ Note

    - Only the installed trays appear on the display panel.

General Settings

Letterhead Setting

You can select the letterhead printing mode.

Letterhead 1, Letterhead 2, Letterhead 3

⬇ Note

- Default: Letterhead 1

Label Paper Setting

You can select the label paper printing mode.

• Label Paper 1, Label Paper 2, Label Paper 3

⬇ Note

• Default: Label Paper 1

Envelope Setting

You can select the envelope printing mode.

• Bypass Tray

Envelope 1, Envelope 2, Envelope 3

⬇ Note

• Default: Envelope 1

Replacement Alert

Use this function to specify the timing to notify user when supplies need to be replaced. Settings can be made separately for photo conductor unit, intermediate transfer unit, or fusing unit.

• Maintenance Kit A

Notify Sooner, Normal, Notify Later

⬇ Note

• Default: Normal

• Maintenance Kit B

Notify Sooner, Normal, Notify Later

⬇ Note

• Default: Normal

Supply End Option

Use this function to specify the whether or not to continue printing when the following supplies end: photo conductor unit, intermediate transfer unit, fusing unit.

• Continue Printing

• Stop Printing

⬇ Note

• Default: Continue Printing

Display Supply Info

You can select whether or not to display the amount of toner on the initial screen.

• On

• Off

⬇ Note

• Default: On

Menu Protect

You can select whether or not to protect menu. When you enable this setting, specify protection level.

- Level 1
- Level 2
- Off

⬇ Note

- Default: Level 2
- If you would like to lower the protection level, disable this setting or select [Level 1].
- You may not be able to change this setting depending on the setting of the printer.

List/Test Print Lock

You can select whether or not to prohibit List/Test printing.

- On
- Off

⬇ Note

- Default: Off
- You may not be able to change this setting depending on the setting of the printer.

Warm-up Beeper

You can select whether or not to sound the beeper when the printer has completed a warm-up process.

- On
- Off

⬇ Note

- Default: On

Display Contrast

You can specify the density of the display.

Key Repeat

You can specify whether or not to scroll the display panel when the [▲] or [▼] key is held down. When you enable this setting, specify the scroll speed. (If repeat time is set to "Long", scroll speed becomes slow.)

- Do not Repeat
- Normal
- Repeat Time: Medium
- Repeat Time: Long

⬇Note

- Default: Normal

Timer Settings

Auto Reset Timer

Specify whether or not to cancel settings made if no operation has been performed for a certain period of time while changing configuration using the control panel. When set to on, specify how long the printer is to wait before resetting configuration.

- On
- Off

⬇Note

- Default: On (60 seconds)

Set Date

You can set the date of the printer's internal clock using the [▲] or [▼] key.

Set Time

You can set the time of the printer's internal clock using the [▲] or [▼] key.

HD Management

Specify the settings related to deletion of data saved on the hard disk. This menu appears only when the optional hard disk is installed.

Delete All Temporary Jobs

Use this function to delete all temporary documents saved on the hard disk (Sample Print, Locked Print and Hold Print data) at once.

Delete All Stored Jobs

Use this function to delete all Stored Print data saved on the hard disk at once.

Auto Delete Temporary Jobs

Specify whether or not to automatically delete temporary documents saved on the hard disk (Sample Print, Locked Print and Hold Print data). When set to on, specify how long the printer is to wait before deleting the documents.

- On
- Off

⬇Note

- Default: Off
- If you enable this setting, specify the timer in hours. (Default: 8 hours)

Auto Delete Stored Jobs

Specify whether or not to automatically delete Stored Print data saved on the hard disk. When set to on, specify how long the printer is to wait before deleting the documents.

- On
- Off

😊 Note

- Default: On
- If you enable this setting, specify the timer in days. (Default: 3 days)

Reset IPDS Fonts

Use this page to delete all IPDS captured fonts.

😊 Note

- This menu appears only when the optional IPDS unit is installed.

5

List/Test Print Menu

You can print lists showing configurations on printer or the paper printings.
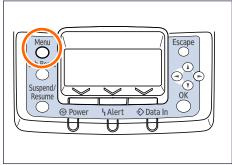
Also, you can check the types and characters of all the printable fonts.

Printing a Configuration Page

Follow the procedure below to print the configuration page.

⭐Important

- The configuration page is printed on A4 or Letter ($8^1/_2$"×11") size paper, so load them in the same paper tray.

1. **Press the [Menu] key.**

BEK204S

The menu screen appears.

2. **Press the [▼] or [▲] key to display [List/Test Print], and then press the [OK] key.**

3. **Press the [▼] or [▲] key to display [Config. Page], and then press the [OK] key.**

After the configuration page is printed out, the screen returns to List/Test print menu.

4. **Press the [Menu] key.**

The initial screen appears.

Interpreting the Configuration Page

System Reference

Unit Number

Shows the serial number assigned to the board by its manufacturer.

Total Counter

Shows the total number of pages printed by the printer to date.

Firmware Version

- Printer

  Shows the version number of the printer controller firmware.

- Engine

  Shows the version number of the printer engine firmware.

- NIB

  Shows the version number of the network interface board.

Device Connection

Shows the names of device options installed in the printer.

HDD:Font / Macro Download

Shows the hard disk status

Printer Language

Shows the version number of the printer language.

Attached Equipment

Shows the options attached to the printer.

Paper Input

Shows the current Paper Input settings.

🔲 Reference

Maintenance

Shows the current Maintenance settings.

🔲 Reference

System

Shows the current System settings.

🔲 Reference

Machine Modes

Shows the current Machine Modes settings.

🔲 Reference

PCL Menu

Shows the current PCL settings.

🔲 **Reference**

- For details, see p.156 "Print Settings Menu".

PS Menu

Shows the current PS settings.

🔲 **Reference**

- For details, see p.156 "Print Settings Menu".

PDF Menu

Shows the current PDF settings.

🔲 **Reference**

- For details, see p.156 "Print Settings Menu".

Host Interface

Shows the current Host Interface settings.

When DHCP is active on the network, the IPv4 address, subnet mask and gateway address appear in parentheses.

🔲 **Reference**

- For details, see p.178 "Host Interface Menu".

Interface Information

Interface information is displayed.

List/Test Print Menu Parameters

This section explains about parameters that can be set on the list/test print menu.

Multiple Lists

You can print the configuration page and error log, network summary and supply list.

Config. Page

You can print the current configuration of the printer.

Error Log

You can print an error report.

Network Summary

You can print the network device status.

Supply Info List

You can print the supply status.

Menu List

You can print a menu list showing all available menus.

PCL Config./Font Page

You can print the current configuration and installed PCL font list.

PS Config./Font Page

You can print the current configuration and installed PostScript font list.

PDF Config./Font Page

You can print the current configuration and installed PDF font list.

IPDS Font List

You can print a list of IPDS-supported fonts.

Hex Dump

You can print the data sent by the computer using Hex Dump.

Operations Test

Use this to check the printer and its options for operability, including paper feed and output, punching and stapling. Only settings of installed options are displayed. If a specified function fails, the printer displays a message and stops printing. If the test is successful, the printer prints black frames.
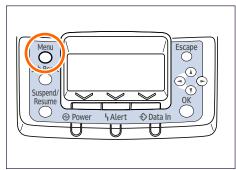
System Menu

The system menu allows you to set the printer's basic functions. Although you can operate the printer using the default settings, you can also change its settings to better suit your printing needs. Changes made to settings remain effective after power off.

Changing the System Menu

Follow the procedure below to change the settings for Energy Saver Timer.

1. **Press the [Menu] key.**

BEK204S

    The menu screen appears.

2. **Press [▲] or [▼] key to display [System], and then press the [OK] key.**

3. **Press [▲] or [▼] key to display [Energy Saver], and then press the [OK] key.**

4. **Press the [▲] or [▼] key to select [Energy Saver Timer], and then enter the [OK] key.**

5. **Press the [▲] or [▼] key to select the lead time needed to switch to Energy Saver mode.**

6. **Press the [OK] key.**

    Wait for one second. The Energy Saver screen appears.

7. **Press the [Menu] key.**

    The initial screen appears.

System Menu Parameters

This section explains about parameters that can be set on the system menu.

Print Error Report

    Select whether or not to print an error report when a printer error or memory error occurs.

    • Off

5

• On

🔽Note

• Default: Off

Auto Continue

Specify whether or not to continue printing after a system error. When you enable this setting, specify how long the printer is to display error before resuming print.

• Off

• Immediate

• 1 minute

• 5 minutes

• 10 minutes

• 15 minutes

🔽Note

• Default: Off

• When this setting is set to on, and a certain error occurs in the printer while printing out, the job might be cancelled. When a job is cancelled due to error, the printer automatically begins the next job in the queue.

Memory Overflow

You can specify whether or not to print a memory overflow error report.

• Do not print

• Error Information

🔽Note

• Default: Do not print

Printer Language

You can specify the printer language.

• Auto

• PCL

• PS

• PDF

🔽Note

• Default: Auto

Sub Paper Size

Specify whether or not to use paper of the alternate size automatically, if paper of the specified size is not loaded. When this setting is set to off, the printer uses paper of any size loaded in the specified tray.

- Auto
- Off

🔽Note

- Default: Off

Default Printer Language

Select the printer language to use when the printer fails to detect the printer language.

- PCL
- PS
- PDF

🔽Note

- Default: PCL

Energy Saver

In Energy Saver mode, electric power consumption is reduced.

Energy Saver On/Off

Select whether or not to switch to Energy Saver mode.

- On
- Off

🔽Note

- Default: On
- When the printer switches to Energy Saver mode, the Power indicator is unlit, but the Online indicator remains lit.

Energy Saver Timer

Specify the lead time needed to switch to Energy Saver mode.

- 1 minute
- 5 minutes
- 15 minutes
- 30 minutes
- 45 minutes
- 60 minutes

⬇Note

- Default: 1 minute

Memory Usage

Select memory to be used from Font Priority or Frame Priority.

- Font Priority
- Frame Priority

⬇Note

- Default : Frame Priority

Spool Printing

Specify whether or not to complete spooling before starting to print.

- On
- Off

⬇Note

- Default: Off
- Spooling stores a sent print job temporarily in the printer, and then prints it.
- This menu appears only when the optional hard disk is installed.

RAM Disk

If the optional hard disk is not installed for PDF Direct Print, select a value of 2 MB or higher.

- 0MB
- 2MB
- 4MB
- 8MB
- 16MB

⭐Important

- When the amount of SDRAM is small and [RAM Disk] is set to [16 MB], printing may not be possible depending on the print job and duplex printing may be canceled. If this happens, increase the amount of SDRAM, or set [RAM Disk] to [8 MB] or less.

⬇Note

- Default: 4MB
- This menu appears only when the optional hard disk is not installed.
- For details about the optional SDRAM module, see Hardware Guide.

Auto Email Notify

Specify whether or not to send an error message to a preset e-mail address when an error occurs in the printer.

- On
- Off

⭐**Important**

- **After changing the setting, turn off the power of the printer briefly, and then turn it on again.**

⬇**Note**

- Default: On
- For information, see Web Image Monitor Help.

5
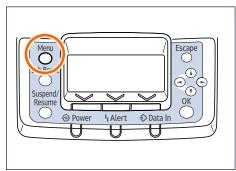
Print Settings Menu

The system menu allows you to set conditions for printing.

Changing the Print Settings Menu

Follow the procedure below to change Bypass Tray Setting Priority.

1. **Press the [Menu] key.**

BEK204S

The menu screen appears.

2. **Press [▲] or [▼] key to display [Print Settings], and then press the [OK] key.**
3. **Press [▲] or [▼] key to display [Machine Modes], and then press the [OK] key.**
4. **Press the [▲] or [▼] key to select [Bypass Tray Setting Priority], and then enter the [OK] key.**
5. **Press the [▲] or [▼] key to select the desired setting item, and then press the [OK] key.**

   Wait for one second. The [Machine Modes] screen appears.

6. **Press the [Menu] key.**

   The initial screen appears.

Print Settings Menu Parameters

This section explains about parameters that can be set on the print settings menu.

Machine Modes

Copies

Specify the number of copies to print.

If the number of copies to print is specified by command or the printer driver, this setting is overridden.

- 1 to 999

Page Size

Specify the default paper size.

`220-240V` : A3, A4, A5, A6, B4 JIS, B5 JIS, B6, C5 Env., C6 Env., DL Env., 11 × 17, 81/2 × 14, 81/2 × 13, 81/2 × 11, 81/4 × 13, 8 × 13, 71/4 × 101/2, 51/2 × 81/2, 41/8 × 91/2, 37/8 × 71/2, Custom Size

`120V` : 12 × 18, 11 × 17, 81/2 × 14, 81/2 × 13, 81/2 × 11, 81/4 × 13, 8 × 13, 71/4 × 101/2, 51/2 × 81/2, 41/8 × 91/2, 37/8 × 71/2, A3, A4, A5, A6, B4 JIS, B5 JIS, B6 JIS, C5 Env., C6 Env., DL Env., Custom Size

⬇ Note

- Default:
    - `220-240V` : A4
    - `120V` : 81/2 × 11
- The default paper size is used when the paper size is not specified in the print data.

Edge to Edge Print

Select to whether or not to print using the whole area of paper, leaving no edge borders.

- On
- Off

⬇ Note

- Default: Off

Duplex

Select whether or not to print on both sides of a sheet. When set to on, specify the binding method.

- Off
- Long Edge Bind
- Short Edge Bind

⬇ Note

- Default: Off

Output Tray

Specify output tray to be used when the output tray is not specified in the print data.

- Standard Tray
- Finisher Upper Tray
- Finisher Shift Tray

⬇ Note

- Default: Standard Tray
- Finisher trays appear only when an optional finisher is attached.

Job Separation

Select whether to use job separation function when paper is output to an output tray capable of job separation.

- On
- Off

⬇Note

- Default: Off

Rotate by 180 Degrees

Select whether or not to rotate image by 180 degrees when printing.

- On
- Off

⬇Note

- Default : Off

Blank Page Print

Select whether or not to print blank pages.

- On
- Off

⬇Note

- Default: On

Edge Smoothing

Specify the letterhead printing mode.

- On
- Off

⬇Note

- Default: On

Toner Saving

Specify the letterhead printing mode.

- On
- Off

⬇Note

- Default: Off

Letterhead Setting

Specify the letterhead printing mode.

- Off

- Auto Detect

- On (Always)

😊 **Note**

- Default: Off

Bypass Tray Setting Priority

When paper size/type setting does not match between the printer driver and the printer, you can select which setting is used.

- Driver/Command

- Machine Settings

😊 **Note**

- Default: Driver/Command

Tray Switching

Select whether or not to automatically switch to a suitable tray, when the setting of the current tray does not match the paper size/type specified by the printer driver.

- On

- Off

😊 **Note**

- Default: Off

Collate Settings

Select a collate type.

- Collate

- Shift Collate

😊 **Note**

- Default: Collate

Staple Settings

Select a stapling type.

- Off

- Top Left Slant

- Top Right Slant

- Left 2

- Top 2

- Right 2

- Top Left
- Top Right

↓Note

- Default: Off

Punch Settings

Select a punch type.

- Off
- Left 2
- Top 2
- Right 2
- Left 3
- Top 3
- Right 3
- Left 4
- Top 4
- Right 4

↓Note

- Default: Off

Extended Auto Tray Switching

Select whether or not to automatically switch to a suitable tray, when the setting of the current tray does not match the paper size/type specified by the printer driver.

- On
- Off

↓Note

- Default: Off

PCL Menu

You can set conditions when using PCL for printing.

Orientation

Select the page orientation.

- Portrait
- Landscape

↓Note

- Default: Portrait

Form Lines

Specify the number of lines per page between 5 and 128.

🔽 Note

- Default:
    - 220-240V : 64
    - 120V : 60
- The default paper size is used when the paper size is not specified in the print data.

Font Source

Specify the location of the default font.

- Resident
- RAM
- HDD
- SD
- SD Font Download

🔽 Note

- Default: Resident
- When you select [RAM], you can select only fonts downloaded to the printer RAM.
- When you select [HDD], you can select only fonts downloaded to the optional hard disk.
- When you select [SD], you can select only fonts downloaded to the SD card.

Font Number

Specify the ID of the default font you want to use.

- 0 to 63 (Internal)
- 1 to X (Download; "X" is the number of downloaded fonts)

🔽 Note

- Default: 0

Point Size

Specify the point size you want to use for the default font between 4 and 999.75 in 0.25 increments.

🔽 Note

- Default: 12.00 points
- This setting is effective only for a variable-space font.

Font Pitch

Specify the number of characters per inch you want to use for the default font between 0.44 and 99.99 in 0.01 increments.

🔽 Note

- Default: 10.00 pitch

- This setting is effective only for fixed-space fonts.

Symbol Set

You can specify the character set for the default font. Available sets are as follows:

Roman-8, ISO L1, ISO L2, ISO L5, PC-8, PC-8 D/N, PC-850, PC-852, PC8-TK, Win L1, Win L2, Win L5, Desktop, PS Text, VN Intl, VN US, MS Publ, Math-8, PS Math, VN Math, Pifont, Legal, ISO 4, ISO 6, ISO 11, ISO 15, ISO 17, ISO 21, ISO 60, ISO 69, Win 3.0

🔽 Note

- Default: PC-8

Courier Font

Select the type of courier font.

- Regular

- Dark

🔽 Note

- Default: Regular

Ext. A4 Width

Select whether or not to extend the width of the printable area of A4 sheets, by reducing side margins.

- Off

- On

🔽 Note

- Default: Off

Append CR to LF

Select whether or not to append a CR code to each LF code to print text data clearly.

- Off

- On

🔽 Note

- Default: Off

Resolution

You can specify the print resolution in dots per inch.

- 300 dpi

- 600dpi

⬇️Note

- Default: 600dpi

PS Menu

You can set conditions when using PostScript for printing.

Job Timeout

You can specify how long the printer waits (in seconds) before canceling the current job when the job is interrupted while being processed.

- Use Driver/Command

- Use Machine Settings

⬇️Note

- Default: Use Driver/Command

- If you select Use Machine Settings, enter a value between 0 and 999. (Default: 0)

Wait Timeout

You can specify how long the printer waits (in seconds) before it cancels receiving a job when the printer cannot detect the end of the job.

- Use Driver/Command

- Use Machine Settings

⬇️Note

- Default: Use Driver/Command

- If you select Use Machine Settings, enter a value between 0 and 999. (Default: 300)

Data Format

Select the data format from Binary Data or TBCP.

This setting is effective when using a parallel, USB, or EtherTalk connection.

When using a parallel or USB connection, the print job is canceled if binary data is sent from the printer driver.

When using an Ethernet connection, the print job is canceled if:

- The printer driver data format is TBCP and the data format selected using the control panel is Binary Data.

- The printer driver data format is binary and the data format selected using the control panel is TBCP.

⬇️Note

- Default: TBCP

Resolution

Select the resolution.

- 300dpi
- 600dpi

⬇Note

- Default: 600dpi

PDF Menu

You can set conditions when using PDF for printing.

Change PDF Password

Specify the password for the PDF file executing PDF Direct Print.

⭐Important

- If you do not set a PDF password, this menu does not appear.
- The password can be set using Web Image Monitor, but must be sent through the network. For increased security, use this menu on the control panel to set the password directly.

PDF Group Password

Specify a group password specified using DeskTopBinder Lite.

⭐Important

- If you do not set a PDF group password, this menu does not appear.
- When you use a group password, the optional data protection unit must be installed.
- The password can be set using Web Image Monitor, but must be sent through the network. For increased security, use this menu on the control panel to set the password directly.
- Default: no password set

Resolution

Specify the resolution for the PDF file executing PDF Direct Print.

- 300dpi
- 600dpi

⬇Note

- Default: 600dpi

IPDS Menu

You can set conditions when using PCL for printing. This menu appears only when the optional IPDS unit is installed.

Tray Form

Specify an IPDS form for each paper tray.
For each paper tray, select the IPDS form you want to allocate to it.

- Tray1

- Tray2

- Tray3

- Tray4

- LCT

- Bypass Tray

😃 Note

- Only installed trays appear on the display panel.

Emulation Mode

Specify the emulation mode.

- Native

- 4028

😃 Note

- Default: Native

Print Mode

Specify the print mode.

- Standard

- Enhanced

😃 Note

- Default: Standard

Default Code Page

Specify the default code page.

- 37

- 38

- 260

- 273

- 274

- 276

- 277

- 278

- 280

- 281

- 284

- 285
- 286
- 287
- 288
- 290
- 297
- 420
- 423
- 424
- 500
- 870
- 871
- 875
- 880
- 892
- 893
- 905
- 1025
- 1026
- 1140
- 1141
- 1142
- 1143
- 1144
- 1145
- 1146
- 1147
- 1148
- 1149

↓Note

- Default: 37

Default FGID

Specify the default FGID (Font Typeface Global Identifier), which identifies the printer's default resident font.

- 3
- 11
- 12
- 18
- 19
- 46
- 60
- 76
- 85
- 86
- 92
- 108
- 111
- 112
- 159
- 164
- 203
- 221
- 223
- 244
- 252
- 254
- 256
- 281
- 283
- 290
- 304
- 307
- 322
- 416

- 420
- 424
- 428
- 701
- 2304
- 2305
- 2306
- 2307
- 2308
- 2309
- 2310
- 2311
- 5687
- 5707
- 5815
- 5835

🔽 **Note**

- Default: 416

Characters Per Inch

Specify the number of characters per inch (pitch) for the default font. Valid values are 5.0 to 30.0 in units of one tenth of an inch.

🔽 **Note**

- Default: 10.0

Printable Area Check

Enable or disable valid printable area checking.

- On
- Off

🔽 **Note**

- Default: On

Page

Specify how data is positioned on the page.

- Whole
- Comp1

- Comp2

- Print

🔽 Note
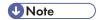
- Default: Whole

Edge to Edge

Enable or disable "Edge to Edge" printing.

- On

- Off

🔽 Note

- Default: Off

Font Substitution

Enables or disables font substitution.

- On

- Off

🔽 Note

- Default: Off

Caching

Specify whether or not to apply caching for repeated overlays.

- On

- Off

🔽 Note

- Default: On

Font Capture

Enable or disable font capturing.

- On

- Off

🔽 Note

- Default: On

- This menu appears only when the optional hard disk is installed.

Resolution

Specify the resolution reported to the host in the "IPDS XOAOPC" command for

raster coded fonts and IM1 image support.

- Auto

- 240 dpi

- 300 dpi

- 600 dpi

😃**Note**

- Default: 300 dpi

Graphic Character String

Specify the Graphic Character String (Graphic Character Sizing) processing method.

- Auto

- Character Scale

- Font Activation

😃**Note**

- Default: Auto

Bar Code

Specify the barcode level protocol.

- Auto

- 4028

- Native

😃**Note**

- Default: Auto

Box Draw

Specify the Box Draw processing.

- On

- Off

😃**Note**

- Default: On

Color Simulation

Let you specify how color specification controls are processed on a monochromatic printer.

- Fidelity

- Legacy

😃**Note**

- Default: Fidelity

Text Color Simulation

Specify how text color specification controls are processed on a monochrome laser printer.

- On
- Off

⬇Note

- Default: On

Suppress Staple Count Nacks

Let you select whether or not to notify the user when stapling errors occur.

- On
- Off

⬇Note

- Default: On
- This menu appears only when the optional staple unit is installed.

Suppress Punch Nacks

Let you select whether or not to notify the user when punching errors occur.

- On
- Off

⬇Note

- Default: On
- This menu appears only when the optional punch unit is installed.

Tray Mapping

Map the media source (input tray) to an ID the host uses for the media source.

- Tray1, Tray2, Tray3, Tray4, LCT, Bypass Tray
- Auto, Specify

⬇Note

- Default: Auto
- Only installed trays appear on the display panel.

Corner Staple Angle

Let you select [Vertical] or [Slant] for the angle of stapling.

- Vertical
- Slant

⬇Note

- Default: Vertical
- This menu appears only when the optional staple unit is installed.

Offset

Specify whether or not the output is offset (jogged).

- On

- Off

⬇Note

- Default: On

Default Punch Pattern

Specify the default number of holes to punch if the punch unit provides a selection (for example, two or four holes).

- 2 Holes

- 3 Holes

- 4 Holes

⬇Note

- Default:

  - When 2-/3-hole type punch unit is installed: 3 Holes

  - When 2-/4-hole type punch unit is installed: 4 Holes

  - When 4-hole type punch unit is installed: 4 Holes

- This menu appears only when the optional punch unit is installed.

Security Options Menu
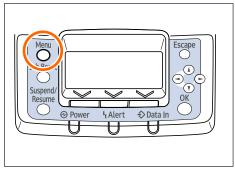
The system menu allows you to set conditions for printing.

Changing the Security Options Menu

Follow the procedure below to erase data inside memory.

⭐ **Important**

- This setting appears only when the optional security card is installed.

1. **Press the [Menu] key.**

BEK204S

The menu screen appears.

2. **Press [▲] or [▼] key to display [Security Options], and then press the [OK] key.**

3. **Press [▲] or [▼] key to display [Extended Security], and then press the [OK] key.**

4. **Press the [▲] or [▼] key to select [Erase All Memory], and then press the [OK] key.**

5. **Press the [▲] or [▼] key to select [On], and then press [EraseNo.].**

6. **Press the [▲] or [▼] key to enter overwrite times, and then press the [OK] key.**

7. **Press the [▲] or [▼] key to select [On], and then press the [OK] key.**

Wait for one second. The [Security Options] menu appears.

8. **Press the [Menu] key.**

The initial screen appears.

Security Options Menu Parameters

This section explains about parameters that can be set on the security options menu.

Extended Security

Depending on the setting of the printer, some of the settings listed below may not appear.
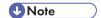
Driver Encryption Key

Specify the driver encryption key.

Encrypt Address Book

Select whether or not to encrypt the printer's address book data.

- On

- Off

😮Note

- Default: Off

Restrict User Info.Display

Select whether or not to display user information as "* * * * * * * *" when checking job information without being authenticated through user authentication.

- On

- Off

😮Note

- Default: Off

Enhance File Protection

Select whether or not to automatically lock password-protected print files if an invalid password is entered ten times. When a file is locked, you cannot select them even if the correct password is entered.

- On

- Off

😮Note

- Default: Off

Settings by SNMP v1 and v2

Select whether or not to prohibit changes to the printer settings through access using SNMPv1, v2 protocol.

- Prohibit

- Do not prohibit

😮Note

- Default: Do not prohibit

Simple Encryption

Select whether or not to use simple, or restricted, encryption when enhanced encryption cannot be used.

- Restrict

- Do not Restrict

⬇Note

- Default: Do not Restrict

Authenticate Current Job

Select whether or not authentication is required for operations such as canceling jobs. If set to [Login Privilege], only authorized users or printer administrator can operate the printer. If set to [Access Privilege], users who sent a print job or the printer administrator can operate the printer.

- Login Privilege

- Access Privilege

- Off

⬇Note

- Default: Off

Password Policy

Specify the format of passwords: types of characters to be used and minimum length.

Valid characters for passwords are upper-case letters, lower-case letters, decimal numbers, and symbols such as #. If complexity is set to [Level 1], passwords must use two types of these characters; if set to [Level 2], three types.

- Complexity Setting

  ⬇Note

  - Default: Do not Restrict

- Minimum Character No.

  Between 0 to 32

  ⬇Note

  - Default: 0

  - If set to 0, minimum length is not specified.

@Remote Service

Select whether or not to prohibit @Remote service.

- Prohibit

- Do not prohibit

5

↓Note

- Default: Do not prohibit
- If you would like to set to Prohibit, contact your service representative.

Update Firmware

Select whether or not to prohibit Update Firmware.

- Prohibit
- Do not prohibit

↓Note

- Default: Do not prohibit
- If you would like to set to Prohibit, contact your service representative.

Change Firmware Structure

Select whether or not to prohibit Change Frimware Structure.

- Prohibit
- Do not prohibit

↓Note

- Default: Do not prohibit
- If you would like to set to Prohibit, contact your service representative.

Service Mode Lock

Select whether or not to prohibit entering service mode.

- On
- Off

↓Note

- Default: Off
- This setting may not appear depending on the setting of the printer.

Firmware Version

Display the firmware version of the printer.

Network Security Level

Specify the network security level.

- Level 0
- Level 1
- Level 2

↓Note

- Default: Level 0

Auto Erase Memory Setting

Select whether or not to automatically delete memory. When set to on, specify the overwrite times.

- On

  No. of Erase: Between 1 to 3

- Off

⬇ Note

- Default: Off

- This setting appears only when the optional security card is installed.

Erase All Memory

Select to delete all data inside the memory. When deleting memory, specify the overwrite times.

- No. of Erase

  Between 1 to 3

⬇ Note

- This setting appears only when the optional security card is installed.

Transfer Log Setting

You can select whether or not to send log information to the log collection server.

- On (Only available from the log collection server.)

- Off

⬇ Note

- Default: Off

Machine Data Encryption

Encrypt data stored on the hard disk. Once you encrypt the data, the following menus appear on the control panel display.

- Update Encryption Key

  Update the encryption key.

- Cancel Encryption

  Cancel the encryption settings.

- Print Encryption Key

  Print the encryption key.

⬇ Note

- This setting appears only when the optional HDD encryption unit is installed.
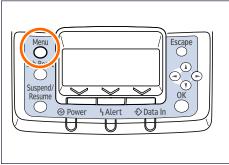
Host Interface Menu

You can set configurations about network connections and communication when using parallel connection between the printer and the computer. The changed configuration holds even if the printer is turned off.

Changing the Host Interface Menu

Follow the procedure below to change the I/O Timeout setting.

1. **Press the [Menu] key.**

BEK204S

   The menu screen appears.

2. **Press the [▼] or [▲] key to display [Host Interface], and then press the [OK] key.**

3. **Press the [▼] or [▲] key to display [I/O Timeout], and then press the [OK] key.**

4. **Press the [▼] or [▲] key to select the lead time needed to end a printing operation, and then press the [OK] key.**

   Wait for one second. The [Host Interface] menu appears.

5. **Press the [Menu] key.**

   The initial screen appears.

Host Interface Menu Parameters

This section explains parameters that can be set on the host interface menu.
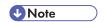
I/O Buffer

   Select the size of I/O Buffer. Normally it is not necessary to change this setting.

   - 128 KB
   - 256 KB

Note

- Default: 128 KB

I/O Timeout

Specify how many seconds the printer should wait before ending a print job. If printing operation is frequently interrupted by data from other ports, you can increase the timeout period.

- 10 seconds
- 15 seconds
- 20 seconds
- 25 seconds
- 60 seconds

Note

- Default: 15 seconds

Network

You can make network-related settings.

Machine IPv4 Address

Select whether to set the IPv4 address automatically or manually.

- Auto-Obtain (DHCP)/Specify (Default: Auto-Obtain (DHCP))

  When DHCP is set to on, the IPv4 address, subnet mask address, and gateway address cannot be changed. To change them, set DHCP to off. Contact your administrator for information about the network configuration.

- IP Add.

  Manually specify the IPv4 address.

  Note

  - Default: 11.22. 33.44

- Subnet M

  Manually specify the subnet mask.

  Note

  - Default: 0.0.0.0

- Gateway

  Manually specify the gateway address.

  Note

  - Default: 0.0.0.0

IPv6 Stateless Setting

Select whether to enable or disable IPv6.

- Active

- Inactive

⬇️Note

- Default: Active

IPsec

This is a security function. For details, contact your network administrator.

- Active

- Inactive

⬇️Note

- Default: Inactive

NW Frame Type

Specify the frame type for NetWare.

- Auto Select

- Ethernet II

- Ethernet 802.2

- Ethernet 802.3

- Ethernet SNAP

⬇️Note
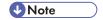
- Default: Auto Select

Effective Protocol

Specify the effective protocol.

- IPv4

  Active, Inactive

  ⬇️Note

  - Default: Active

- IPv6

  Active, Inactive

  ⬇️Note

  - Default: Inactive

- NetWare

  Active, Inactive

⬇Note

- Default: Active

- SMB

  Active, Inactive

  ⬇Note

  - Default: Active

- Apple Talk

  Active, Inactive

  ⬇Note

  - Default: Active

Ethernet Speed

Specify the network speed to operate the printer.

- Auto Select
- 10Mbps Full Duplex
- 10Mbps Half Duplex
- 100Mbps Half Duplex
- 100Mbps Full Duplex

⬇Note

- Default: Auto Select

LAN Type

Select Ethernet or Wireless LAN.

- Ethernet
- Wireless LAN

⬇Note

- Default: Ethernet
- This menu appears only when the optional wireless LAN interface unit is installed.

Wireless LAN

Configure settings for wireless LAN. This menu appears only when the optional wireless LAN interface unit is installed.

Communication Mode

Specify the transmission mode for wireless LAN.

- 802.11 ad-hoc Mode
- Infrastructure Mode

⬇ Note

- Default: Infrastructure Mode

SSID Setting

Specify an SSID in infrastructure mode and Ad-hoc mode.

- View

- Enter ID

⬇ Note

- Default: blank (ASSID)

- Select [?] to enter [/] for the SSID. Also, [¥] appears when printing the configuration page, read it as [/].

- Characters used are ASCII 0x20-0x7e (32 bytes).

- An SSID is set automatically to the nearest access point if no SSID has been set.

- If no SSID has been set for Ad-hoc mode, an SSID is set automatically and the same SSID is used for Ad hoc mode and infrastructure mode.

- If blank is specified in SSID for Ad hoc mode, "ASSID" appears.

- An SSID can also be set using Web Image Monitor. For details, see Web Image Monitor Help.

Ad-hoc Channel

Select channels: 1-13, 36,40,44,48 (220-240V)/1-11, 36,40,44,48 (120V)

⬇ Note

- Default: 11

Security Method

Select whether to enable encryption and specify the security type when the encryption is enabled.

- Off

- WEP
  Change (HEX), Change (ASCII)

- WPA
  Encryption Method (TKIP, CCMP(AES)), Authentication Method (WPA-PSK, WPA (802.1X)),(WPA2-PSK), (WPA2)

⬇ Note

- Default: Off

- WPA appears only when the optional wireless LAN interface unit is installed.

Wireless LAN Signal

You can check the signal strength when using wireless LAN.

Restore Defaults

Reset the wireless LAN to default.

USB Settings

Select speed for USB interface.

USB Speed

- Auto
- Full Speed

⬇Note

- Default: Auto

Fixed USB Port

- On
- Off

⬇Note

- Default: Off
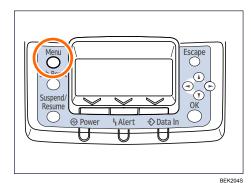
Language Menu

You can set a language to be displayed on the menu.

Changing the Language Menu

Follow the procedure below to change the interface language.

1. **Press the [Menu] key.**

BEK204S

The menu screen appears.

2. **Press the [▲] or [▼] key to display [Language], and then press the [OK] key.**

3. **Press the [▲] or [▼] key to select the language, and then press the [OK] key.**

Wait for one second. The [Language] menu screen appears.

4. **Press the [Menu] key.**

The initial screen appears.

Language Menu Parameters

You can select the language you use. Available languages are as follows:

English, German, French, Italian, Dutch, Swedish, Norwegian, Danish, Spanish, Finnish, Portuguese, Czech, Polish, Hungarian, Russian.

Note

- Default: English

6. Monitoring and Configuring the Printer

Using Web Image Monitor

Using Web Image Monitor, you can check the printer status and change settings.

Available operations

The following operations can be remotely performed using Web Image Monitor from a client computer.

- Displaying printer status or settings
- Checking the print job status or history
- Interrupting currently printing jobs
- Resetting the printer
- Managing the Address Book
- Making printer settings
- Making network protocol settings
- Making security settings

Configuring the printer

To perform the operations from Web Image Monitor, TCP/IP is required. After the printer is configured to use TCP/IP, operations from Web Image Monitor become available.

Recommended Web browser

- Windows:

  Internet Explorer 5.5 SP2 or higher

  Firefox 1.0 or higher

- Mac OS:

  Firefox 1.0 or higher

  Safari 1.0, 1.2, 2.0 (412.2) or higher

Web Image Monitor supports screen reader software. We recommend JAWS 7.0 or a later version.

⊕Note

- Safari cannot be used on Mac OS X 10.4.1.
- Display and operation problems can occur if you do not enable JavaScript and cookies, or if you are using a non-recommended Web Browser.

- If you are using a proxy server, change the Web browser settings. Contact your administrator for information about the settings.

- If you click your browser's back button but the previous page does not appear, click the browser's refresh button and try again.

- Printer information is not automatically updated. To perform an update, click [Refresh] in the display area.

- We recommend using Web Image Monitor in the same network.

- You cannot access to the printer from outside the firewall.

- When using the printer under DHCP, the IP address may be automatically changed by the DHCP server settings. Enable DDNS setting on the printer, and then connect using the printer's host name. Alternatively, set a static IP address to the DHCP server.

- If the HTTP port is disabled, connection to the printer using the printer's URL cannot be established. SSL setting must be enabled on this printer. For details, consult your network administrator.

- When using the SSL encryption protocol, enter "https://(printer's IP address or host name)/".

- Internet Explorer must be installed on your computer. Use the most recent available version. We recommend Internet Explorer 6.0 or later.

- When you are using Firefox, fonts and colors may be different, or tables may be out of shape.

- When using a host name under Windows Server 2003 or Windows Vista with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

- To use JAWS 7.0 under Web Image Monitor, you must be running Windows OS and Microsoft Internet Explorer 5.5 SP2, or a later version.

Displaying Top Page

This section explains the Top Page and how to display Web Image Monitor.

⭐Important
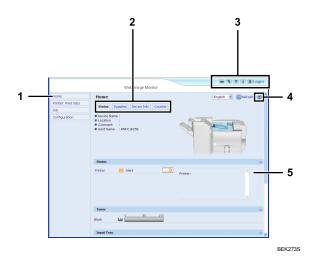
- **When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".**

1. **Start your Web browser.**

2. **Enter "http://(printer's IP address or host name)/" in your Web browser's URL bar.**

   Top Page of Web Image Monitor appears.

   If the printer's host name has been registered on the DNS or WINS server, you can enter it.

   When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's IP address or host name)/".

   Every Web Image Monitor page is divided into the following areas:

BEK273S

1. **Menu area**

   If you select menu, it's content will be shown on the work area, or the sub area.

2. **Tab area**

   Details about each menu appears.

3. **Header area**

   The dialog box for switching to the user mode and administrator mode appears, and each mode's menu will be displayed.

   The link to help and dialog box for keyword search appears.

4. **Help**

   Use Help to view or download Help file contents.

5. **Display area**

   Displays the contents of the item selected in the menu area.

   Printer information in the display area is not automatically updated. Click [Refresh] at the upper right in the display area to update the printer information. Click the Web browser's [Refresh] button to refresh the entire browser screen.

   Note

   - When using a host name under Windows Server 2003 or Windows Vista with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

When User Authentication is Set

Login (using Web Image Monitor)

Follow the procedure below to log on when user authentication is set.

1. **Click [Login].**

2. **Enter a login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

⬇**Note**

- For user code authentication, enter a user code in [Login User Name], and then click [Login].

- The procedure may differ depending on the Web browser used.

Log off (using Web Image Monitor)

Click [Logout] to log off.

⬇**Note**

- When you log on and made the setting, always click [Logout].

About Menu and Mode

There are two modes available with Web Image Monitor: guest mode and administrator mode.

Displayed Items may differ depending on the printer type.

Guest mode

In the guest mode, printer status, settings, and print job status can be viewed, but the printer settings cannot be changed.

BEK274S

1. **Home**

   The [Status], [Configuration], [Counter], and [Inquiry] tab are displayed. Details of the tab menu are displayed on the work area.

2. **Printer: Print Jobs**

   Allows you to display list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

3. **Job**

   Display all print files.
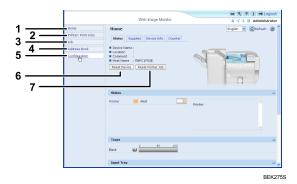
4. **Configuration**

Display current printer and network settings.

Administrator mode

In the administrator mode, you can configure various printer settings.

BEK275S

1. **Home**

The [Status], [Configuration], [Counter], and [Inquiry] tab are displayed. Details of the tab menu are displayed on the work area.

2. **Printer: Print Jobs**

Allows you to display list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

3. **Job**

Display all print files.

4. **Address Book**

User information can be registered, displayed, changed, and deleted.

5. **Configuration**

Make system settings for the printer, interface settings, and security.

6. **Reset Device**

Click to reset the printer. If a print job is being processed, the printer will be reset after the print job is completed. This button is located on Top Page.

7. **Reset Printer Job**

Click to reset current print jobs and print jobs in queue. This button is located on Top Page.

Access in the Administrator Mode

Follow the procedure below to access Web Image Monitor in the administrator mode.

1. **On Top Page, click [Login].**

The window for entering the login user name and password appears.

2. **Enter your login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

Displaying Web Image Monitor Help

When using Help for the first time, clicking the icon marked "?" (?) makes the following screen appear, in which you can view Help in two different ways, as shown below:

Viewing Help on our Web site

   Downloading Help to your computer

Downloading and checking Help

   You can download Help to your computer. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.

   ⬇Note

   • By clicking "?" (?) in the header area, the contents of Help appear.

   • By clicking "?" (?), the Help icon in the display area, Help for the setting items in the display area appears.

Downloading Help

1. **In the [OS] list, select the operating system.**
2. **In the [Language] list, select the language.**
3. **Click [Download].**
4. **Download Help by following the instructions on the screen.**
5. **Store the downloaded compressed file in a given location, and then decompress the file.**

   To create a link for the Help button (?), save the downloaded Help files on a Web server.

Linking the URL of the downloaded Help

You can link the URL of the help file on a Web server to the "?" button.

1. **Log on to Web Image Monitor in the administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Click [Webpage].**
4. **In the [Set Help URL Target] box, enter the URL of the help file.**

   If you saved the file to a Web server, and the URL of the index file is "http:// a.b.c.d/HELP/EN/ index.html", enter "http://a.b.c.d/HELP/".

5. **Click [OK].**

⬇ Note

- If you save the Help files on your hard disk, you must access them directly - you cannot link to them using the Help button (?).

Using SmartDeviceMonitor for Admin

Using SmartDeviceMonitor for Admin, you can monitor the network printers. Also, you can change the configuration of the network interface board using TCP/IP or IPX/SPX.

⭐ **Important**

- **IPv6 cannot be used on this function.**

Protocol stack provided with operating system

- Windows 2000

  TCP/IP

  IPX/SPX

  NetWare

  Novell Client for Windows NT/2000/XP

- Windows Server 2003

  TCP/IP

  IPX/SPX

- Windows XP

  TCP/IP

  IPX/SPX

  Novell Client for Windows NT/2000/XP

- Windows Vista

  TCP/IP

  Novell Client for Windows NT/2000/XP/Vista

Available operations

The following functions are available:

- Printer Information function

  - Display the network settings and detailed information of the printer.

  - Display the number of pages printed under each user code.

  - Display the status of print jobs sent from computers.

  - Change the printer network settings.

- Device Settings function

  - Lock some of the setting items on the control panel so that they cannot be changed using the control panel.

  - Select type of paper loaded in the paper trays.

- Energy Saver function

- Enable or disable the Energy Saver mode.
- System Status function
- Display the information such as when paper is depleted during printing on a computer.
- Groups function
    - Monitor multiple printers at the same time. When there are multiple printers to manage, you can create groups and classify the printers to facilitate management.
    - You can customize printer status according to groups, and send status notification e-mail to a computer.

Installing SmartDeviceMonitor for Admin

Follow the procedure below to install SmartDeviceMonitor for Admin.

1. **Quit all applications currently running.**
2. **Insert the CD-ROM into the CD-ROM drive.**

    The installer starts.

3. **Select an interface language, and then click [OK].**

    The default interface language is English.

4. **Click [SmartDeviceMonitor for Admin], and then click [Next>].**

    The software license agreement appears in the [License Agreement] dialog box.

5. **After reading through its contents, click [Next>].**
6. **Follow the instructions on the screen.**

    A message appears when the installation is completed.

7. **Click [OK].**

    A message about restarting the computer may appear. Restart the computer to complete installation.

🔽 Note

- Auto Run may not work under certain operating system settings. In this case, launch "Setup.exe" located on the CD-ROM root directory.
- If you are required to restart the computer after installing SmartDeviceMonitor for Admin, restart the computer and continue the configuration.

Changing the Network Interface Board Configuration

Follow the procedure below to change the network interface board configuration using SmartDeviceMonitor for Admin.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.

   If you are using IPv4 SNMPv3, enter the user authentication.

3. **In the list, select a printer whose configuration you want to change.**

4. **On the [Tools] menu, click [NIB Setup Tool].**

   A Web browser opens and the window for entering the user name and password for the Web Image Monitor administrator appears.

   NIB Setup Tool starts. Follow the instruction on the screen.

5. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

6. **Configure settings using Web Image Monitor.**

7. **Click [Logout].**

8. **Quit Web Image Monitor.**

9. **Quit SmartDeviceMonitor for Admin.**

🔸 Note

• For details about Web Image Monitor, see "Using Web Image Monitor".

🔹 Reference

• p.185 "Using Web Image Monitor"

Locking the Menus on the Printer's Control Panel

Follow the procedure below to lock the menus on the printer's control panel.
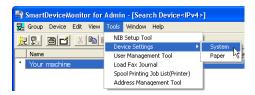
1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

3. **In the list, select a printer whose configuration you want to change.**

4. **On the [Tools] menu, point to [Device Settings], and then click [System].**

A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

5. **Enter the login user name and password, and then click [Login].**

For details about the user name and password, consult your network administrator.

The [System] page of Web Image Monitor appears.

6. **On the [Protect Printer Display Panel], select [Level 1] or [Level 2].**

7. **Click [OK].**

8. **Click [Logout].**

9. **Quit Web Image Monitor.**

10. **Quit SmartDeviceMonitor for Admin.**

⬇ Note

• For details about Web Image Monitor, see "Using Web Image Monitor".

🔲 Reference

• p.185 "Using Web Image Monitor"

Changing the Paper Type

Follow the procedure below to change the paper type.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of printers using the selected protocol appears.

Select the protocol of the printer whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

3. **In the list, select a printer whose configuration you want to change.**

4. **On the [Tools] menu, point to [Device Settings], and then click [Paper].**

   A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

5. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   The [Paper] page appears.

   Select a paper type in the [Paper Type] list for each tray.

6. **Enter required setting items, and then click [OK].**

7. **Click [Logout].**

8. **Quit Web Image Monitor.**

9. **Quit SmartDeviceMonitor for Admin.**

🔸**Note**

- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about setting items, see Help in the [General Settings] on [Configuration] page.

📖**Reference**

- p.185 "Using Web Image Monitor"

Managing User Information

Follow the procedure below to manage the user's information using SmartDeviceMonitor for Admin.

Prints jobs can be managed and functions restricted by user codes.

Starting User Management Tool

Follow the procedure below to start User Management Tool.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.

   If you are using IPv4 SNMPv3, enter the user authentication.

3. **In the list, select a printer you want to manage.**

4. **On the [Tools] menu, click [User Management Tool].**

The dialog box for entering the user name and password appears.

5. **Enter the user name and password, and then click [OK.]**

Enter the same user name and password you enter to log on to the Web Image Monitor. For details about the user name and password, consult your administrator.

User Management Tool starts.

Note

- For details about User Management Tool, see SmartDeviceMonitor for Admin Help.

Displaying the number of sheets printed

Follow the procedure below to display the number of sheets printed under each user.

1. **Start SmartDeviceMonitor for Admin User Management Tool.**
2. **Click the [User Counter Information] tab of User Management Tool.**

The number of pages printed under each user appears.

3. **Click [Exit] on the [File] menu to quit User Management Tool.**

Exporting the information about the number of pages printed

Follow the procedure below to export the information of the number of pages printed under each user code as a ".csv" file.

1. **Start SmartDeviceMonitor for Admin User Management Tool.**

2. Click the [User Counter Information] tab of User Management Tool.

3. On the [File] menu, click [Export User Statistics List].

4. Specify the save location and file name, and then click [Save].

5. Click [Exit] on the [File] menu to quit User Management Tool.

Resetting the number of pages printed to 0

Follow the procedure below to reset the number of pages printed under each user to 0.

1. Start SmartDeviceMonitor for Admin User Management Tool.

2. Click the [User Counter Information] tab of User Management Tool.

3. Select the user whose information you want to reset.

4. On the [Edit] menu, click [Reset User Counters].

5. **Select the check box, and then click [OK].**

   A confirmation message appears.

6. **Click [OK].**

   The count for the selected paper type becomes 0 and [Modified] is displayed for [Status].

7. **On the [Edit] menu, click [Apply Settings].**

   Changes are applied to information on the [User Counter Information] tab.

8. **Click [Exit] on the [File] menu to quit User Management Tool.**

Restricting functions

Follow the procedure below to restrict use of individual functions.

1. **Start SmartDeviceMonitor for Admin User Management Tool.**

2. **Click the [User Counter Information] tab of User Management Tool.**

3. **Click the user whose functions you want to restrict.**

4. **On the [Edit] menu of User Management Tool, click [Restrict Access To Device].**

5. **Select the check box of the functions you want to restrict.**

6. **Click [OK].**

   A confirmation message appears.

7. **Click [Yes].**

   The settings are applied.
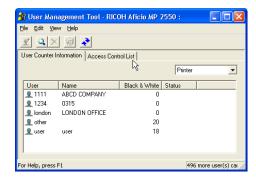
8. **Click [Exit] on the [File] menu to quit User Management Tool.**

Setting applicable functions to new users

Follow the procedure below to add new users and set functions applicable to them.

1. **Start SmartDeviceMonitor for Admin User Management Tool.**

2. **Click the [Access Control List] tab of User Management Tool.**

3. **On the [Edit] menu, click [Add New User].**

4. **Enter the user code and user name.**

5. **Select the check box of the functions applicable to the new user.**

   If the check boxes are unavailable, there is no restriction to use that function.

6. **Click [OK].**

   The user is added, and [New] is displayed for [Status].

7. **On the [Edit] menu, click [Apply Settings].**

   The settings are applied.

8. **Click [Exit] on the [File] menu to quit User Management Tool.**

🔽 **Note**

- For details about setting restrictions, see SmartDeviceMonitor for Admin Help.

Configuring the Energy Saver Mode

Follow the procedure below to configure Energy Saver mode.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.
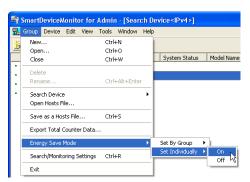
   If you are using IPv4 SNMPv3, enter the user authentication.

3. **Select the printer whose settings you want to make.**

   To make settings for all printers in the selected group, select no printer.

4. **Click the [Group] menu, point to [Energy Save Mode], [Set Individually], and then click [On].**

   To select all the printers in the group, select [Set By Group].

   To disable Energy Save mode, click [Off].

5. **Quit SmartDeviceMonitor for Admin.**

🔽 Note

- For details about the setting for Energy Saver mode, see SmartDeviceMonitor for Admin Help.

Setting a Password

Follow the procedure below to set a password.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.

   If you are using IPv4 SNMPv3, enter the user authentication.

3. **In the list, select a printer whose configuration you want to change.**

4. **On the [Tools] menu, click [NIB Setup Tool].**

A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

NIB Setup Tool starts when the network interface board is default. Follow the instructions on the screen.

5. **Enter the login user name and password, and then click [Login].**

   For details about the user name and password, consult your network administrator.

   Top Page of Web Image Monitor appears.

6. **Click [Configuration].**

7. **Click [Program/Change Administrator] on the [Device Settings] area, and then change the settings.**

8. **Click [OK].**

9. **Click [Logout].**

10. **Quit Web Image Monitor.**

11. **Quit SmartDeviceMonitor for Admin.**

Checking the Printer Status

Follow the procedure below to check printer status.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.

   If you are using TCP/IP SNMP v3, enter the user authentication.

3. **To obtain status details, click the printer in the list, and then click [Open] on the [Device] menu**

   The printer status appears in the dialog box.

4. **Click [System] or [Printer].**

   The printer status appears in the dialog box.

5. **Quit SmartDeviceMonitor for Admin.**

Note

- For details about status icons and items in the dialog box, see SmartDeviceMonitor for Admin Help.

Changing Names and Comments

Follow the procedure below to change the names and comments of the printer.

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.

   If you are using IPv4 SNMPv3, enter the user authentication.

3. **Select a printer in the list, and then click [NIB Setup Tool] on the [Tools] menu.**

   A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

   NIB Setup Tool starts when the network interface board is default. Follow the instructions on the screen.

4. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   Top Page of Web Image Monitor appears.

5. **Click [Configuration].**

6. **Click [System] on the [Device Settings] area, and then change the settings.**

7. **Click [OK].**

8. **Click [Logout].**

9. **Quit Web Image Monitor.**

10. **Quit SmartDeviceMonitor for Admin.**

↓ Note

- In the [Device Name] box, enter a device name on the printer using up to 31 characters.

- In the [Comment] box, enter a comment on the printer using up to 31 characters.

- For details about Web Image Monitor, see "Using Web Image Monitor".

⊟ Reference

- p.185 "Using Web Image Monitor"

Viewing and Deleting Spool Print Jobs

1. **Start SmartDeviceMonitor for Admin.**

2. **On the [Group] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

   A list of printers using the selected protocol appears.

   Select the protocol of the printer whose configuration you want to change.

   If you are using IPv4 SNMPv3, enter the user authentication.

3. **Select a printer in the list, and then click [Spool Printing Job List(Printer)] on the [Tools] menu.**

   A Web browser opens and the window for entering the login user name and password for the Web Image Monitor administrator appears.

4. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

   [Spool Printing Job List] appears in the Web Image Monitor.

5. **Click [Logout].**

6. **Quit Web Image Monitor.**

7. **Quit SmartDeviceMonitor for Admin.**

🔽Note

- To display Spool Printing Job List, [Spool Printing] must be set to [Active] on Web Image Monitor in advance.

- To delete the Spool Printing Job, select the document you want to delete and then click [Delete].

- For details, see Help in the [Spool Printing Job List] area.

- For details about Web Image Monitor, see "Using Web Image Monitor".

📄Reference

- p.185 "Using Web Image Monitor"

205

Using SmartDeviceMonitor for Client

To view the status of printers using SmartDeviceMonitor for Client, configure SmartDeviceMonitor for Client beforehand.
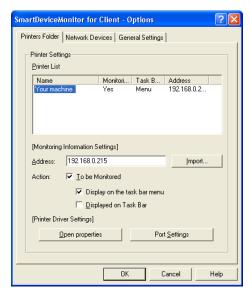
Monitoring Printers

Follow the procedure below to monitor the printer using SmartDeviceMonitor for Client.

1. **Right-click the SmartDeviceMonitor for Client icon, point to [Property], and then click [Monitor Device Settings...].**

2. **On the [Printers Folder] tab, select the printer you want to monitor, and then select the [To Be Monitored] check box in the Monitoring Information Settings area.**

   To display the name of the monitored printer on the task bar, you must first select the [Display on the task bar menu] check box, and then select the [Displayed on Task Bar] check box.

3. **Click [OK].**

   The dialog box closes and the configured printer is monitored.

↓Note

- For details about status icons, see SmartDeviceMonitor for Client Help.

Checking the Printer Status

Follow the procedure below to check printer status using SmartDeviceMonitor for Client.

1. **Right-click the SmartDeviceMonitor for Client icon, and then click the printer name on the task bar.**

The printer status appears in the dialog box.

⬇Note

- For details about items in the dialog box, see SmartDeviceMonitor for Client Help.

When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

- The network printer can only receive one print job from SmartDeviceMonitor for Client at a time. While the network printer is printing, another user cannot access it until the job is finished. In this case, SmartDeviceMonitor for Client tries to access the network printer until the retry interval expires.

- If SmartDeviceMonitor for Client cannot access the network printer and times out, it will stop sending the print job. In this case, you should cancel the paused status from the print queue window. SmartDeviceMonitor for Client will resume access to the network printer. You can delete the print job from the print queue window, but canceling a print job printed by the network printer might cause the next job sent from another user to be incorrectly printed.

- If a print job sent from SmartDeviceMonitor for Client is interrupted and the network printer cancels the job because something went wrong, send the print job again.

- Print jobs sent from another computer do not appear in the print queue window, regardless of protocol.

- If various users send print jobs using SmartDeviceMonitor for Client to network printers, the printing order might not be the same as that in which the jobs were sent.

- An IP address cannot be used for the IPP port name because the IP address is used for the SmartDeviceMonitor for Client port name.

- When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's IP address or host name)/ ". Internet Explorer must

be installed on your computer. Use the highest version. Internet Explorer 6.0 or higher is recommended.

- If the [Security Alert] dialog box appears when accessing the printer using IPP to create or configure an IPP port, or when printing, install the certificate. To select the certificate store location when using Certificate Import Wizard, click [Place all certificates in the following store], and then click [Local Computer] under [Trusted Root Certification Authorities].

↓Note

- For details about SSL settings, consult your network administrator.

Printer Status Notification by E-Mail

Whenever a paper tray becomes empty or paper jams, a notification e-mail is sent to the registered addresses.

You can make the timing and content settings for notification e-mail.

⭐ **Important**

- Depending on your e-mail application, a phishing warning might appear after you receive an e-mail message. To prevent phishing warnings appearing after you receive e-mail from a specified sender, you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.
- Service call.
- Toner is empty.
- Toner is nearly empty.
- Maintenance kit needs replacing.
- Maintenance kit needs replacing soon.
- Paper has jammed.
- Cover is open.
- Paper tray is empty.
- Paper tray is nearly empty.
- Paper tray error.
- Output paper tray is full.
- Unit connection error.
- Duplex unit error.
- Waste toner bottle is full.
- Waste toner bottle is nearly full.
- Stapler has no staples.
- Punch waste receptacle is full.
- Memory for file storage is full soon.
- Log error.
- Device access violates.

1. **Open a Web browser, and then enter "http://(printer's address)/" in the address bar.**

   Top Page of Web Image Monitor appears.

   When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(printer's address)/".

2. **Click [Login] on Top Page of Web Image Monitor.**

   The window for entering the login user name and password appears.

3. **Enter the user name and password, and then click [Login].**

   For details about the login user name and password, consult your administrator.

4. **In the menu area, click [Configuration].**

5. **On the [Device Settings] area, click [E-mail].**

6. **Make the following settings:**

   • Items in the Reception column: Make the necessary settings for sending and receiving e-mail.

   • Items in the SMTP column: Configure the SMTP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the SMTP server.

   • Items in the POP before SMTP column: Configure the POP server. Check your mailing environment, and then specify the necessary items. You can also perform mail authentication for the POP server.

   • Items in the POP3/IMAP4 column: Configure the POP3 or IMAP4 server. Check your mailing environment, and then specify the necessary items.

   • Items in the E-mail Communication Port column: Configure the port to be used for access to the mail server.

   • Items in the E-Mail Notification Account column: Specify these items if you want to use on-demand e-mail notification.

7. **Click [OK].**

Auto E-mail Notification

1. **Click [Configuration] in the menu area, and then click [Auto E-mail Notification] on the [Device Settings] area.**

   The dialog box for making notification settings appears.

2. **Make the following settings:**

   • Items in Notification Message column: You can set this according to your needs, for example, the printer's location, service representative contact information.

   • Items in the Groups to Notify column: E-mail notification addresses can be grouped as required.

   • Items in the Select Groups/Items to Notify column: Select groups for each notification type, such as printer status and error.

     To make detailed settings for these items, click [Edit] next to [Detailed Settings of Each Item].

3. **Click [OK].**

4. **Click [Logout].**

5. **Quit Web Image Monitor.**

On-demand E-mail Notification

1. **Click [Configuration] in the menu area, and then click [On-demand E-mail Notification] on the [Device Settings] area.**

   The dialog box for making notification settings appears.

2. **Make the following settings:**

   - Notification Subject: Enter a text string to be added to the subject line of return e-mails.

   - Items in Notification Message column: You can set this according to your needs, for example, the printer's location, service representative contact information.

   - Items in the Access Restriction to Information column: Select whether to restrict accesses based on a specific category of information.

   - Items in the Receivable E-mail Address/Domain Name Settings column: Enter an e-mail address or domain name to use for requesting information by e-mail and to receive its return e-mail.

3. **Click [OK].**

4. **Click [Logout].**

5. **Quit Web Image Monitor.**

Mail authentication

You can configure mail authentication to prevent illegal use of the mail server.

SMTP authentication

Specify SMTP authentication.

When mail is sent to the SMTP server, authentication is performed using the SMTP AUTH protocol by prompting the mail originator to enter the user name and password. This prevents illegal use of the SMTP server.

1. In the menu area, click [E-mail]

2. Make the following settings:

   - SMTP Authentication: Enable or disable SMTP authentication.

   - SMTP Auth. E-mail Address: Enter the e-mail address.

   - SMTP Auth. User Name: Enter the SMTP account name.

   - SMTP Auth. Password: To set or change the password for SMTP AUTH.

   - SMTP Auth. Encryption: Select whether to encrypt the password or not.

     [Auto Select]: If the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.

     [Active]: If the authentication method is CRAM-MD5 or DIGEST-MD5.

[Inactive]: If the authentication method is PLAIN or LOGIN.

3. Click [OK].

4. Click [Logout].

5. Quit Web Image Monitor.

POP before SMTP authentication

Select whether to log on to the POP3 server before sending e-mail.

1. In the menu area, click [E-mail].

2. Make the following settings:

   - POP before SMTP: Enable or disable POP before SMTP.

   - POP E-mail Address: Enter the e-mail address.

   - POP User Name: Enter the POP account name.

   - POP Password: To set or change the POP password.

   - Timeout setting after POP Auth.: Enter the time available before connecting to the SMTP server after logging on to the POP server.

3. Click [OK].

4. Click [Logout].

5. Quit Web Image Monitor.

Sending On-demand E-mail

To use on-demand e-mail notification, perform the following configuration tasks in Web Image Monitor.

1. **In the menu area, click [E-mail].**

2. **Make the following settings:**

   - E-mail Notification E-mail Address: Enter the address using alphanumeric characters.

   - Receive E-mail Notification: Specify whether to use on-demand e-mail notification.

   - E-mail Notification User Name: Enter the administrator's user name as the mail originator name.

   - E-mail Notification Password: Enter the password of the mail notification user.

3. **Click [OK].**

4. **Click [Logout].**

5. **Quit Web Image Monitor.**

Format of on-demand e-mail messages

To use mail notification, you need to send an on-demand e-mail message to this printer.

Using your mail software, enter the following:

Item	Description
Subject (Referred to as Subject)	Enter a request regarding the device. For details, see the table below.
From (Referred to as From)	Specify a valid mail address. The device information will be sent to the address specified here.

Subject field

Format: devicestatus?parametername=parameter[&=parameter][& =parameter]...

Subject field coding examples

Coding example	Action
devicestatus?request=sysconfig& format=text& lang=en	The device's system configuration information will be sent in an English text format.
devicestatus?request=sysconfig	The device's system configuration information will be sent in a preset format and language.

Parameters

Parameter	Meaning	Default
request	Information to be obtained	Mandatory
format	Mail format	Mail will be sent in the format preset for each mail address.
lang	Language for mail body	Mail will be sent in the language preset for each mail address.

Parameters specifying the information to be obtained

Information to be obtained	Parameter
System configuration information	sysconfig
Network configuration information	netconfig
Printer configuration information	prtconfig
Supplies information	supply

6

213

Information to be obtained	Parameter
Device status information	status

Parameters specifying the mail format

Mail format	Parameter
Text	text
HTML	html
XML	xml

Parameters specifying the language for mail body

Language for mail body	Parameter
English	en
French	fr
German	de
Italian	it
Spanish	es
Dutch	nl
Danish	da
Finnish	fi
Norwegian	no
Portuguese	pt
Swedish	sv
Czech	cs
Polish	pl
Hungarian	hu

⬇ Note

- A mail message must be within 1 MB in size.

- E-mail may be incomplete if sent immediately after power on.

- The Subject field is case-insensitive.

- Parameter names can be written in any order.

- HTML and XML can be selected for subject field, but output is text only.

6

Remote Maintenance by telnet

⭐ **Important**

- Remote Maintenance should be password-protected so that access is allowed to administrators only.

- The password is the same as the one of Web Image Monitor administrator. When the password is changed using "mshell", other passwords change also.

- Some commands cannot be used depending on your printer.

Using telnet

Follow the procedure below to use telnet.

⭐ **Important**

- Only one user at a time can log on to perform remote maintenance.

1. **Use the IP address or the host name of the printer to start telnet.**

   `% telnet "IP_address"`

2. **Enter your user name and password.**

   Contact your administrator for information about the settings.

3. **Enter a command.**

4. **Quit telnet.**

   `msh> logout`

   The configuration message about saving the changes appears.

5. **Enter "yes" to save the changes, and then press the [OK] key.**

   If you do not want to save the changes, enter "no", and then press the [OK] key. To make further changes, enter "return" at the command line, and then press the [OK] key.

💠 **Note**

- If the message "Can not write NVRAM information" appears, the changes are not saved. Repeat the procedure above.

- When the changes are saved, the network interface board is reset automatically with that changes.

- When the network interface board resets, the print job in print process will be printed. However, print jobs in queue will be canceled.

access

Use the "access" command to view and configure access control. You can also specify two or more access ranges.

View settings

```
msh> access
```

IPv4 configuration

```
msh> access [×] range "start-address end-address"
```

- [×] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv4 addresses between 192.168.0.10 and 192.168.0.20:

```
msh> access 1 range6 192.168.0.10 192.168.0.20
```

IPv6 configuration

```
msh> access [×] range6 "start-address end-address"
```

- [×] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv6 addresses between 2001:DB8::100 and 2001:DB8::200.

```
msh> access 1 range6 2001:DB8::100 2001:DB8::200
```

IPv6 access mask configuration

```
msh> access [×] mask6 "base-address prefixlen"
```

- [×] represents a target number between 1 and 5. (Up to five access ranges can be registered and selected.)

Example: to specify accessible IPv6 addresses to 2001:DB8::/32

```
msh> access 1 mask6 2001:DB8:: 32
```

Access control initialization

```
msh> access flush
```

- Use the "flush" command to restore the default settings so that all access ranges become "0.0.0.0" for IPv4, and ":: " for IPv6.

🔽 Note

- The access range restricts computers from use of the printer by IP address. If you do not need to restrict printing, make the setting "0.0.0.0" for IPv4, and "::" for IPv6.
- Valid ranges must be from lower (start address) to higher (end address).
- If you are running IPv4 or IPv6, up to five access ranges can be registered and selected.
- IPv6 can register and select the range and the mask for each access ranges.
- IPv6 mask ranges between 1 - 128 can be selected.

6

- Up to five access ranges can be specified. The entry is invalid if the target number is omitted.

- You cannot send print jobs, or access Web Image Monitor and diprint from a restricted IP address.

appletalk

Use the "appletalk" command to view and configure Apple Talk parameters.

View settings

    msh> appletalk

- [2] means "active" and [0] means "inactive".

- The default is [2].

Changing PAP timeout configuration

    msh> appletalk ptimeout value > 0

- Timeout value becomes effective.

    msh> appletalk ptimeout value = 0

- Timeout value becomes ineffective.

authfree

Use the "authfree" command to view and configure AuthFree parameters.

View settings

The following command displays the current AuthFree settings:

    msh> authfree

- If print job authentication exclusion is not set, authentication exclusion control cannot be displayed.

IPv4 address settings

    msh> authfree "ID " range_addr1 range_addr2

IPv6 address settings

    msh> authfree "ID " range6_addr1 range6_addr2

IPv6 address mask configuration

    msh> authfree "ID " mask6_addr1 masklen

Parallel/USB settings

    msh> authfree [parallel | usb] [on|off]

- To enable authfree, set to on. To disable authfree, set to off. Always specify the interface.

Authentication exclusion control initialization

> `msh> authfree flush`

autonet

Use the "autonet" command to view and configure AutoNet parameters.

View settings

> The following command displays the current AutoNet settings:

> `msh> autonet`

Configuration

> You can configure AutoNet settings.

> `msh> autonet {on|off}`

> - {on} means "active" and {off} means "inactive".

Current interface priority configuration display

> `msh> autonet priority`

Interface priority configuration

> `msh> autonet priority "interface_name"`

> - You can give interface's AutoNet parameter priority.
> - Priority settings are available when multiple interfaces are installed.
> - wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

♦Note

> - If an interface is not selected, the current interface connection settings remain in effect.
> - For details about AutoNet, refer to autonet parameters.

bonjour

Use the "bonjour" command to display bonjour-related settings.

View settings

> Bonjour settings are displayed.

```
msh> bonjour
```

Bonjour service name setting

You can specify the bonjour service name.

```
msh> bonjour cname "computer name"
```

- The computer name can be entered using up to 63 alphanumeric characters.

Bonjour Installation location information setting

You can enter information about the location where the printer is installed.

```
msh> bonjour location "location"
```

- Information about location can be entered using up to 32 alphanumeric characters.

Setting order of priority for each protocol

- diprint

  ```
  msh> bonjour diprint [0-99]
  ```

- lpr

  ```
  msh> bonjour lpr [0-99]
  ```

- ipp

  ```
  msh> bonjour ipp [0-99]
  ```

You can specify the order of priority for "diprint", "lpr", and "ipp". Smaller numbers indicate higher priority.

IP TTL setting

```
msh> bonjour ip ttl {1-255}
```

You can specify the IP TTL (the number of routers a packet can pass through).

Note

- The default is 255.

Resetting the computer name and location information

You can reset the computer name and location information.

```
msh> bonjour clear {cname | location}
```

- cname

  Reset the computer name. The default computer name will be displayed when the computer is restarted.

- location

  Reset the location information. The previous location information will be deleted.

Interface configuration

```
msh> bonjour linklocal "interface_name"
```

- If many types of interface are installed, configure the interface that communicates with linklocal address.

- If you do not specify an interface, the Ethernet interface is automatically selected.

- wlan can be specified only when the wireless LAN interface unit is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

devicename

Use the "devicename" command to display and change the printer name.

View settings

    msh> devicename

Printer name configuration

    msh> devicename name "string"

- Enter a printer name using up to 31 alphanumeric characters.

- Set single names for each printer.

Printer name initialization

    msh> device name clearname

- Reset the printer name to its default.

dhcp

Use the "dhcp" command to configure DHCP settings.

View settings

The following command displays the current DHCP settings.

    msh> dhcp

Configuration

You can configure DHCP.

    msh> dhcp "interface_name" {on|off}

- Click {on} to enable DHCP. Click {off} to disable DHCP.

- If the DNS server address and domain name are obtained from DHCP, be sure to click {on}.

- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Current interface priority configuration display

msh> dhcp priority

Interface priority configuration

msh> dhcp priority "interface_name"

- You can select which interface has DHCP parameter priority.

- Priority settings are available when multiple interfaces are installed.

DNS server address selection

msh> dhcp dnsaddr {dhcp | static}

- Specify whether to obtain the DNS server address from the DHCP server or use the address set by a user.

- To obtain the DNS server address from the DHCP server, specify "dhcp". To use the address set by a user, specify "static".

Domain name selection

msh> dhcp domainname {dhcp | static}

- Specify whether to obtain the domain name from the DNS server or use the domain name set by a user.

- To obtain the domain name from the DHCP server, specify "dhcp". To use the domain name set by a user, specify "static".

dhcp6

Use the "dhcp6" command to display or configure DHCPv6 settings.

View settings

The following command displays the current DHCPv6 settings.

msh> dhcp6

DHCPv6-lite configuration and display

msh> dhcp6 "interface_name" lite {on|off}

Viewing and specifying DNS server address selection (obtained from the dhcpv6 server/user specified value)

msh> dhcp6 dnsaddr {dhcp|static}

DUID(DHCP unique ID) deletion and display

    msh> dhcp6 duid clear

Viewing and specifying the time required to re-obtain the parameter obtained from dhcpv6

    msh> dhcp6 ooption lifetime [0-65535]

- It can be entered between 0 and 65535 minutes.

- The default is 60 minutes.

- If you specify "0", you cannot re-obtain the value.

dns

Use the "dns" command to configure or display DNS (Domain Name System) settings.

View settings

The following command displays current DNS settings:

    msh> dns

IPv4 DNS server configuration

The following command enables or disables the IPv4 DNS server address:

    msh> dns "number" server "server address"

The following command displays a configuration using the IP address 192.168.15.16 on a DNS 1 server:

    msh> dns 1 server 192.168.15.16

- You can register IPv4 DNS Server address.

- You can register up to three IPv4 DNS server numbers.

- You cannot use "255.255.255.255" as the DNS server address.

IPv6 DNS server configuration

The following command enables or disables the IPv6 DNS server address:

    msh> dns "number" server6 "server address"

- You can register IPv6 DNS Server address.

- You can register up to three IPv6 DNS server numbers.

Dynamic DNS function setting

    msh> dns "interface_name" ddns {on|off}

- You can set the dynamic DNS function "active" or "inactive".

- {on} means "active" and {off} means "inactive".

- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Specifying the record overlap operation

```
msh> dns overlap {update|add}
```

- You can specify operations performed when records overlap.

- update

  To delete old records and register new records.

- add

  To add new records and store the old records.

- When CNAME overlaps, it is always changed, irrespective of settings.

CNAME registration

```
msh> dns cname {on|off}
```

- You can specify whether to register CNAME.

- {on} means "active" and {off} means "inactive".

- The CNAME registered is the default name beginning with rnp. CNAME cannot be changed.

A records registration

```
msh> dns arecord {dhcp|own}
```

- {dhcp}

  You can specify the method of registering an A record when the dynamic DNS function is enabled and DHCP is used.

- {own}

  To register an A record using the printer as the DNS client.

  The DNS server address and the domain name already designated are used for the registration.

Record updating interval settings

```
msh> dns interval "time"
```

- You can specify the interval after which records are updated when using the dynamic DNS function.

- The updating interval is specified hourly. It can be entered between 1 and 255 hours.

- The default is 24 hours.

domainname

Use the "domainname" command to display or configure the domain name settings.

You can configure the Ethernet interface or wireless LAN interface.

View settings

The following command displays the current domain name:

msh> domainname

Interface domain configuration

msh> domainname "interface_name"

Setting the domain name

msh> domainname "interface_name" name "domain name"

- A domain name can be entered using up to 63 alphanumeric characters.
- The Ethernet interface and wireless LAN interface will have the same domain name.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface	Interface set
ether	Ethernet interface
wlan	Wireless LAN interface

Deleting the domain name

msh> domainname "interface_name" clear "name"

help

Use the "help" command to display the available command list and the procedures for using those commands.

Command list display

msh> help

Display of procedure for using commands

msh> help "command_name"

hostname

Use the "hostname" command to change the printer name.

View settings

```
msh> hostname
```

IPv4 Configuration

```
msh> hostname "interface_name" "printer_name"
```

- Enter the printer name using up to 63 alphanumeric characters.

- You cannot use a printer name starting with "RNP" or "rnp"

- The Ethernet interface and wireless LAN interface will have the same printer name.

- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Initializing the printer name for each interface

```
msh>hostname "interface_name" clear "name"
```

6

ifconfig

Use the "ifconfig" command to view and configure TCP/IP (IP address, subnet mask, broadcast address, default gateway address) for the printer.

View settings

```
msh> ifconfig
```

IPv4 configuration

```
msh> ifconfig "interface_name" "parameter" "address"
```

- If you did not enter an interface name, it is automatically set to the Ethernet interface.

- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet Interface
wlan	wireless LAN Interface

The following explains how to configure an IPv4 address 192.168.15.16 on Ethernet interface.

```
msh> ifconfig ether 192.168.15.16
```

IPv6 configuration

```
msh> ifconfig ether inet6 "interface_name" "prefixlen"
```

The following explains how to configure a IPv6 address to 2001:DB8::100 with prefix length 64 on the Ethernet interface.

```
msh> ifconfig ether inet6 2001:DB8::100 64
```

Netmask configuration

```
msh> ifconfig "interface_name" netmask "address"
```

The following explains how to configure a subnet mask 255.255.255.0 on Ethernet interface.

```
msh> ifconfig ether netmask 255.255.255.0
```

Broadcast address configuration

```
msh> ifconfig "interface_name" broadcast "address"
```

Changing the interface

```
msh> ifconfig "interface" up
```

You can specify either the Ethernet interface or wireless LAN interface when using the optional wireless LAN interface unit is installed.

⬇ **Note**

- To get the above addresses, contact your administrator.

- Use the default configuration if you cannot obtain setting addresses.

- The IP address, subnet mask and broadcast address are the same as that for the ethernet interface and wireless LAN interface.

- TCP/IP configuration is the same for both Ethernet and wireless LAN interface. If interfaces are changed, the new interface inherits the configuration.

- Use "0x" as the initial two letters of a hexadecimal address.

info

Use the "info" command to display printer information such as paper tray, output tray, and printer language.

Printer information display

```
msh> info
```

🔖 **Reference**

- For details about displayed contents, see p.253 "Getting Printer Information over the Network".

ipds

Use the "ipds" command to view and configure ipds settings.

Viewing settings

The following command displays the current ipds settings:

msh> ipds

ipsec

Use the "ipsec" command to view and configure IPsec settings.

Viewing settings

The following command displays the current IPsec settings:

msh> ipsec

Note

- For details about displayed contents, see Security Guide.

ipp

Use the "ipp" command to view and configure IPP settings.

Viewing settings

The following command displays the current IPP settings:

msh> ipp

IPP timeout configuration

Specify how many seconds the computer waits before canceling an interrupted print job. The time can be entered between 30 to 65535 seconds.

msh> ipp timeout [30 - 65535]

IPP user authorization configuration

Use IPP user authorization to restrict users to print with IPP. The default is "off".

msh> ipp auth {basic|digest|off}

- User authorization settings are "basic" and "digest".
- Use "off" to remove a user's authorization.
- If user authorization is specified, register a user name. You can register up to 10 users.

IPP user configuration

Configure IPP users according to the following messages:

msh> ipp user

The following message appears:

msh> Input user number (1 to 10):

Enter the number, user name, and password.

```
msh> IPP user name:user1
```

```
msh> IPP password:*******
```

After configuring the settings, the following message appears:

```
User configuration changed.
```

ipv6

Use the "ipv6" command to display and configure IPv6 settings.

View setting

```
msh> ipv6
```

IPv6 stateless address

```
msh> ipv6 stateless {on|off}
```

lpr

Use the "lpr" command to view and configure LPR settings.

View setting

```
msh> lpr
```

Checking host name when deleting the job

```
msh> lpr chkhost {on|off}
```

If "on" is selected, you can delete print jobs only from the IP address of the host that sent the print job. If LPR is disabled, you can also delete print jobs sent from IP addresses other than that of the host.

Printer Error Detection Function

```
lpr prnerrchk {on|off}
```

If you set this to "on", the printer stops receiving data and will wait until the error is resolved before continuing processing a job.

netware

Use the "netware" command to configure the NetWare settings such as the print server name or file server name.

Netware printer server names

```
msh> netware pname "character string"
```

- Enter the NetWare print server name using up to 47 characters.

Netware file server names

```
msh> netware fname
```

- Enter the NetWare file server name using up to 47 characters.

Encap type

```
msh> netware encap {802.3|802.2|snap|ethernet2|auto}
```

Remote printer number

```
msh> netware rnum {0-254}
```

Timeout

```
msh> netware timeout {3-255}
```

Printer server mode

```
msh> netware mode pserver
```

```
msh> netware mode ps
```

Remote printer mode

```
msh> netware mode rprinter
```

```
msh> netware mode rp
```

NDS context name

```
msh> netware context "character string"
```

SAP interval

```
msh> netware "sap_interval"
```

Setting login mode for file server

```
msh> netware login server
```

Setting login mode for NDS tree

```
msh> netware login tree
```

Setting login mode for NDS tree name

```
msh> netware tree "NDS name"
```

File transfer protocol

```
msh> netware trans {ipv4pri|ipxpri|ipv4|ipx}
```

If you do not specify the protocol, the current setting is displayed.

Protocol	Set Protocol
ipv4pri	IPv4+IPX(IPv4)
ipxpri	IPv4+IPX(IPX)
ipv4	IPv4

Protocol	Set Protocol
ipx	IPX

nvramlog

Use the "navamlog" command to obtain NAVRAM log information.

View settings

```
msh> nvramlog
```

passwd

Use the "passwd" command to change the remote maintenance password.

Changing the password

```
msh> passwd
```

- Enter the current password.
- Enter the new password.
- Renter the new password to confirm it.

Changing the Password of the administrators using the supervisor

```
msh> passwd {Administrator ID}
```

- Enter the new password.
- Renter the new password to confirm it.

⬇ Note

- Be sure not to forget or lose the password.
- The password can be entered using up to 32 alphanumeric characters. Passwords are case-sensitive. For example, "R" is not the same as "r".

pathmtu

Use the "pathmtu" command to display and configure the PathMTU Discovery service function.

View settings

```
msh> pathmtu
```

Configuration

```
msh> pathmtu {on|off}
```

- The default is "on".

- If the MTU size of the sent data is larger than the router's MTU, the router will declare it impassable, and communication will fail. If this happens, selecting the "pathmtu" to "off" optimized the MTU size and prevents data output failure.

- Depending on the environment, information might not be obtained from the router, and communication will fail. If this happens, select the "pathmtu" to "off".

prnlog

Use the "prnlog" command to obtain printer log information.

Print logs display

```
msh> prnlog
```

- Displays 16 previous print jobs.

```
msh> prnlog "ID Number"
```

- Specify the ID number of the displayed print log information to display additional details about a print job.

Reference

- For details about displayed contents, see p.253 "Getting Printer Information over the Network".

rhpp

Use the "rhpp" command to view and configure RHPP settings.

View settings

```
msh> rhpp
```

Changing rhpp port number

```
msh> rhpp [1024-65535]
```

- The default is 59100.

Setting timeout

```
msh> rhpp timeout [30-65535]
```

- The default is 300 seconds.

Note

- "RHPP" is an abbreviation of "Reliable Host Printing Protocol", which is a manufacturer-original printing protocol.

route

Use the "route" command to view and control the routing table.

All route information display

    msh> route get "destination"

- Specify the IPv4 address to destination.

"0.0.0.0" cannot be specified as destination address.

Enabling/disabling specified IPv4 destination

    msh> route active {host|net} "destination" {on | off}

- You can turn the specified destination on or off. Host becomes the default setting.

Adding IPv4 Routing Table

    msh> route add {host|net} "destination" "gateway"

- Adds a host or network route to "destination", and a gateway address to "gateway" in the table.
- Specify the IPv4 address to destination and gateway.
- Host becomes the default setting.

Setting default IPv4 Gateway

    msh> route add default gateway

Deleting specified IPv4 destination from Routing Table

    msh> route delete {host|net} "destination"

- Host becomes the default setting.
- IPv4 address of destination can be specified.

Setting IPv6 Default Gateway

    msh> route add6 default gateway

Adding a specified IPv6 destination to Routing Table

    msh> route add6 "destination" "prefixlen" "gateway"

- Specify the IPv6 address to destination and gateway.

Deleting a specified IPv6 destination from Routing Table

    msh> route delete6 "destination" "prefixlen"

- Specify the IPv6 address to destination and gateway.

Display information about a specified IPv6 route information

    msh> route get6 "destination"

- Specify the IPv6 address to destination and gateway.

6

Enabling/disabling a specified IPv6 destination

```
msh> route active6 "destination" "prefixlen" {on | off}
```

Route initialization

```
msh> route flush
```

Note

- The maximum number of IPv4 routing tables is 16.
- The maximum number of IPv6 routing tables is 2.
- Set a gateway address when communicating with devices on an external network.
- The same gateway address is shared by all interfaces.
- "Prefixlen" is a number between 1 and 128.

set

Use the "set" command to set the protocol information display "active" or "inactive".

View settings

The following command displays protocol information (active/inactive).

```
msh> set ipv4
msh> set ipv6
msh> set appletalk
msh> set netware
msh> set smb
msh> set protocol
```

- When protocol is specified, information about TCP/IP, Apple Talk, Netware, SCSI print, and SMB appears.

```
msh> set parallel
msh> set usb
msh> set bluetooth
msh> set lpr
msh> set lpr6
msh> set ftp
msh> set ftp6
msh> set rsh
msh> set rsh6
msh> set diprint
```

```
msh> set diprint6
msh> set web
msh> set snmp
msh> set ssl
msh> set ssl6
msh> set nrs
msh> set rfu
msh> set rfu6
msh> set ipp
msh> set ipp6
msh> set http
msh> set http6
msh> set bonjour
msh> set nbt
msh> set ssdp
msh> set ssh
msh> set sftp
msh> set sftp6
```

Configuration

- Enter "up" enable protocol, and enter "down" to disable protocol.

  You can set the protocol to "active" or "inactive".

  ```
  msh> set ipv4 {up | down}
  ```

- If you disable IPv4, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via IPv4.

- Disabling IPv4 also disables lpr, ftp, rsh, diprint, web, snmp, ssl, ipp, http, bonjour, and sftp.

  ```
  msh> set ipv6 {up | down}
  ```

- If you disable IPv6, you cannot use remote access after logging off. If you did this by mistake, you can use the control panel to enable remote access via IPv6.

- Disabling IPv6 also disables lpr6, ftp6, rsh6, diprint6, ssl6, ipp6, http6, and sftp6.

  ```
  msh> set appletalk {up | down}
  msh> set netware {up | down}
  msh> set smb {up | down}
  msh> set lpr {up | down}
  msh> set lpr6 {up | down}
  ```

```
msh> set ftp {up | down}

msh> set ftp6 {up | down}

msh> set rsh {up | down}

msh> set rsh6 {up | down}

msh> set diprint {up | down}

msh> set diprint6 {up | down}

msh> set web {up | down}

msh> set snmp {up | down}

msh> set ssl {up | down}

msh> set ssl6 {up | down}
```

- If Secured Sockets Layer (SSL, an encryption protocol) function is not available for the printer, you cannot use the function by enabling it.

```
msh> set nrs {up | down}

msh> set rfu {up | down}

msh> set rfu6 {up | down}

msh> set ipp {up | down}

msh> set ipp6 {up | down}

msh> set http {up | down}

msh> set http6 {up | down}

msh> set bonjour {up | down}

msh> set ssh {up | down}

msh> set ssdp {up | down}

msh> set nbt {up | down}

msh> set sftp {up | down}

msh> set sftp6 {up | down}
```

show

Use the "show" command to display network interface board configuration settings.

View settings

```
msh> show
```

- If "-p" is added, you can view settings one by one.

Reference

- For details about the information displayed, see p.262 "Understanding the Displayed Information".

slp

Use "slp" command to view and configure SLP settings.

`msh> slp ttl "ttl_val"`

- You can search the NetWare server using SLP in the PureIP environment of NetWare 5/5.1 and Netware 6/6.5. Using the "slp" command, you can configure the value of TTL which can be used by SLP multicast packet.

- The default value of TTL is 1. A search is executed only within a local segment. If the router does not support multicast, the settings are not available even if the TTL value is increased.

- The acceptable TTL value is between 1 and 255.

smb

Use the "smb" command to configure or delete the computer or workgroup name for SMB.

Computer Name settings

`msh> smb comp "computer name"`

- Set computer name using up to 15 characters. Names beginning with "RNP" or "rnp" cannot be entered.

Working Group Name settings

`msh> smb group "work group name"`

- Set workgroup name using up to 15 characters

Comment settings

`msh> smb comment "comment"`

- Set comment using up to 31 characters

Notify print job completion

`msh> smb notif {on | off}`

- To notify print job completion, specify "on". Otherwise, specify "off"

Deleting Computer Nam

`msh> smb clear comp`

Deleting Group Name

`msh> smb clear group`

Deleting Comment

`msh> smb clear comment`

View Protocol

`msh> smb protocol`

snmp

Use the "snmp" command to display and edit SNMP configuration settings such as the community name.

View settings

```
msh> snmp
```

- Default access settings 1 is as follows:

  Community name:public

  IPv4 address:0.0.0.0

  IPv6 address:::

  IPX address:00000000:000000000000

  Access type:read-only

  Effective Protocol:IPv4/IPv6/IPX

- Default access settings 2 is as follows:

  Community name:admin

  IPv4 address:0.0.0.0

  IPv6 address:::

  IPX address:00000000:000000000000

  Access type:read-write

  Effective Protocol:IPv4/IPv6/IPX

- If "-p" is added, you can view settings one by one.

- To display the current community, specify its registration number.

Display

```
msh> snmp ?
```

Community name configuration

```
msh> snmp "number" name "community_name"
```

- You can configure ten SNMP access settings numbered 1-10.

- The printer cannot be accessed from SmartDeviceMonitor for Admin or SmartDeviceMonitor for Client if "public" is not registered in numbers 1-10. When changing the community name, use SmartDeviceMonitor for Admin and SNMP Setup Tool to correspond with printer settings.

- The community name can be entered using up to 15 characters.

Deleting community name

```
msh> snmp "number" clear name
```

Access type configuration

```
msh> snmp "number" type "access_type"
```

Access type	Type of access permission
no	not accessible
read	read only
write	read and write
trap	user is notified of trapmessages

Protocol configuration

    msh> snmp {ipv4|ipv6|ipx} {on|off}

- Use the following command to set protocols "active" or "inactive": If you set a protocol "inactive", all access settings for that protocol are disabled.
- Specify "ipv4" for IPv4, "ipv6" for IPv6, or "ipx" for IPX/SPX.
- {on} means "active" and {off} means "inactive".
- All protocols cannot be turned off concurrently.

Configuration of protocol for each registration number

    msh> snmp "number" active {ipv4|ipv6|ipx} {on|off}

- To change the protocol of access settings, use the following command. However, if you have disabled a protocol with the above command, activating it here has no effect.

Access configuration

    msh> snmp "number" {ipv4|ipv6|ipx} "address"

- You can configure a host address according to the protocol used.
- The network interface board accepts requests only from hosts that have IPv4, IPv6, and IPX addresses with access types of "read-only" or "read-write". Enter "0" to have network interface board accept requests from any host without requiring a specific type of access.
- Enter a host address to deliver "trap" access type information to.
- To specify IPv4 or IPv6, enter "ipv4" or "ipv6" followed by a space, and then the IPv4 or IPv6 address.
- To specify IPX/SPX, enter "ipx" followed by a space, the IPX address followed by a decimal, and then the MAC address of the network interface board.

sysLocation configuration

    msh> snmp location

Deleting sysLocation

    msh> snmp clear location

sysContact setting

    msh> snmp contact

Deleting sysContact

> `msh> snmp clear contact`

SNMP v1v2 function configuration

> `msh> snmp v1v2 {on|off}`

> - Specify "on" to enable, and "off" to disable.

SNMP v3 function configuration

> `msh> snmp v3 {on|off}`

> - Specify "on" to enable, and "off" to disable.

SNMP TRAP configuration

> `msh> snmp trap {v1|v2|v3} {on|off}`

> - Specify "on" to enable, and "off" to disable.

Remote Configuration Authorization configuration

> `msh> snmp remote {on|off}`

> - Specify "on" to enable, and "off" to disable the SNMP v1v2 setting.

SNMP v3 TRAP configuration display

> `msh> snmp v3trap`

> `msh> snmp v3trap {1-5}`

> If a number from 1-5 is entered, settings are displayed for that number only.

Configuring a sending address for SNMP v3 TRAP

> `msh> snmp v3trap {1-5} {ipv4|ipv6|ipx} "address"`

Configuring a sending protocol for SNMP v3 TRAP

> `msh> snmp v3trap {1-5} active {ipv4|ipv6|ipx} {on|off}`

Configuring a user account for SNMP v3 TRAP

> `msh> snmp v3trap {1-5} account "account_name"`

> Enter an account name using up to 32 alphanumeric characters.

Deleting an SNMP v3 TRAP user account

> `msh> snmp v3trap {1-5} clear account`

Configuring an SNMP v3 encryption algorithm

> `msh> snmp v3auth {md5|sha1}`

Configuring SNMP v3 encryption

> `msh> snmp v3priv {auto|on}`

> Set "auto" for automatic encryption configuration

> Set "on" for mandatory encryption configuration.

sntp

The printer clock can be synchronized with a NTP server clock using Simple Network Time Protocol (SNTP). Use the "sntp" command to change SNTP settings.

View settings

```
msh> sntp
```

NTP server address configuration

You can specify the IP address of the NTP server.

```
msh> sntp server "IP_address"
```

Interval configuration

```
msh> sntp interval "polling_time"
```

- You can specify the interval at which the printer synchronizes with the operator-specified NTP server. The default is 60 minutes.

- The interval can be entered from 0, or between 16 and 10,080 minutes.

- If you set 0, the printer synchronizes with the NTP server only when you turn the printer on. After that, the printer does not synchronize with the NTP server.

Time-zone configuration

```
msh> sntp timezone "+/-hour_time"
```

- You can specify the time difference between the printer clock and NTP server clock. The values are between -12:00 and +13:00.

spoolsw

Use the "spoolsw" command to view and configure Job Spool settings.

You can only specify diprint, lpr, ipp, ftp, smb and sftp protocol.

View settings

The Job Spool setting appears.

```
msh> spoolsw
```

Job Spool setting

```
msh> spoolsw spool {on | off}
```

⊙Note

- Specify "on" to enable Job Spool, or "off" to disable it.

Resetting Job spool setting

```
msh> spoolsw clear job {on | off}
```

- When the printer power is cut during job spooling, this determines whether to reprint the spooled job.

Protocol configuration

```
msh> spoolsw diprint {on | off}
msh> spoolsw lpr {on | off}
msh> spoolsw ipp {on | off}
msh> spoolsw smb {on | off}
msh> spoolsw ftp {on | off}
msh> spoolsw sftp {on|off}
```

- You can specify the settings for diprint, lpr, ipp, smb and sftp.

ssdp

Use the "ssdp" command to view and configure SSDP settings.

View settings

```
msh> ssdp
```

Setting effective time

```
msh> ssdp profile {1801-86400}
```

The default is 10800 seconds.

Advertise packet TTL settings

```
msh> ssdp ttl {1-255}
```

The default is 4.

ssh

Use the "ssh" command to view and configure SSH settings.

View settings

```
msh> ssh
```

Data compression communication settings

```
msh> ssh compression {on|off}
```

The default is "on".

SSH/SFTP communication port setting

```
msh> ssh port {22, 1024-65535}
```

The default is 22.

SSH/SFTP communication timeout setting

> `msh> ssh timeout {0-65535}`

> The default is 300.

SSH/SFTP communication login timeout setting

> `msh> ssh logintimeout {0-65535}`

> The default is 300.

Setting an open key for SSH/SFTP

> `msh> ssh genkey {512|768|1024} "character string"`

> Create an open key for SSH/SFTP communication.

> Usable characters are ASCII 0x20-0x7e (32 bytes) other than "0".

> The default key length is 1024, and the character string is blank.

Deleting open key for ssh/sftp communication

> `msh> ssh delkey`

⬇Note

- If you do not specify a character string, current setting is displayed.

status

Use the "status" command to display the printer status.

Messages

> `msh> status`

📖Reference

- For details, see p.253 "Getting Printer Information over the Network".

syslog

Use the "syslog" command to display the information stored in the printer's system log.

View message

> `msh> syslog`

📖Reference

- For details about the information displayed, see p.273 "Message List".

upnp

Use the "upnp" command to display and configure the universal plug and play.

Public URL display

```
msh> upnp url
```

Public URL configuration

```
Msh< upnp url "string"
```

- Enter the URL string in the character string.

web

Use the "web" command to display and configure parameters on Web Image Monitor.

View Settings

```
msh> web
```

URL Configuration

You can set URLs linked by clicking URL on Web Image Monitor.

Specify "1" or "2" for x as the number corresponding to the URL. Up to two URLs can be registered and specified.

```
msh> web url http://"The URL or IP address you want to register"/
```

Deleting URLs registered as link destinations

```
msh> web x clear url
```

Specify "1" or "2" for x as the corresponding number to the URL.

Link name configuration

You can enter the name for URL that appears on Web Image Monitor.

Specify "1" or "2" for x as the corresponding number to the link name.

```
msh> web name "Name you want to display"
```

Resetting URL names registered as link destinations

```
msh> web x clear name
```

Specify "1" or "2" for x as the number corresponding to the link name.

Help URL Configuration

You can set URLs linked by clicking [Help] or [?] on Web Image Monitor.

```
msh> web help http://"Help URL or IP address"/help/
```

Deleting Help URL

```
msh> web clear help
```

wiconfig

Use the "wiconfig" command to make settings for wireless LAN.

View settings

    msh> wiconfig

View wireless LAN settings

    msh> wiconfig cardinfo

- If wireless LAN is not working correctly, its information is not displayed.

Configuration

    msh> wiconfig "parameter"

Parameter	Value configured
mode {ap|802.11adhoc}	You can set infrastructure mode (ap), or 802.11 ad hoc mode (802.11adhoc). The default is infrastructure mode.
ssid "ID value"	You can make settings for the SSID in the infrastructure mode. Usable characters are ASCII 0x20-0x7e (32 bytes). An SSID value is set automatically to the nearest access point if no setting is made. If no setting is made for the ad hoc mode, the same value as for the infrastructure mode or an ASSID value is automatically set. The default is blank.
channel "channel no."	You can enable or disable the WEP function. To enable the WEP function, specify [on]; to disable it, specify [off]. To start the WEP function, enter the correct WEP key. The default is "11".
key "key value" val {1|2|3|4}	You can specify the WEP key when entering in hexadecimal. With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.

Parameter	Value configured
	Up to four WEP keys can be registered. Specify the number to be registered with "val".
	When a WEP is specified by key, the WEP specified by key phrase is overwritten.
	To use this function, set the same key number and WEP key for all ports that transmit data to each other. Put "0x" on the front of WEP key.
	You can omit the numbers with "val". The key number is set to 1 when making these omissions. The default is blank.
keyphrase "phrase" val {1|2|3|4}	You can specify the WEP key when entering in ASCII.
	With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.
	Up to four WEP keys can be registered. Specify the number to be registered with "val".
	When a WEP is specified by key phrase, the WEP specified by key is overwritten.
	To use this function, set the same key number and WEP key for all ports that transmit data to each other.
	You can omit the numbers with "val". The key number is set to 1 when making these omissions.
encval {1|2|3|4}	You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.
wepauth [open|shared]	You can set an authorization mode when using WEP. The specified value and authorized mode are as follows:
	open: open system authorized (default)
	shared: shared key authorized rate
rate [auto|11m|5.5m|2m|1m]	You can set the wireless LAN transmitting speed.
	The speed you specify here is the speed at which data is sent. You can receive data at any speed.

Parameter	Value configured
	auto: automatically set (default)
	11m: 11 Mbps fixed
	5.5m: 5.5 Mbps fixed
	2m:2 Mbps fixed
	1m: 1 Mbps fixed
security {none|wep|wpa}	You can specify the security mode.
	none: No encryption(default)S
	wep: WEP encryption
	wpa: WPA encryption
wpaenc {tkip|ccmp}	You can specify WPA encryption key when using WPA encryption.
	tkip: TKIP (default)
	ccmp: CCMP (AES)
wpaauth {wpapsk | wpa}	You can specify the WPA authentication mode when using WPA encryption.
	wpapsk: WPA-PSK authentication(default)
	wpa: WPA(802.1X) authentication
psk "character string"	You can specify the Pre-Shared key.
	Usable characters: ASCII 0x20-0x7e (8 to 63 bytes).
	The default is blank.
eap {tls|ttls|leap|peap} {chap|mschap|mschapv2|pap|md5|tls}	You can specify the EAP authentication type.
	tls: EAP-TLS (default)
	ttls: EAP-TTLS
	leap: LEAP
	peap: PEAP
	chap, mschap, mschapv2, pap, md5, or tls are settings for the phase 2 method, and must be set when using EAP-TTLS or PEAP.
	Do not make these settings when using other EAP authentication types.

6

Parameter	Value configured
	If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5. If you select PEAP, you can select mschapv2 or tls.
username "character string"	You can specify the login user name for the Radius server. Usable characters: ASCII 0x20-0x7e(31 bytes) other than "@". The default is blank.
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication. Usable characters: ASCII 0x20-0x7e (31 bytes) other than "@". The default is blank.
domain "character string"	You can specify the login domain name for the Radius server. Usable characters: ASCII0x20-0x7e (31 bytes) other than "@". The default is blank.
password "character string"	You can specify the login password for the Radius server. Usable characters: ASCII 0x20-0x7e(128 bytes). The default is blank.
srvcert {on | off}	You can set the server certificate. The default is "off".
imca {on | off}	You can enable or disable the certificate when the intermediate certificate authority is present. The default is "off".
srvid "character string"	You can set the server ID and subdomain of the certificate server.

↓Note

- You can use this command only when the wireless LAN interface unit is installed.

wins

Use the "wins" command to configure WINS server settings.

Viewing settings

msh> wins

- If the IPv4 address obtained from DHCP differs from the WINS IPv4 address, the DHCP address is the valid address.

Configuration

msh> wins "interface_name" {on | off}

- {on} means "active" and {off} means "inactive".
- Be sure to specify the interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

Address configuration

Use the following command to configure a WINS server IP address:

msh> wins "interface_name" {primary|secondary} "IP address"

- Use the "primary" command to configure a primary WINS server IPv4 address.
- Use the "secondary" command to configure a secondary WINS server IPv4 address.
- Do not use "255.255.255.255" as the IPv4 address.

NBT (NetBIOS over TCP/IP) Scope ID Selection

You can specify the NBT scope ID.

msh> wins "interface_name" scope "scope ID"

- The scope ID can be entered using up to 31 alphanumeric characters.
- Be sure to specify the interface.
- wlan can be specified only when the wireless LAN interface unit is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	Wireless LAN interface

wsmfp

Use the "wsmfp" command to view and configure WS-MFP settings.

Viw settings

```
msh> wsmfp
```

Comment settings

```
msh> wsmfp comments "comment"
```

- If you do not specify a comment, current setting is displayed.

Location configuration

```
mah> wsmfp location "location"
```

- If you do not specify a comment, current setting is displayed.

Presentation URL configuration

```
msh> wsmfp url "URL"
```

- Ebter the URL string in the "URL".

WS-Device TCP port configuration

```
msh> wsmfp devport "port_number"
```

- The Default is 53000.

WS-Printer TCP port configuration

```
msh> wsmfp prnport "port_number"
```

- The Default is 53001.

Timeout configuration

```
msh> wsmfp prntimeout [30-65535]
```

- The default is 900 seconds.

Comment initialization

```
msh> wsmfp clear comments
```

Location initialization

```
msh> wsmfp clear location
```

Presentation URL initialization

```
msh> wsmfp clear url
```

SNMP

Using the SNMP manager, you can get information about the printer.

The SNMP agent operating on UDP and IPX is incorporated into the built-in Ethernet board and optional wireless LAN interface unit of this printer.

This printer also supports SNMPv3, which increases user authentication, data encryption, and access control security.

To encrypt communication by SNMPv3, you must specify the printer's encrypted password.

⭐ **Important**

- If you changed the printer's community name, change the configuration of the connected computer accordingly, using SNMP Setup Tool. For details, see SNMP Setup Tool Help.

The default community names are [public] and [admin]. You can get MIB information using these community names.

Start SNMP Setup Tool

- Windows XP/Vista:

  Click the [Start] button.

  Point to [SmartDeviceMonitor for Admin] on the [All Programs] menu.

  Click [SNMP Setup Tool].

Supported MIBs(SNMPv1/v2)

- MIB-II
- PrinterMIB
- HostResourceMIB
- IPv6-TCP-MIB
- IPv6-UDP-MIB
- IPv6-MIB
- IPv6-ICMP-MIB
- RicohPrivateMIB

Supported MIBs(SNMPv3)

- MIB-II
- PrinterMIB
- HostResourceMIB
- IPv6-TCP-MIB
- IPv6-UDP-MIB
- IPv6-MIB

6

- IPv6-ICMP-MIB
- RicohPrivateMIB
- SNMP-FRAMEWORK-MIB
- SNMP-TARGET-MIB
- SNMP-NOTIFICATION-MIB
- SNMP-USER-BASED-SM-MIB
- SNMP-VIEW-BASED-ACM-MIB

6

Getting Printer Information over the Network

This section explains details of each item displayed in the printer status and information.

Current Printer Status

The printer status can be checked using the following commands:

- UNIX: Use the "lpq" command and "rsh", "rcp", "ftp" and "sftp" parameters.
- mshell: Use the "status" command.

Messages	Description
Access Restricted	The job was canceled because user have no authority.
Adjusting...	The printer is initializing or calibrating.
Call Service Center	There is a malfunction in the printer.
Canceled	The job is reset.
Canceling Job...	The job is being reset.
Cannot multi-install: SD Card	SD card you are trying to install has already been installed in a different printer.
Card/Counter not inserted	The printer is waiting for prepaid card or key.
Coin or amount not inserted	The printer is waiting for coin to be inserted.
Coin/Key Counter not inserted	The printer is waiting for coin or key counter.
Configuring...	Setting is being changed.
Cooling Down Fusing Unit...	Fusing unit is cooling down.
Cover Open: Bridge Unit Left	The left cover of the Bridge Unit is open.
Cover Open: Bridge Unit Right	The right cover of the Bridge Unit is open.
Cover Open: Duplex Unit	The cover of the duplex unit is open.
Cover Open: Duplex Unit Left	The left cover of the duplex unit is open.
Cover Open: Duplex Unit Right	The right cover of the duplex unit is open.

Messages	Description
Cover Open: Finisher	The cover of Finisher is open.
Cover Open: Finisher Front	The front cover of Finisher is open.
Cover Open: Finisher Upper	The upper cover of Finisher is open.
Cover Open: Front Cover	The front cover is open.
Cover Open: LCT	The LCT cover is open.
Cover Open: Upper Right Cover	The upper right cover of the duplex unit is open.
Data Size Error	The data size error occurred.
Empty: Black Toner	The black toner cartridge is almost empty.
Energy Saver Mode	The printer is in Energy Saver Mode.
Envelope Setting Error: None	Printing paper type other than envelope is instructed when B2 lever is down.
Envelope Setting Error: Others	Printing envelope is instructed when B2 lever is down.
Error	An error has occurred.
Error: Address Book	An error has occurred in the data of the address book.
Error: Command Transmission	An error has occurred in the printer.
Error: DIMM Value	A memory error occurred.
Error: Ethernet Board	An Ethernet board error has occurred.
Error: HDD Board	A hard disk drive board error has occurred.
Error: Optional Font	An error has occurred in the font file of the printer.
Error: Optional RAM	An error has occurred in the optional memory unit.
Error: Media Link Board	An error has occurred on the media link board.
Error: Memory Switch	A memory switch error has occurred.
Error: Parallel I/F Board	An error has occurred in the parallel interface.

Messages	Description
Error: PDL	An error has occurred in the page description language.
Error: Rem. Certificate Renewal	An error has occurred in the remote certificate renewal.
Error: USB Board	An error has occurred in the USB board.
Error: USB Interface	An error has occurred in the USB interface.
Error: Wireless Board	An error has occurred in the wireless board.
Error: Wireless Card	Wireless card is not inserted during start up, or the wireless LAN interface unit or the wireless card is taken out after start up.
Exceed Stapling Limit	The printing has exceeded the stapling limit.
Full: Finisher	Finisher tray is full.
Full: Finisher Shift Tray	Shift tray of Finisher is full.
Full: Finisher Shift Tray 1, 2	The shift tray 1 and 2 of Finisher are full.
Full: Finisher Upper Tray	The upper tray of Finisher is full.
Full: Hole Punch Receptacle	Punch Chip receptacle for hole punch is full.
Full: Log Data Capacity	Log data capacity is full.
Full: Standard Tray	Standard output tray is full.
Hex Dump Mode	It is a hex dump mode.
Immed. Trans. not connected	It did not connect directly with the other party of the transmission.
Immediate Transmission Failed	An error has occurred while transmitting directly.
Immed. Trans. not connected	It did not connect directly with the other party of the transmission.
Independent-supplier Toner	Toner that is not recommended is set.
In Use: Finisher	Other functions is using Finisher.
In Use: Input Tray	Other functions is using the input tray.

Messages	Description
In Use: Staple Unit	Other functions is using the staple unit.
Jobs Suspended	All jobs are suspended.
Key Card not inserted	The printer is waiting for key card to be inserted.
Key Card/Counter not inserted	The printer is waiting for key card or key counter to be inserted.
Key Counter not inserted	The printer is waiting for key counter to be left in it.
Loading Toner...	Toner is being supplied.
Log Data Transfer failed	Log transfer has failed.
Low: Black Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Low: Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Malfunction: Duplex Unit	There is a problem with duplex unit.
Malfunction: Finisher	There is a problem with Finisher.
Malfunction:Lower Paper Tray(s)	There is a problem with the bank motor.
Malfunction: Output Tray	There is a problem with output tray.
Malfunction: Punch Unit	There is a problem with Punch Unit.
Malfunction: Staple Unit	There is a problem with the staple unit.
Malfunction: Tray 1	There is a problem with tray 1.
Malfunction: Tray 2	There is a problem with tray 2.
Malfunction: Tray 3	There is a problem with tray 3.
Malfunction: Tray 4	There is a problem with tray 4.
Malfunction: LCT	There is a problem with the large capacity tray.
Memory Low: Data Storage	Memory shortage has occurred while the document was being accumulated.

Messages	Description
Miscellaneous Error	Other error has occurred.
Mismatch: Paper Size	Indicated paper tray does not contain paper of selected size.
Mismatch: Paper Size and Type	Indicated paper tray does not contain paper of selected size and type.
Mismatch: Paper Type	Indicated paper tray does not contain paper of selected type.
Near Replacing: Black PCU	Prepare the new black photoconductor unit.
Near Replacing: Develop. Unit K	Prepare the new development unit (black).
Near Replacing: Fusing Unit	Prepare the new fusing unit.
Near Replacing: MaintenanceKitA	Prepare new Maintenance Kit A.
Near Replacing: MaintenanceKitB	Prepare new Maintenance Kit B.
Nearly Full: Log Data Capacity	Log data capacity is nearly full.
Need more Staples	Stapler has almost run out of staples.
No Paper: LCT	There is no paper in Large Capacity tray.
No Paper: Selected Tray	There is no paper in specified tray.
No Paper: Tray 1	There is no paper in tray 1.
No Paper: Tray 2	There is no paper in tray 2.
No Paper: Tray 3	There is no paper in tray 3.
No Paper: Tray 4	There is no paper in tray 4.
Not Detected: B2 Lever	B2 lever is not correctly set.
Not Detected: Black Toner	Black toner is not correctly set.
Not Detected: Develop. Unit (K)	The development unit (black) is not correctly set.
Not Detected: Duplex Feed Unit	The duplex feed unit is not correctly set.
Not Detected: Duplex Unit	The duplex unit is not correctly set.
Not Detected: Finisher	Finisher is not correctly set.

6

Messages	Description
Not Detected: Fusing Unit	The fusing unit is not correctly set.
Not Detected: PCU (K)	The photoconductor unit (black) is not correctly set.
Not Detected: Input Tray	The paper feed tray is not correctly set.
Not Detected: Tray 1	Tray 1 is not correctly set.
Not Detected: Tray 2	Tray 2 is not correctly set.
Not Detected: Tray 3	Tray 3 is not correctly set.
Not Detected: Tray 4	Tray 3 is not correctly set. (LCT)
Not Detected: LCT	Tray 4 is not correctly set.
Not Reached, Data Deleted	Unreached job is deleted.
Not Reached, Data Stored	Unreached job is preserved.
Offline	Printer is offline.
Operating Thermo-range Error	Exceeded appropriate thermo range.
Panel Off Mode	The printer is in Panel-Off mode.
Paper in Duplex Unit	The paper remains in the duplex unit.
Paper in Finisher	The paper remains in Finisher.
Paper Misfeed: Duplex Unit	The paper has jammed in the duplex unit.
Paper Misfeed: Finisher	The paper has jammed in the finisher.
Paper Misfeed: Input Tray	The paper has jammed in the input tray.
Paper Misfeed: Internal/Output	The paper has jammed inside the printer.
Paper on Finisher Shift Tray 2	The paper remains in Finisher Shift Tray 2.
Paper on FinisherShiftTray1, 2	The paper remains in Finisher Shift Tray 1 and 2.
Prepaid Card not inserted	The printer is waiting for prepaid card to be inserted.
Print Complete	The print was completed.

Messages	Description
Printing...	Printing is in progress.
Processing	Data is being processed.
Proxy Address/Port Incorrect	Proxy address or Port No. is incorrect.
Proxy User/Password Incorrect	Proxy user name or Password is incorrect.
Ready	The printer is ready to print.
Renewing Remote Certificate	Remote Certificate is Renewing.
Replace Black PCU	It is time to replace the black photoconductor unit.
Replace Charger Kit	It is time to replace the charger kit.
Replace Cleaning Web	It is time to replace the Cleaning Web.
Replace Develop. Unit (Black)	It is time to replace the development unit (black).
Replace Fusing Unit	It is time to replace the fusing unit.
Replace Int. Transfer Unit	It is time to replace the transfer unit.
Replace Transfer Cleaning Unit	It is time to replace the transfer cleaning unit.
Replace Maintenance Kit A	It is time to replace Maintenance Kit A.
Replace Maintenance Kit B	It is time to replace Maintenance Kit B.
Retarding...	Printing has stopped momentarily to allow printed sheets to dry.
Setting Remotely	The RDS setting is being processed.
SD Card Authentication failed	SD card authentication failed.
SD Card not inserted	SD card is not inserted correctly.
Skipped due to Error	Skipped the error.
Storage Complete	The storage is complete.
Storage Failed	The storage has failed.
Supplies Order Call failed	The supply order call has failed.

6

Messages	Description
Suspend/Resume Key Error	Finisher stop button was pressed.
Transmission Aborted	The transmission was interrupted.
Transmission Complete	The transmission completion was completed.
Transmission Failed	The transmission has failed.
Tray Error: Chaptering	The paper feed tray specification error has occurred because chaptering as well as the normal paper use the same tray for printing.
Tray Error: Duplex Printing	Selected paper tray cannot be used for duplex printing.
Waiting for Job Suspension	All jobs are being suspended.
Warming Up...	The printer is warming up.

6

↓ Note

- For details about UNIX commands, see UNIX Supplement.

Reference

- Check the error contents that may be printed in the configuration page. For details about printing a configuration page, see p.147 "List/Test Print Menu".

Printer Configuration

You can check the printer configuration using telnet.

This section explains the checking procedure for input/output tray and printer language.

- UNIX: Use the "info" command and "rsh", "rcp", "ftp" and "sftp" parameters.
- mshell: Use the "info" command.

Input Tray

Item	Description
No.	ID number of the paper tray
Name	Name of the paper tray
PaperSize	Size of paper loaded in the paper tray

Item	Description
status	Current status of the paper tray • Normal: Normal • NoInputTray: No tray • PaperEnd: No paper

Output Tray

Item	Description
No.	ID number of the output tray
Name	Name of the output tray
status	Current status of the output tray • Normal: Normal • PaperExist: Paper exist • OverFlow: Paper is full • Error: Other errors

Emulation

Item	Description
No.	ID number of the printer language used by the printer
Name	Name of the printer language used in the printer
Version	Version of the printer language

⤓ Note

- For details about UNIX commands and parameters, see UNIX Supplement.

📄 Reference

- For details about mshell "info" commands, see p.216 "Remote Maintenance by telnet".

Understanding the Displayed Information

This section explains how to read status information returned by the network interface board.

Print Job Information

Use the following command to display print job information:

- UNIX: Use the "info" command and "rsh", "rcp", and "ftp" parameters.
- mshell: Use the "info" command.

Item	Description

Rank	Print job status.
	
	  • Active
	    Printing or preparing for printing.
	
	  • 1st, 2nd, 3rd, 4th...
	    Waiting to be transferred to the printer.

Owner	Print request user name.
Job	Print request number.
Files	The name of the document.
Total Size	The size of the data (spooled). The default is 0 bytes.

🔽 **Note**

- For details about UNIX commands and parameters, see UNIX Supplement.

📄 **Reference**

- For details about mshell "info" commands, see p.216 "Remote Maintenance by telnet".

Print Log Information

This is a record of the most recent 16 jobs printed.

Use the following command to display print log information:

- UNIX: Use the "prnlog" command and "rsh", "rcp", and "ftp" parameters.
- telnet : Use the "prnlog" command. See "p.216 "Remote Maintenance by telnet"".

Item	Description
ID	Print request ID.
User	Print request user name.
Page	Number of pages printed
Result	Print Request Result Communication Result • OK Print was completed normally. However, the print result may not be as required due to printer problems. • NG Printing was not completed normally. • Canceled An "rcp", "rsh", or "lpr" command print request was canceled, possibly due to the printing application. Not applicable to the "ftp" or "rprinter" command.
Time	Time the print requested was received. Time of print request reception
User ID	Printer driver-configured User ID. Appears when the print request ID is specified.
JobName	Name of the document for printing Appears when the print request ID is specified.

Note

- For details about UNIX commands and parameters, see UNIX Supplement.

Reference

- For details about mshell "info" commands, see p.216 "Remote Maintenance by telnet".

Configuring the Network Interface Board

Use the following command to display network interface board settings:

- telnet : Use the "show" command.

Item			Description
Common			
	Mode		
	Protocol Up/Down		Protocol Settings
		AppleTalk	
		IPv4	
		IPv6	
		IPsec	
		NetWare	
		SMB	
	Device Up/Down		Device Settings
		Parallel	
		USB	
	Ethernet interface		
	Syslog priority		
	NVRAM version		
	Device name		
	Comment		
	Location		
	Contact		
	Soft switch		
AppleTalk			AppleTalk settings
	Mode		
	Net		
	Object		

Item			Description
	Type		
	Zone		
TCP/IP			TCP/IP settings
	Mode(IPv4)		
	Mode(IPv6)		
		ftp	
		lpr	
		rsh	
		telnet	
		diprint	
		web	
		http	
		ftpc	
		snmp	
		ipp	
		autonet	
		bonjour	
		ssl	
		nrs	
		rfu	
		nbt	
		ssdp	
		ssh	
		sftp	
		WS-Device	

6

Item			Description
	WS-Print		
	ipds		
	rhpp		
IPv4			
	DHCP		
	Address		
	Netmask		
	Broadcast		
	Gateway		
IPv6			
	Stateless		
	Manual		
	Gateway		
	EncapType		
	DHCPv6-lite		
	DUID		
	DHCPv6 option lifetime		
IPsec			
	Manual Mode		
	Excluded Protocol		
		https	
		dns	
		dhcp	
		wins	
EncapType			

Item			Description
Host name			
DNS Domain			
Access Control			Access Control settings
	IPv4		
		AccessEntry[X]	X can be set between 1 and 5.
	IPv6		
		AccessEntry[X]	X can be set between 1 and 5.
SNTP Server			Time settings
Time Zone			
SNTP Server polling time			
SYSLOG server			Websys settings
Home page URL1			
Home page linkname1			
Home page URL2			
Home page linkname2			
Help page URL			
IPDS Port			
IPDS timeout			
RHPP Port			
RHPP timeout			
NetWare			
	EncapType		
	RPRINTER number		
	Print server name		
	File server name		

Item			Description
	Context name		
	Switch		
		Mode	
		NDS/Bindery	
		Packet negotiation	
		Login Mode	
	Print job timeout		
	Protocol		
	SAP interval time		
	NDS Tree Name		
	Transfer Protocol		
SMB			SMB settings
	Switch		
		Mode	
		Direct print	
		Notification	
	Workgroup name		
	Computer name		
	Comment		
	Share name[1]		
	Protocol		
Wireless LAN			Wireless LAN settings
	Host Name		
	Communication Mode		
	SSID		

Item	Description
Channel	
Security	
WEP Authentication	
WEP Encryption key number	
WEP Encryption key number [X]	X can be set between 1 and 4.
WPA Encryption	
WPA Authentication	
Pre-Shared Key	
User name	
Domain name	
EAP Type	
Password	
Phase 2 user name	
Phase 2 Method TTLS	
Phase 2 Method PEAP	
Server cert.	
IntermediateCA	
Server ID	
Sub domain	
MIC check	
DNS	DNS settings
IPv4	
Server[X]	X can be set between 1 and 3.
Selected IPv4 DNS Server	
IPv6	

6

Item			Description
		Server[X]	X can be set between 1 and 3.
		Selected IPv6 DNS Server	
	Resolver Protocol		
Domain Name			
	ether		
	wlan		
DDNS			
	ether		
	wlan		
WINS			WINS settings
	ether		
		Primary WINS	
		Secondary WINS	
	wlan		
		Primary WINS	
		Secondary WINS	
SSDP			SSDP settings
	UUID		
	Profile		
	TTL		
UPnP			UPnP settings
	URL		
Bonjour			Bonjour (Redezvous) settings
	Computer Name (cname)		
	Local Hostname (ether)		

Item	Description
Local Hostname (wlan)	
Location	
Priority (diprint)	
Priority (lpr)	
Priority (ipp)	
IP TTL	
LinkLocal Route for MultiI/F	
IPP Port	
SNMP	SNMP settings
SNMPv1v2	
SNMPv3	
protocol	
v1Trap	
v2Trap	
v3Trap	
SNMPv1v2 Remote Setting	
SNMPv3 Privacy	
ssh	ssh settings
Compression	
Port	
TimeOut	
Login TimeOut	
AuthFree	Authfree settings
IPv4	
AuthFreeEntry[X]	X can be set between 1 and 5.

6

Item			Description
	IPv6		
		AuthFreeEntry[X]	X can be set between 1 and 5
	Parallel		
	USB		
LPR			
	lprm check host		
	lpr prnerr chk		
Certificate			
	Verification		
WS-MFP			
	Network Device Name		
	Comments		
	Location		
	Presentation URL		
	WS-Device TCP Port		
	WS-Printer TCP Port		
	WS-Printer Job Timeout		
	MetadataVersion		
	UUID		
Shell mode			Remote maintenance tool mode

Message List

This is a list of messages that appear in the printer's system log. The system log can be viewed using the "syslog" command.

System Log Information

Use the following command to display the system log information:

- UNIX: Use the "syslog" command and "rsh", "rcp", "ftp", and "sftp" parameters.
- telnet : Use the "syslog" command.

Message	Problem and solutions
account is unavailable: Same account name be used.	User account is disabled. This could be because it use the same account name as the administrator account.
account is unavailable: The authentication password is not set up.	User account is disabled. This could be because the authentication password is not set, and only the encryption account is set.
account is unavailable: encryption is impossible.	Encryption is not possible and account is disabled. This could be because: • Security option is not installed. • Encryption password has not been specified.
add_sess_IPv4: bad trap<IPv4 address>, community:<community name>	The IPv4 address (0.0.0.0.) is unavailable when the community access type is TRAP. Specify the host IPv4 address for the TRAP destination.
add_sess_IPv6: bad trap<IPv6 address>, community:<community name>	The IPv6 address [::] is unavailable when the community access type is TRAP. Specify the host IPv6 address for the TRAP destination.
add_sess_IPv4: community<community name> already defined.	The same community name already exists. Use another community name.
add_sess_IPv6: community <community name> already defined.	The same community name already exists. Use another community name.
adjust time server <NTP sarver> offset:XX sec.	ncsd tells you the timing of the NTP server and whether or not the time system clock is set.

6

273

Message	Problem and solutions
add_sess_IPX: bad trap<IPX address>community <community name>	The IPX address (00:00:00:00:00:00) is unavailable when the community access type is TRAP. Specify the host IPX address for the TRAP destination.
add_sess_IPX: community <community name> already defined.	The same community name already exists. Use another community name.
authenticated	The supplicant is authenticated.
authenticating	The supplicant is authenticating with the access point (EAP or WPA).
Authentication mode mismatch	The authentication mode of the access point is different from the authentication mode of the supplicant. Use the authentication mode between the access point and the supplicant.
Client EAP method rejected	The authentication mode of the access point is different with the authentication mode of the supplicant. Use the same authentication mode between the access point and the supplicant.
Client password rejected	The client's password was rejected. Check the client password.
Client TLS certificate rejected	The client's TLS certificate was rejected. Check the certificate.
connecting	The supplicant is waiting for wireless connection to the access point.
centrod is disabled.	Communication via parallel connections unavailable because centrod is disabled in the security mode. Enable centrod in the security mode.
child process exec error! (process name)	The network service failed to start. Turn the printer off and then on. If this does not work, contact your service or sales representative.

6

Message	Problem and solutions
Client password rejected	The client's password was rejected. Check the client password.
Client tls certificate rejected	The client's TLS certificate was rejected. Check the certificate.
cipher suite mismatch	The uni-cast / multi-cast suite (TKIP/AES/WEP) of the access point is different from the suite used by the supplicant.
Connected DHCPv 6 Server(<DHCPv 6 serveraddress>).	The IP address was successfully received from the DHCPv 6server.
Current Interface Speed: xxxMbps	Speed of the network (10Mbps, 100 Mbps, or 1Gbps).
DHCPv6 server not found.	The DHCPv6 server was not found. Make sure that the DHCPv6 is on the network.
Duplicate IP=<IP address>(from<MAC address>).	The same IP address (IPv4, or IPv6 address) was used. Each IP address (IPv4, or IPv6 address) must be unique. Check the address of the device indicated in [MAC address].
exiting	The lpd service has ended and the system is exiting the process.
IEEE 802.11 <communication mode> mode	Displays Wireless LAN communication mode (infrastructure, or 802.11 ad hoc).
IEEE 802.11 Card does NOT support WPA .	A wireless card that does not support WPA is installed. Install a wireless card that supports WPA.
IEEE 802.11 Card Firmware REV.<version>	Displays the version number of the 802.11 card's firmware.
IEEE 802.11 card removed	The wireless card managed by the supplicant has been removed.
IEEE 802.11 current channel <channel nember>	Displays the current channel number of the active wireless card (in ad hoc and infrastructure mode).

6

Message	Problem and solutions
IEEE 802.11 interface down	The IEEE 802.11 interface managed by the supplicant is disabled, or cannot connect to the access point.
IEEE 802.11 interface up	The IEEE 802.11 interface managed by the supplicant is enabled, or is connected to the access point.
IEEE 802.11 MAC Address = <MAC address>	Displays the MAC address of the wireless interface.
IEEE 802.11 SSID <ssid> (AP MAC Address <MAC address>)	The MAC address and SSID of the access point are connected in infrastructure mode.
IEEE 802.11 <communication mode> mode	Displays IEEE 802.11 communication mode.
inetd start.	The inetd service has started.
Interface (interface name): Duplicate IP Address (IP address).	The same IP (IPv4 or IPv6) address was used. Each IP address must be unique. Check the address of the device indicated in [IP address].
< Interface > started with IP: < IP address >	IP address (IPv4, or IPv4 address) has been set for the interface and is operating.
< Interface >: Subnet overlap.	The same IP address (IPv4, or IPv6 address) and the subnet mask is used with other device.
LEAP challenge to access point failed	The LEAP challenge to the access point has failed.
IPP job canceled. jobid=%d.	The spooled job was canceled due to error or user request.
Memory allocate error.	Data cannot be obtained. Disconnect the USB cable, and then connect it.
MIC failure TKIP counter measures started	The supplicant using TKIP has detected two instances of tampering within 60 seconds and has started counter measures.
MIC failure TKIP counter measures stopped	Counter measures have stopped after 60 seconds (since the supplicant using TKIP started counter measures against tampering).
restarted.	The lpd service has started.

Message	Problem and solutions
server certificate invalid	The server ID is disabled. Check the server authentication.
server identity invalid	The server ID is disabled. Check the server authentication.
server not trusted	The RADIUS server cannot be trusted.
session IPv4 <community name> not defined.	The requested community name is not defined.
session IPv6 <community name> not defined.	The requested community name is not defined.
session_ipx <community name> not defined.	The requested community name is not defined.
shutdown signal received. network service rebooting...	The smbd service has started.
SMTPC: failed to get smtp server ip-address.	The SMTP server IP address could not be obtained. This could be because: • The specified DNS server could not be found. • No connection to the network has been established. • The specified DNS server could not be found. • An incorrect DNS server is specified. • The specified SMTP server IP address could not be found in the DNS server.
SMTPC: failed to connect smtp server. timeout.	Connection to the SMTP server failed due to timeout. This could be because the specified SMTP server name is incorrect, or no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server. Check the SMTP server name, or the network connection and configuration.
SMTPC: refused connect by smtp server.	Connection to the SMTP server is denied. This could be because server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.

6

Message	Problem and solutions
SMTPC: no smtp server. connection close.	Connection to the SMTP server failed due to no response from SMTP. This could be because a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.
SMTPC: failed to connect smtp server.	Connection to the SMTP server failed. This could be because no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server, or the specified SMTP server name is incorrect, or the specified SMTP server IP address could not be found in the DNS server, or a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the DNS Server's IP address and SMTP server's IP address, or the SMTP server name and SMTP port number, or the SMTP server's SMTP port number, or the network connection and configuration.
SMTPC: username or password wasn't correct. [response code] (information)	Connection to the SMTP server failed, because the specified SMTP user name is incorrect, or the specified SMTP password is incorrect. Check the SMTP user name and password.
Snmp over IPv4 is ready	Communication over IPv4 with snmp is available.
Snmp over IPv6 is ready.	Communication over IPv6 with snmp is available.
Snmp over IPX is ready.	Communication over IPX with snmp is available.
snmpd start.	The snmpd service has started.
started.	The direct print service has started.
Started.	The bonjour (rendezvous) function is enabled.
stopped	The supplicant is terminating.
success key received	The supplicant received the EAP-Success key.

Message	Problem and solutions
success but invalid key	The supplicant received a message reporting that EAP authentication was successful, but the EAPOL key was invalid.
terminated.	The direct print service has stoped.
Terminated.	The bonjour (rendezvous) function is disabled.
There is problem in dhcp server operation.	There is a problem with the DHCP server. If multiple DHCP servers are active on the network, check that they are assigning unique IP addresses to each machine.
trap account is unavailable.	v3Trap cannot be sent. This could be because the Trap destination account is different from the account specified by the printer.
unauthenticated	The authentication failed. The supplicant was denied access to the access point, or was not authenticated.
Updated (option name) (value) via DHCPv6 Server	The parameter obtained from the DHCP server has been updated.
waiting for keys	The supplicant is waiting for the session key.
WPA supplicant started	The WPA supplicant has started.
WPA supplicant unbound	The WPA supplicant is not connected to the unbound access point.
WS-Device started.	WS-Device has started.
WS-Printer started.	WS-Printer has started.

🔸 Note

- For details about UNIX commands and parameters, see UNIX Supplement.

🔲 Reference

- For details about "syslog" command, see p.216 "Remote Maintenance by telnet".

6

7. Using a Printer Server

Preparing Printer Server

This section explains how to configure the printer as a Windows network printer. The printer is configured to enabling network clients to use it. When the network printer is connected via SmartDeviceMonitor for Client, you can set the printing notification function to notify clients of the results of their print jobs.

⭐ **Important**

- Under Windows XP Professional or Windows Server 2003, to change printer properties in the [Printer] folder, you need Printer Management access authentication; under Windows Vista, Full Control access authentication. Log on to the file server as an Administrator or member of the PowerUsers group.

1. **Open the [Printers and Faxes] window from the [Start] menu.**

   The [Printers and Faxes] window appears.

2. **Click the icon of the printer you want to use. On the [File] menu, click [Properties]. The printer properties appear.**

3. **On the [Sharing] tab, click [Share this printer].**

4. **To share the printer with users using a different version of Windows, click [Additional Drivers...].**

   If you have installed an alternative driver by selecting [Share As:] during the printer driver installation, this step can be ignored.

5. **Click [OK], and then close the printer properties.**

Printing notification via SmartDeviceMonitor for Client

Follow the procedure below to configure the printer to use the printing notification function of SmartDeviceMonitor for Client.

Setting the print server

⭐ **Important**

- Under Windows XP Professional or Windows Server 2003, to change printer properties in the [Printer] folder, you need Printer Management access authentication; under Windows Vista, Full Control access authentication. Log on to the file server as an Administrator or member of the PowerUsers group.

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Print Server Setting].**

   The print server setting dialog box appears.

2. **Select the [Notify client PCs of printout/data-transmission] check box, and then click [OK].**

   After print server setting is made, a dialog box appears. Confirm the dialog box content, and click [OK].

   Click [Cancel] to interrupt the procedure.

   A dialog box appears for client setting.

3. **Click [OK].**

   The print server setting is completed. Each client must be set to receive print notification.

   🔽Note

   - Current printing jobs restart from the beginning after the spooler pauses briefly.

   - When the expansion function is not used, the function is automatically set as available.

   - If you log on using an account that does not have Administrator privileges, the client may not be notified.

   🔖Reference

   - For details, see p.206 "Using SmartDeviceMonitor for Client".

Setting a client

1. **On the [Start] menu, point to [All Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Extended Features Settings].**

   A dialog box for setting the expansion function appears.

2. **Select the [Notify of printout/data-transmission when using print server] check box.**

3. **Click [OK].**

   The client setting is completed.

   🔽Note

   - Set the printing notification function on the printer driver as well as on SmartDeviceMonitor for Client.

Using NetWare

This section describes the setting procedure for network printers in the NetWare environment. In the NetWare environment, you can connect the printer as a "print server" or "remote printer".

⭐ **Important**

- IPv6 cannnot be used on this function.

Setting procedure

- When using the printer as a print server
    1. Installing SmartDeviceMonitor for Admin
    2. Setting the network interface board.
    3. Turning the printer off and then back on.

- When using the printer as a remote printer
    1. Installing SmartDeviceMonitor for Admin.
    2. Setting the network interface board.
    3. Setting NetWare.
    4. Starting the print server.

⬇ **Note**

- This procedure assumes an environment is already prepared for normal NetWare running the printing service setting.

- The procedure is explained with the following example settings:
    - File server's name ...CAREE
    - Print server's name ...PSERV
    - Printer's name ...R-PRN
    - Queue name ...R-QUEUE

Using SmartDeviceMonitor for Admin

To use the printer in a NetWare environment, use SmartDeviceMonitor for Admin to set the NetWare printing environment.

Printers listed by SmartDeviceMonitor for Admin

SmartDeviceMonitor for Admin lists printers connected to the network. If you cannot identify the printer you want to configure, print configuration page, and then check the printer name.

⬇ **Note**

- The NetWare Client provided by Novell is required to set the printing environment using SmartDeviceMonitor for Admin under the following environments:
    - NDS or Bindery mode in Windows 2000/XP

• For details about SmartDeviceMonitor for Admin, see "Using SmartDeviceMonitor for Admin".

🗉 Reference

• p.192 "Using SmartDeviceMonitor for Admin"

Setting Up as a Print Server (NetWare 3.x)

Follow the procedure below to connect the printer as a print server using NetWare 3.x.

1. **Start Web Image Monitor.**

2. **Click [Login].**

   A dialog box for entering the login user name and password appears.

3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

4. **Click [Configuration] in the left area, and then click [NetWare Print Settings].**

   • Print Server Name: Enter the NetWare print server name. To use the interface board as a print server, enter the name of a print server that is not active on the file server. Use up to 47 characters.

   • Logon Mode: Specify whether to designate a file server or NDS tree when logging on to NetWare.

   • File Server Name: When a file server name is entered here, only the specified file server is searched for. This item is mandatory. Use up to 47 characters.

   • NDS Tree: To enable NDS mode, enter the name of the NDS tree you want to log on to. Use up to 32 alphanumeric characters.

   • NDS Context Name: To enable NDS mode, enter the print server context. Use up to 127 characters.

   • Operation Mode: Specify whether to use the interface board as a print server or a remote printer.

   • Remote Printer No.: This item is effective when the interface board is specified as a remote printer. Enter the same number as the number of the printer to be created on the print server (0 to 254 characters).

   • Job Timeout: When the interface board is used as a NetWare remote printer, the printer cannot detect when a print job ends. Therefore, the printer terminates printing when a certain period of time has elapsed since it last received print data (i.e., when it has not received print data for a certain period of time). Specify here this period of time (3 to 255 seconds). The initial value is 15 (seconds).

   • Frame Type: Select the frame type from the drop-down menu.

   • Print Server Protocol: Select the protocol for NetWare from the drop-down menu.

   • NCP Delivery Protocol: Select the protocol for NCP delivery.

5. **Confirm the settings, and then click [Device Name].**

   Configuration is now complete. Wait several before restarting Web Image Monitor.

6. **Click [Logout].**

↓ Note

- To check the configuration is correct, enter the following from the command prompt:

  `F:> USERLIST`

- If the printer works as configured, the name of the print server appears as a connected user.

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. For details about printing a configuration page, see "Test Printing", Quick Installation Guide.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.

- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

▣ Reference

- p.185 "Using Web Image Monitor"

Setting Up as a Print Server (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to connect the printer as a print server using NetWare 4.x, NetWare 5 / 5.1, or NetWare 6 / 6.5.

★ Important

- **When using the printer as a print server in NetWare 4.x, NetWare 5 / 5.1, or NetWare 6 / 6.5, set it to the NDS mode.**

- **When using NetWare 5 / 5.1 or NetWare 6 / 6.5, set the printer as a print server.**

1. **Start Web Image Monitor.**

2. **Click [Login].**

   A dialog box for entering the login user name and password appears.

3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

4. **Click [Configuration] in the left area, and then click [NetWare Print Settings].**

5. **Confirm the settings, and then click [Device Name].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

6. Click [Logout].

7. Quit Web Image Monitor.

⬇ Note

- To check the configuration is correct, enter the following from the command prompt:

  `F:> USERLIST`

- If the printer works as configured, the name of the print server appears as a connected user.

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. For details about printing a configuration page, see "Test Printing", Quick Installation Guide.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.

- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

⊟ Reference

- p.185 "Using Web Image Monitor"

Using Pure IP in the NetWare 5 / 5.1 or 6 / 6.5 Environment

Follow the procedure below to connect the printer as a print server in a pure IP environment of NetWare 5 / 5.1 or NetWare 6 / 6.5.

⭐ Important

- When creating a queued print server in a pure IP environment of NetWare 5 / 5.1 or NetWare 6 / 6.5, create a print queue on the file server using NetWare Administrator.

- This printer is not available as a remote printer for use in a pure IP environment.

- To use the printer in a pure IP environment, set it to IPv4.

Setting up using NWadmin

1. From Windows, start NWadmin.

   For details about NWadmin, see the NetWare manuals.

2. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.

3. In the [Class of new object] box, click [Print Queue], and then click [OK].

4. In the [Print Queue Name] box, enter the name of the print queue.

5. In the [Print Queue Volume] box, click [Browse].

6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].

7. Check the settings, and then click [Create].

8. Select the object in which the printer is located, and then click [Create] on the [Object] menu.

9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].

10. In the [Printer name] box, enter the printer name.

11. Select the [Define additional properties] check box, and then click [Create].

12. Click [Assignments], and then click [Add] in the [Assignments] area.

13. In the [Available objects] box, click the queue you created, and then click [OK].

14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].

15. Click [Manual load] in the [Communication type] area, and then click [OK].

16. Check the settings, and then click [OK].

17. Select a context specified, and then click [Create] on the [Object] menu.

18. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Sever (Non NDPS)].

19. In the [Print Server Name] box, enter the print server name.

    Use the same print server name specified using SmartDeviceMonitor for Admin.

20. Select the [Define additional properties] check box, and then click [Create].

21. Click [Assignments], and then click [Add] in the [Assignments] area.

22. In the [Available objects] box, click the queue you created, and then click [OK].

23. Check the settings, and then click [OK].

24. Start the print server by entering the following from the console of the NetWare server.

    If the print server is in operation, quit and restart it.

    To quit

    ```
    CAREE: unload pserver
    ```

    To start

    ```
    CAREE: load pserver print_server_name
    ```

Setting up using Web Image Monitor

1. Start Web Image Monitor.

2. Click [Login].

   A dialog box for entering the login user name and login password appears.

3. **Enter the user login user name and password, and then click [Login].**

   For details about the login name and password, consult your network administrator.

4. **Click [Configuration] in the left area, and then click [NetWare Print Settings].**

5. **Confirm the settings, and then click [Device Name].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

6. **Click [Logout].**

7. **Quit Web Image Monitor.**

⬇ Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. For details about printing a configuration page, see "Test Printing", Quick Installation Guide.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.

- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

🔖 Reference

- p.185 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 3.x)

Follow the procedure below to use the printer as a remote printer under NetWare 3.x.

Setting up using PCONSOLE

1. **Enter "PCONSOLE" from the command prompt.**

   `F:> PCONSOLE`

2. **Create a print queue.**

   When using the existing print queue, go to the procedure for creating a printer.

3. **From the [Available Options] menu, select [Print Queue Information], and then press the [Enter] key.**

4. **Press [Insert] key, and then enter a print queue name.**

5. **Press [Esc] key to return to the [Available Options] menu.**

6. **Set up the network connection to a printer.**

7. **On the [Available Options] menu, click [Print Server Information], and then press the [Enter] key.**

8. **To create a new print server, press the [Insert] key, and then enter a print server name.**

   For a currently defined print server, select a print server in the [Print Server] list.

   Use the same printer name specified using SmartDeviceMonitor for Admin.

9. **From the [Print Server Information] menu, select [Print Server Configuration].**

10. **From the [Print Server Configuration] menu, select [Printer Configuration].**

11. **Select the printer indicated as [Not Installed].**

    Use the same printer number specified as the remote printer number using SmartDeviceMonitor for Admin.

12. **To change the printer name, enter a new name.**

    A name "printer x" is assigned to the printer. The "x" stands for the number of the selected printer.

13. **As type, select [Remote Parallel, LPT1].**

    The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

14. **Press the [Esc] key, and then click [Yes] on the confirmation message.**

15. **Press the [Esc] key to return to [Print Server Configuration Menu].**

16. **Assign print queues to the created printer.**

17. **From [Print Server Configuration Menu], select [Queues Serviced By Printer].**

18. **Select the printer created.**

19. **Press the [Insert] key to select a queue serviced by the printer.**

    You can select several queues.

20. **Follow the instructions on the screen to make other necessary settings.**

    Following these steps, check that the queues are assigned.

21. **Press the [Esc] key until "Exit?" appears, and then select [Yes] to exit PCONSOLE.**

22. **Start the print server by entering the following from the console of the NetWare server.**

    If the print server is in operation, quit and restart it.

    To quit

    ```
    CAREE: unload pserver
    ```

    To start

    ```
    CAREE: load pserver print_server_name
    ```

    If the printer works as configured, the message "Waiting for job" appears.

Setting up using Web Image Monitor

1. **Start Web Image Monitor.**

2. **Click [Login].**

   A dialog box for entering the login user name and login password appears.

3. **Enter the login user name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

4. **Click [Configuration] in the left area, and then click [NetWare Print Settings].**

5. **Confirm the settings, and then click [Device Name].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

6. **Click [Logout].**

7. **Quit Web Image Monitor.**

⬇ **Note**

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. For details about printing a configuration page, see "Test Printing", Quick Installation Guide.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.

- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

🔖 **Reference**

- p.185 "Using Web Image Monitor"

Setting Up as a Remote Printer (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to use the printer as a remote printer under NetWare 4.x, 5 / 5.1 and 6 / 6.5.

⭐ **Important**

- To use the printer as a remote printer under NetWare 4.x, 5 / 5.1, 6 / 6.5, set it to NDS mode.

- Do not use the printer as a remote printer when Pure IP is used.

Setting up using NWadmin

1. **From Windows, start NWadmin.**

   For details about NWadmin, see the NetWare manuals.

2. **Set up the network connection to a print queue. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.**

3. **In the [Class of new object] box, click [Print Queue], and then click [OK].**

4. **In the [Print Queue Name] box, enter the name of the print queue.**

5. **In the [Print Queue Volume] box, click [Browse].**

6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].

7. Check the settings, and then click [Create].

8. Set up the network connection to a printer. Select the object in which the printer is located, and then click [Create] on the [Object] menu.

9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].

10. In the [Printer name] box, enter the printer name

11. Select the [Define additional properties] check box, and then click [Create].

12. Assign print queues to the created printer. Click [Assignments, and then click [Add] in the [Assignments] area.

13. In the [Available objects] box, click the queue you created, and then click [OK].

14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].

15. Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].

16. Set up the network connection to a print server. Select a context specified, and then click [Create] on the [Object] menu.

17. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Sever (Non NDPS)].

18. In the [Print Server Name:] box, enter the print server name.

    Use the same print server name specified using SmartDeviceMonitor for Admin.

19. Select the [Define additional properties] check box, and then click [Create].

20. Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.

21. In the [Available objects] box, click the queue you created, and then click [OK].

22. In the [Printers] area, click the printer you assigned, and then click [Printer Number].

23. Enter the printer number, and then click [OK]. Check the settings, and then click [OK].

    Use the same printer number specified as the remote printer number using SmartDeviceMonitor for Admin.

24. Start the print server by entering the following from the console of the NetWare server.

    If the print server is in operation, quit and restart it.

    To exit

    ```
    CAREE: unload pserver
    ```

    To start

    ```
    CAREE: load pserver print_server_name
    ```

25. **Enter the printer server name as the context name, and then press the [Enter] key.**

26. **Select the printer name on the context menu, and then press the [Enter] key.**

Setting up using Web Image Monitor

1. **Start Web Image Monitor.**

2. **Click [Login].**

   A dialog box for entering the login user name and login password appears.

3. **Enter the user login name and password, and then click [Login].**

   For details about the login user name and password, consult your network administrator.

4. **Click [Configuration] in the left area, and then click [NetWare Print Settings].**

5. **Confirm the settings, and then click [Device Name].**

   Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

6. **Click [Logout].**

7. **Quit Web Image Monitor.**

🔽 **Note**

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. For details about printing a configuration page, see "Test Printing", Quick Installation Guide.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.

- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Guide, which is the administrator's manual.

📑 **Reference**

-

8. Mac OS Configuration

Mac OS

This section explains how to configure a Mac OS to use EtherTalk and USB.

The following explains how to configure Mac OS 9.1. If you are not using Mac OS 9.1, see the manual of the Mac OS you are using for details.

⭐ **Important**

- For Mac OS 8.6 and higher. (Mac OS X Classic environment is supported.)

↓ **Note**

- The PostScript 3 printer driver is stored in "Mac OS 8 and 9:PS Driver:(language):Disk1" on the CD-ROM.

Installing the PostScript 3 Printer Driver and PPD File

It is necessary to install a printer driver and PostScript Printer Description (PPD) files to print from a Mac OS.

Follow the procedure below to install a printer driver and a PPD file into a Mac OS using Mac OS 8.6 and higher.

PostScript 3 Printer Driver

1. **Insert the CD-ROM into the CD-ROM drive.**
2. **Double-click the CD-ROM drive icon.**
3. **Double-click the [Mac OS 8 and 9] folder.**
4. **Double-click the [PS Driver] folder.**
5. **Double-click the folder of the language you use.**
6. **Open [Disk1], and then double-click the installer icon.**
7. **Follow the instructions on the screen.**

PPD Files

1. **Double-click the CD-ROM drive icon.**
2. **Double-click the [Mac OS 8 and 9] folder.**
3. **Double-click the [Printer Descriptions] folder.**
4. **Double-click the folder of the language you use.**
5. **Open the [Disk1] folder.**

6. Drag the PPD file and the plugin file into [Printer Descriptions] in [Extensions] under [System Folder].

7. Restart the Mac OS.

Setting Up PPD Files

⭐ **Important**

- Make sure that the printers are connected to an Apple Talk network before performing the following procedure.

1. On the [Apple] menu, click [Chooser].

2. Click the Adobe PS icon.

3. In the [Select a PostScript Printer:] list, click the name of the printer you want to use.

4. Click [Create].

5. Click the printer you want to use, and then click [Select].

6. A PPD file is set up and the Adobe PS icon appears at the left of the printer name in the list.

Creating a Desktop Printer Icon

⭐ **Important**

- Make sure that printers are connected to the USB before performing the following procedure.

To use a printer connected by USB, create a desktop printer icon.

1. Double-click [Desktop Printer Utility] in the [AdobePS Components] folder.

2. Click [AdobePS] in [With], click [Printer (USB) in] Create Desktop, and then click [OK].

3. Click [Change] in [USB Printer Selection].

4. Select the model you are using in [Select a USB Printer:], and then click [OK].

5. Click [Create].

6. Enter the printer name, and then click [Save].

7. Quit Desktop Printer Utility.

Setting Up Options

1. On the [Apple] menu, click [Chooser].

2. Click the Adobe PS icon.

3. **In the [Select the PostScript Printer:] list, click the name of the printer you want to use, and then click [Setup...].**

4. **Click [Configure].**

   A list of options appears.

5. **Select the option you want to set up, and then select an appropriate setting for it.**

6. **Click [OK].**

   The list of options closes.

7. **Click [OK].**

   The [Chooser] dialog box appears.

8. **Close the [Chooser] dialog box.**

   ⬇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.

Installing Adobe Type Manager

⭐Important

- Quit all applications currently running before installation. Install ATM after you restart the computer.

1. **Start a Mac OS.**

2. **Insert the CD-ROM into the CD-ROM drive.**

3. **Double-click the CD-ROM drive con.**

4. **Double-click the [Mac OS 8 and 9] folder.**

5. **Double-click the [ATM folder].**

6. **Double-click the ATM 4.6.2 installer icon.**

7. **Follow the instructions on the screen.**

8. **When the procedure is complete, restart the computer. ATM will be completely installed only after restarting.**

9. **On the [Apple] menu, open [Control Panel], and then click [~ATM].**

   The ATM control panel opens.

   ⬇Note

   - For details about installation, see the operating instructions in the ATM folder.

Installing Screen Fonts

Follow the procedure below to install screen fonts.

The screen fonts described below can be found in the [Fonts] folder on the CD-ROM.

1. **Start a Mac OS.**

2. **Insert the CD-ROM into the CD-ROM drive.**

    The CD-ROM drive icon appears.

3. **Double-click the CD-ROM drive icon.**

    The contents of the CD-ROM appear.

4. **Double-click the [Mac OS 8 and 9] folder.**

5. **Double-click the [Fonts] folder.**

6. **Double-click the [ScreenFonts] folder.**

7. **Double-click the [TrueType] or Type1 folder.**

    Select the font type you want to use.

8. **Copy the fonts you want to install in Fonts under [System Folder].**

9. **A confirmation message appears.**

10. **Click [OK].**

    The fonts are installed.

11. **Restart the Mac OS.**

Changing to EtherTalk

Follow the procedure below to configure to a Mac OS to use EtherTalk.

1. **Open [Control Panel], and then double-click the Apple Talk icon.**

2. **On the [Connect via:] pop-up menu, click [Ethernet].**

3. **If you change zones, select a name on the [OK] pop-up menu.**

4. **Close the Apple Talk control panel.**

5. **Restart the computer.**

    ⬇Note

    • The procedures used to configure Mac OS may vary depending on the Mac OS version. The following describes how to configure Mac OS 9.1. If you are using a different version of Mac OS, use the following procedures as a reference and see the manuals for your Mac OS version.

    • Confirm the Connection to the Printer with TCP/IP.

    • For information about installing applications required for EtherTalk, see the Mac OS manuals.

Mac OS X

This section explains how to configure a Mac OS X to use EtherTalk and USB.

Follow the procedure below to configure Mac OS X 10.1. If you are not using Mac OS X 10.1, see the manual of the Mac OS X you are using for details.

⭐ **Important**

- **For Mac OS X 10.1 or higher.**

⬇ **Note**

- The PPD files are stored in "Mac OS X:PPD Installer" on the CD-ROM.

Installing the PPD Files

Follow the procedure below to install a PPD file to print from Mac OS X.

⭐ **Important**

- **You need an administrator name and a password (phrase). For details, consult your administrator.**

1. **Insert the CD-ROM into the CD-ROM drive.**
2. **Double-click the CD-ROM drive icon.**
3. **Double-click the [Mac OS X] folder.**
4. **Double-click the [MacOSX PPD Installer] folder.**
5. **Double-click the installer icon.**
6. **Follow the instructions on the screen.**

Setting Up the PPD File

1. **Start Printer Setup Utility.**
2. **Click [Add].**

   Mac OS X 10.4 or later

   Click [More Printers...]. Then select the zone from the second pop-up menu.

   Other Mac OS X

   Click [AppleTalk] on the first pop-up menu.

   If the zone is set, select the zone from the second pop-up menu.

3. **Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.**
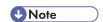
   Under Mac OS X 10.4 or later, select the printer you are using from the [Print Using] popup menu.

8

A list of printer types appears.

4. **Select the PPD file for the model you are using, and then click [Add].**

5. **Quit Printer Setup Utility.**

Setting Up Options

1. **Start System Preferences.**

2. **Click [Print & Fax].**

3. **In the [Printer] list, click the name of the printer you want to use, and then click [Printer Setup...].**

4. **Select the option you want to set up, and then select an appropriate setting for it.**

5. **Click [Apply Changes].**

   🔸 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.

Using USB Interface

Follow the procedure below to setup USB connection.

1. **Start Printer Setup Utility.**

2. **Click [Add].**

   Mac OS X 10.4 or later

   Click a printer that has "USB" indicated in the "Connection" column.

   Other Mac OS X

   Click [USB] on the pop-up menu.

   The connected printer appears.

3. **Select the printer, and then select its manufacturer from the [Printer Model:] pop-up menu.**

   Under Mac OS X 10.4 or later, you are using from the [Print Using] pop-up menu.

   A list of printer types appears.

4. **Select the connected printer from the list of printer models, and then click [Add].**

5. **Quit Printer Setup Utility.**

🔽**Note**

- When printing with a USB connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.
- USB2.0 can be used only with Mac OS X 10.3.3 or higher.

Using Bonjour

Follow the procedure below to print using Bonjour under Mac OS X 10.2.3 or higher. Ethernet, wireless LAN connections can also be used.

1. **Start Printer Setup Utility.**
2. **Click [Add].**

   Mac OS X 10.4 or later

   Click a printer that has "Bonjour" indicated in the "Connection" column.

   Other Mac OS X

   Click [Rendezvous] on the pop-up menu.
3. **Select the name of the connected printer from the list of printer models, and then click [Add].**

   Under Mac OS X 10.4 or later, Installable Options window appears. Select the option you want to set up, and then select an appropriate setting for it, and then [Continue].
4. **Quit Printer Setup Utility.**

   When printing with a Rendezvous connection to a Macintosh computer, printer language does not change automatically. Use the control panel on this printer to change printer language to [Auto Detect] or [PS] before printing.

Changing to EtherTalk

Follow the procedure below to configure a Mac OS X to use EtherTalk.

⭐**Important**

- You need an administrator name and a password (phrase). For details, consult your administrator

1. **Open [System Preference], and then click the Network icon.**
2. **Click [Built-in Ethernet] in the [Show:] list box.**
3. **Click the [AppleTalk] tab.**
4. **Select the [Make AppleTalk Active] check box.**

5. **To change Apple Talk zones, select a name from the [AppleTalk Zone:] pop-up menu.**

6. **When the settings are made, click [Apply Now].**

   Quit [System Preference].

   🔽Note

   • For information about installing applications required for EtherTalk, see the Mac OS manuals.

Configuring the Printer

Use the control panel to enable Apple Talk. (The default is active.)

8

Using PostScript 3

Job Type

Use this to select the type of print job.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Job Type:] on [Job Log] in the print dialog box.
Mac OS X	[Job Type:] on [Job Log] in the print dialog box.

You can select the following items:

Normal Print

Select this for normal printing. The print job starts immediately after the print command is given.

Sample Print

Use this function to print only one set of a multiple print jobs.

The other sets are saved in the printer. The saved job can be printed from the printer's control panel. You can also delete the saved job.

⬇️Note

- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- Entering the "User ID:" helps you distinguish your print job from others.

Locked Print

Use this function to save documents in the printer memory with a password, and then edit and print them as you want.

⬇️Note

- The "User ID:" can contain to eight alphanumeric (a-z, A-Z, 0-9) characters. The "Password" must be 4-8 digits.
- Entering the "User ID:" helps you distinguish your print job from others.

Hold Print

Use this function to temporarily hold a file in the printer, and print it from the computer or the printer's control panel later.

⬇️Note

- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- Entering the "User ID:" helps you distinguish your print job from others.

Stored Print

Use this function to store a file in the printer, and then print it from the computer or the printer's control panel later.

⬇Note

- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters. The "Password" must be 4-8 digits.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- You can assign a password to a saved document, but password assignment is not mandatory.
- Entering the "User ID:" helps you distinguish your print job from others.

Store and Print

Use this function to prints the file at once and also stores the file in the printer.

⬇Note

- The "User ID:" can contain up to eight alphanumeric (a- z, A- Z, 0- 9) characters. The "Password" must be 4-8 digits.
- The "File Name:" can contain to 16 alphanumeric (a-z, A-Z, 0-9) characters.
- You can assign a password to a saved document, but password assignment is not mandatory.
- Entering the "User ID:" helps you distinguish your print job from others.

Using sample print

⭐Important

- You need Mac OS X v10.2 or higher to use this function.
- The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print, Hold Print and Stored Print.
- Sample Print files will not appear on the display panel if they have already been executed or deleted using the Web browser before you select [Sample Print] from the control panel.
- Sample Print files printed or deleted using Web Image Monitor after you select [Sample Print] using the control panel will appear on the display panel. However, an error message will appear if you try to print or delete those Sample Print files.
- If the application has a collate option, make sure that it is not selected before sending a print job. By default, sample print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.
- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.

8

- When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
- When the total number of pages saved on the hard disk exceeds 9,000 pages.

1. **In the application, on the [File] menu, click [Print].**

   The [Print] dialog box appears.

2. **Set the number of copies to two or more.**

   The sample print job is sent to the printer, and one set is printed.

3. **In the pop-up menu, click [Job Log].**

4. **On the [Job Type:] pop-up menu, select [Sample Print].**

5. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters.**

   The user ID associates the user with his/her jobs.

6. **Check the printed output to make sure the settings are correct.**

   If the settings are correct, perform the following steps to print the remaining sets.

   If you want to delete a saved job, see "Sample Print".

7. **On the printer's control panel, press [Prt.Jobs].**

8. **Select [Sample Print Jobs], and then press [Job List].**

   A list of sample print files stored in the printer appears.

   User ID, Date/Time and File Name also appear.

9. **Select the file you want to print by pressing it.**

   A list of print files stored in the printer appears.

10. **Press [Print] to change the number of sets to be printed.**

11. **Enter the new number of sets using the number keys.**

    If you do not want to change the set quantity, perform the following steps.

    You can enter up to 999 sets.

    Press [Escape] to correct any entry mistakes.

12. **Press [Print].**

    The remaining sets are printed.

🔽Note

- Press [Cancel] to cancel printing.
- When printing finishes, the stored file is deleted.
- To stop printing after printing has started, press [JobReset]. The file will be deleted.
- If there is a print job outstanding, this is printed before the sample print job.

⊟ **Reference**

- p.87 "Sample Print"

Deleting a Sample Print File

1. **Press [Prt.Jobs].**

   A list of print files stored in the printer appears.

2. **Select [Sample Print Jobs], and then press [Job List].**

   A list of sample print files stored in the printer appears.

3. **Select the file you want to delete by pressing it.**

   To cancel a selection, press the highlighted jobs again.

   Only one file can be selected at a time.

4. **Press [Delete].**

   A confirmation screen appears.

5. **Press [Delete] to delete the file.**

   After the file is deleted, the printer screen reappears.

⬇ **Note**

- Press [Cancel] to cancel the delete request.

Using locked print

⭐ **Important**

- You need Mac OS X v10.2 or higher to use this function.

- The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print and Hold Print.

- Locked Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [Locked Print] using the control panel.

- Locked Print files printed or deleted using Web Image Monitor after you have selected [Locked Print] using the control panel will still appear on the display panel. However, an error message will appear if you try to print or delete those Locked Print files.

- If the application has a collate option, make sure that it is not selected before sending a print job. By default, locked print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.

  - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.

8

- **When the total number of pages saved on the hard disk exceeds 9,000 pages.**

1. **In the application, click [Print] on the [File] menu.**

   The [Print] dialog box appears.

2. **In the pop-up menu, click [Job Log].**

3. **On the [Job Type:] pop-up menu, click [Locked Print].**

4. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box.**

   The user ID associates the user with his/her jobs.

5. **After making the necessary settings, click [Print].**

   The document file is saved in the printer.

   To print the document, perform the following steps.

   To delete the document, see "Locked Print".

6. **On the printer's control panel, press [Prt.Jobs].**

7. **Select [Locked Print Jobs], and then press [Job List].**

   A list of locked print files stored in the printer appears.

   User ID, Date/Time and File Name also appear.

8. **Select the file you want to print by pressing it.**

   A list of print files stored in the printer appears.

9. **Press [Print].**

   The password screen appears.

10. **Enter the password using the scroll keys, and then press [OK].**

    A confirmation screen appears.

    A confirmation screen will appear if the password is not entered correctly. Press [OK] to enter the password again.

11. **Press [Print].**

    The locked file is printed.

🡇 **Note**

- Press [Cancel] to cancel printing.

- When printing finishes, the stored file is deleted.

- To stop printing after printing has started, press [JobReset]. The file will be deleted.

🗐 **Reference**

- p.90 "Locked Print"

Deleting a Locked Print File

1. **Press [Prt.Jobs].**

   A list of print files stored in the printer appears.

2. **Select [Locked Print Jobs], and then press [Job List].**

   A list of locked print files stored in the printer appears.

3. **Select the file you want to delete by pressing it.**

   To cancel a selection, press the highlighted jobs again.

   Only one file can be selected at a time.

4. **Press [Delete].**

   A password screen appears.

5. **Enter the password using the scroll keys, and then press [OK].**

   A confirmation screen appears.

   A confirmation screen will appear if the password is not entered correctly. Press [Clear] to enter the password again.

   When multiple files are selected, the printer deletes only files that correspond to the entered password. The number of files to be deleted is displayed on the confirmation screen.

6. **Press [Delete].**

   After the file is deleted, the printer screen reappears.

🔽 **Note**

- Press [Cancel] to cancel the delete request.

Using hold print

⭐ **Important**

- You need Mac OS X v10.2 or higher to use this function.

- The number of pages the printer can save varies depending on the contents of the print images. At most, the printer can save 100 jobs or 9,000 pages for Sample Print, Locked Print and Hold Print.

- Hold Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [Hold Print] using the control panel.

- Hold Print files printed or deleted using Web Image Monitor after you have selected [Hold Print] using the control panel will still appear on the display panel. However, an error message will appear if you try to print or delete those Hold Print files.

- If the application has a collate option, make sure that it is not selected before sending a print job. By default, Hold print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

- Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.
  - When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.
  - When the total number of pages saved on the hard disk exceeds 9,000 pages.

1. **In the application, click [Print] on the [File] menu.**

   The [Print] dialog box appears.

2. **In the pop-up menu, click [Job Log].**

3. **On the [Job Type:] pop-up menu, click [Hold Print].**

4. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters. File Name can also be set.**

   The user ID associates the user with his/her jobs.

5. **After making the necessary settings, click [Print].**

   The document file is saved in the printer.

   To print the document, perform the following steps.

To delete the document, see "Hold Print".

1. **On the printer's control panel, press [Prt.Jobs].**

   A list of print files stored in the printer appears.

2. **Select [Hold Print Jobs], and then press [Job List].**

   A list of hold print files stored in the printer appears.

   User ID, Date/Time and File Name also appear.

3. **Select the file you want to print by pressing it.**

4. **Press [Print].**

   The hold print file is printed.

⬇ **Note**

- Press [Cancel] to cancel printing.
- To stop printing after printing has started, press [Job Reset]. The file will be deleted.
- When printing is completed, the stored file is deleted.

📘 **Reference**

- p.93 "Hold Print"

Deleting a Hold Print File

1. **Press [Prt.Jobs].**

   A list of print files stored in the printer appears.

2. **Select [Hold Print Jobs], and then press [Job List].**

   A list of hold print files stored in the printer appears.

   Depending on the security settings, certain print jobs may not be displayed.

3. **Select the file you want to delete by pressing it.**

   To cancel a selection, press the highlighted job again.

   Only one file can be selected at a time.

4. **Press [Delete].**

   A confirmation screen appears.

5. **Press [Delete].**

   After the file is deleted, the printer screen reappears.

⬇ **Note**

• Press [Cancel] to cancel the delete request.

Using stored print

⭐ **Important**

• You need Mac OS X v10.2 or higher to use this function.

• Stored Print files will not appear on the display panel if they have already been printed or deleted using Web Image Monitor before you select [Stored Print] using the control panel.

• Stored Print files printed or deleted using Web Image Monitor after you have selected [Stored Print] using the control panel will still appear on the display panel. However, an error message will appear if you try to print or delete those Stored Print files.

• If the application has a collate option, make sure that it is not selected before sending a print job. By default, Stored print jobs are automatically collated by the printer driver. If the collate option is selected in the application print dialog box, more prints than intended may be printed.

• Print jobs are not saved on the hard disk in the following cases. You can check the error log for jobs not saved.

   • When there are 100 Sample Print, Locked Print, Hold Print and Stored Print jobs saved on the hard disk.

   • When the total number of pages saved on the hard disk exceeds 9,000 pages.

1. **In the application, click [Print] on the [File] menu.**

   The [Print] dialog box appears.

2. **In the pop-up menu, click [Job Log].**

3. **On the [Job Type:] pop-up menu, click [Stored Print] or [Store and Print].**

   • [Stored Print]

Stores the file in the printer and print it later using the control panel.

- [Store and Print]

    Prints the file at once and also stores the file in the printer.

4. **In the [User ID:] box, enter a user ID using up to eight alphanumeric (a-z, A-Z, 0-9) characters, and then enter a 4-8 digit password in the [Password:] box. File Name can also be set.**

    The user ID associates the user with his/her jobs.

    You can assign a password to a saved document, but password assignment is not mandatory.

    The password must be entered when printing or deleting.

5. **After making the necessary settings, click [Print].**

    The document file is saved in the printer.

    To print the document, perform the following steps.

To delete the document, see "Stored Print".

1. **On the printer's control panel, press [Prt.Jobs].**

    A list of print files stored in the printer appears.

2. **Select [Stored Print Jobs], and then press [Job List].**

    A list of Stored Print files stored in the printer appears.

    User ID, Date/Time and File Name also appear.

    Depending on the security settings, certain print jobs may not be displayed.

3. **Select the file you want to print by pressing it.**

4. **Press [Print].**

    A confirmation screen appears.

    If you have already set a password, proceed to the following step.

5. **Enter the password using the scroll keys, and then press [OK].**

    A confirmation screen appears.

    A confirmation screen will appear if the password is not entered correctly. Press [OK] to enter the password again.

    If you have not set the password, proceed to the following step.

6. **Press [Print].**

    The Stored Print file is printed.

Note

- Press [Cancel] to cancel printing.

- Stored Print files sent to the printer is not deleted unless you delete them in the printer, or enable automatic deletion of Stored Print files.

- p.96 "Stored Print"

Deleting a Stored Print File

1. **Press [Prt.Jobs].**

   A list of print files stored in the printer appears.

2. **Select [Stored Print Jobs], and then press [Job List].**

   A list of Stored Print files stored in the printer appears.

3. **Select the file you want to delete by pressing it.**

4. **Press [Delete].**

   A confirmation screen appears.

5. **Enter the password using the scroll keys, and then press [OK].**

   A confirmation screen appears.

   A confirmation screen will appear if the password is not entered correctly. Press [OK] to enter the password again.

6. **Press [Delete].**

   After the file is deleted, the printer screen reappears.

🔽 **Note**

- Press [Cancel] to cancel the delete request.
- If you have already set a password in the printer driver, enter it to delete.

User Code

Use this to set a user code for print logging.

Enter a user code using up to eight digits. A user code identifies a group of users and allows you to check the number of sheets printed under each code with SmartDeviceMonitor for Admin.

The following table shows the tabs or menus where you can select this function.

Mac OS	Select the [Enable User Code] check box, and then enter a user code in the [User Code] box on [Job Log] in the print dialog box.
Mac OS X	Select the [Enable User Code] check box, and then enter a user code in the [User Code] box on [Job Log] in the print dialog box.

Paper Size

Use this to select the size of paper you want to use.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Paper:] on the [Page Attributes] tab in the Page Setup dialog box.
Mac OS X	[Paper Size:] in the Page Setup dialog box.

Note

- For details about the paper sizes supported by this printer, see Hardware Guide.

Fit to Paper

When the size of the document and paper size differ, set whether or not to print according to paper size.

Mac OS	[Fit to Paper] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Fit to Paper] on the [Features x] tab on [Printer Features] in the print dialog box.

Prompt User

Print is performed with the size of document to be printed unchanged.

Nearest Size and Scale

If the paper size is smaller than the selected paper size, the driver reduces the print size.

If the paper size is larger than the size of document to be printed, print is not to fit the paper size.

Nearest Size and Crop

When the paper size is smaller than the size of document to be printed, print is adjusted to meet the paper size.

Input Slot

Use this to select the paper sources.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Paper Source:] on [General] in the print dialog box.
Mac OS X	[Paper Feed] in the print dialog box.

⬇Note

- For details about the paper sources, see Hardware Guide.

Resolution

Use this to set the resolution types.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Resolution] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Resolution] on the [Features x] tab on [Printer Features] in the print dialog box.

⬇Note

- For more information about the resolution types, see Hardware Guide.

Orientation Override

Use this to set the paper orientation.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Orientation Override] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Orientation Override] on the [Feature Sets: X] tab on [Printer Features] in the print dialog box.

You can select the following items:

- Off

- Landscape

- Portrait

Duplex Printing

Use this function to select duplex printing.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Print on Both Sides] on [Layout] in the print dialog box.
Mac OS X	• 10.3 or higher The [Two Sided Printing] check box on [Layout] in the print dialog box. • Other Mac OS X The [Print on both Sides] check box on [Duplex] in the print dialog box.

None

Disables duplex printing.

Flip on Long Edge

Prints so you can open it to the long edge when bound along the long edge.

Flip on Short Edge

Prints so you can open it to the short edge when bound along the short edge.

Collate

Use this function to enable collation. With this feature, the printer can efficiently print collated sets of multiple-page documents.

⭐Important

- Make sure that the following check boxes have not been selected.
    - Mac OS

        The [Collate] check box in the print dialog box.
    - Mac OS X
- The [Collate] check box on [Copies & Pages] in the printer dialog box.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Collate] on [Printer Specific Options] in the print dialog box.

Mac OS X	[Collate] on the [Features: Set x] tab on [Printer Feature] in the printer dialog box.

Paper Type

Use this to select the paper type.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Paper Type:] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Paper Type] on the [Feature Set: x] tab on [Printer Features] in the print dialog box.

↓Note

- For details about the media type supported by this printer, see Hardware Guide.

Image Smoothing

Use this to select the image smoothing type.

The following table shows the tabs or menus where you can select this function.

Mac OS	[Image Smoothing] on [Printer Specific Options] in the print dialog box.
Mac OS X	[Image Smoothing] on the [Feature Set: x] tab on [Printer Features] in the print dialog box.

Off

Disables image smoothing.

On

Performs image smoothing unconditionally.

Auto

Performs image smoothing automatically for images that have a resolution less than 25% of supported printer resolution.

Less than 90 ppi - Less than 300 ppi

Performs image smoothing only when the image has an image resolution (pixels per inch) less than the respective value you have selected in the list.

⬇ Note

- When Auto is selected, data processing may take a long time.

- When [Image Smoothing] is used for a mask image, this function may have an undesired effect on the print result.

Dithering

Use this function to set the Image Rendering mode.

The following table shows the tabs or menus where you can select this function.

Mac OS	Dithering: on Printer Specific Options in the print dialog box.
Mac OS X	Dithering: on the Feature Set: x tab on Printer Features in the print dialog box.

You can select the following items:

Auto

Use this setting to configure the best dithering method automatically depending on the appearance of the document to be printed.

Photographic

Performs dithering using an appropriate pattern for photographs.

Text

Performs dithering using an appropriate pattern for text.

User Setting

Use this setting to print images set in half tone in your application.

Printer Utility for Mac

By using Printer Utility for Mac, you can download fonts, change the name of the printer and so on.

★ Important

- If a Macintosh and printer are connected by USB, you cannot use Printer Utility for Mac.

⬇ Note

- Printer Utility for Mac is included on the CD-ROM labeled "Printer Drivers and Utilities".

- Printer Utility for Mac requires Mac OS 7.6.1-9.x, or Mac OS X 10.1.x or 10.2.1. Mac OS X 10.0.x and 10.2 are not supported.

Installing Printer Utility for Mac

Follow these steps to install Printer Utility for Mac on the printer.

1. **Start the Macintosh.**

2. **Insert the CD-ROM into the CD-ROM drive.**

   The CD-ROM icon appears.

3. **Double-click the CD-ROM icon.**

   The contents of the CD-ROM appear.

4. **Double-click the [Mac OS 8 and 9] icon to open it.**

   Under Mac OS X, double-click the [Mac OS X] folder.

5. **Double-click the [PS Utility] folder on the CD-ROM, and then drag the [Printer Utility for Mac] file, and then drop it into the Macintosh hard disk.**

6. **Drag the CD-ROM icon and drop it into [Trash] to eject the CD-ROM.**

   Printer Utility for Mac is installed.

   ⬇ Note

   - Printer Utility for Mac is included on the CD-ROM labeled "Printer Drivers and Utilities".

   - Printer Utility for Mac requires Mac OS 8.1 or higher. (Mac OS X Classic environment is supported.)

   - Printer Utility for Mac cannot use Mac OS X (native mode).

Starting Printer Utility for Mac

Mac OS

⭐ Important

- Before starting Printer Utility for Mac, make sure the printer is selected in [Chooser] on the Apple menu.

1. **Double-click the Printer Utility for Mac icon.**

   The [Printer Utility for Mac] dialog box appears.

2. **Click [OK].**

   Printer Utility for Mac will take a few seconds to start.

Mac OS X

1. **Double-click the Printer Utility for Mac icon.**

   The [Printer Utility for Mac] dialog box appears.

2. **Click [OK].**

3. **In the [Available Printers:] box, select the printer you want to use.**

   If you change zones, select a name from [Available Network Zones:].

   Click [Choose Printer...] on the Printer Utility for Mac menu if you want to change the printer.

4. **Select the printer you want to use.**

   Printer Utility for Mac will take a few seconds to start.

5. **Click [Choose].**

Printer Utility for Mac Functions

Downloading PS fonts

You can download the PS fonts to the printer memory or hard disk drive.

⭐ Important

- The following procedure to download the fonts assume that you are a system administrator. If you are not, be sure to consult your system administrator.

- During the download, do not turn off the power switch, operate the panel or open or close the cover.

- If the printer restarts, all the printer settings return to the defaults.

- Confirm that a Macintosh and the printer are connected with Apple Talk.

1. **Select [Download PS Fonts...] on the [File] menu.**

2. **Click [Add to list].**

   The dialog box to select fonts appears.

3. **Select the desired font files, and then click [Open].**

   The list of selectable font names appears.
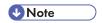
4. **After adding all the fonts you want to download, click [OK].**

   The dialog box of selected fonts to download appears.

5. **Click [Download].**

   The fonts begin to download, and the download status is shown.

6. **When the completion message appears, click [OK].**

7. **Click [Cancel].**

   ⬇️Note

   - Some fonts cannot be downloaded.

   - Before downloading, read the documentation about the fonts you want to use.

Displaying printer fonts

You can display the available fonts currently downloaded to the printer. Fonts in the printer memory and hard disk drive can be displayed.

1. **Select [Display Printer's Fonts...] on the [File] menu.**

   A dialog box appears.

2. **Select [Printer's memory] or [Printer's disk].**

3. **Click [OK].**

   ⬇️Note

   - The fonts displayed in italics are the default fonts.

Deleting fonts

You can delete fonts from the printer's memory or hard disk drive.

⭐Important

- You cannot delete the fonts displayed in italic.

1. **Select [Display Printer's fonts] on the [File] menu.**

   A dialog box appears.

8

2. **Select [Printer's memory] or [Printer's disk].**

3. **Select the fonts you want to delete.**

4. **Click [Delete].**

   A confirmation message appears.

5. **Confirm the fonts you want to delete and the printer name from which you want to delete the fonts.**

6. **Click [Continue], and then click [OK].**

7. **Click [OK].**

Initializing the printer disk

When initializing the printer hard disk, all the fonts downloaded to the printer hard disk drive are deleted. Before initializing, be sure to check the fonts on the hard disk drive.

⭐ **Important**

- When initializing the printer hard disk drive from the control panel, all of the data on the printer hard disk drive is deleted. Before initializing, be sure to check the data on the hard disk drive.

- Do not turn off the power switch until initializing is completed, otherwise the hard disk drive might be damaged.

1. **Select [Initialize Printer's Disk...] on the [File] menu.**

   The confirmation message appears. To cancel initialization, click [Cancel].

2. **Click [Execute].**

   Initializing starts.

3. **When the completion message appears, click [OK].**

Page Setup

You can set the paper size on which to print "Print Fonts Catalogue" and "Prints Fonts Sample".

1. **Select [Page Setup...] on the [File] menu.**

2. **Select the paper size.**

3. **Click [OK].**

Printing font catalog

You can print the names of fonts available on the printer.

1. **Select [Print Fonts Catalog...] on the [File] menu.**

2. **Click [Print].**

   🔽 Note

   • The paper selected under [Page Setup] is used.

Printing font sample

You can print samples of fonts downloaded to the hard disk drive or memory.

1. **Select [Print Fonts Sample...] on the [File] menu.**

2. **Click [Print].**

   🔽 Note

   • Print by using the paper selected on [Page Setup].

Renaming the printer

You can change the printer name displayed under Apple Talk. If you connect several printers on the network, assign different names so you can identify them. If several printers have the same name, a digit appears next to the printer name in [Chooser].

⭐ Important

   • You can enter up to 31 digits and letters.

   • Do not use symbols, for example "*", ":", "=", "@", "~".

Mac OS

1. **On the [File] menu, click [Rename Printer...].**

2. **In the [New Name:] filed enter a new name.**

3. **Click [Rename].**

   The printer name is changed.

4. **Click [OK].**

5. **On the Apple menu, click [Chooser].**

6. **Click the [AdobePS] icon.**

7. **Select the printer whose name you changed, and then close the [Chooser] dialog box.**

   If there are several Apple Talk zones, select the zone the printer belongs to.

Mac OS X

1. **On the [File] menu, click [Rename Printer...].**

2. **In the [New Name:] filed enter a new name.**

8

3. **Click [Rename].**

   The printer name is changed.

4. **Click [OK].**

5. **On the [Printer Utility for Mac] menu, click [Choose Printer...].**

6. **In the [Available Network Zones:] list, select the zone for the Macintosh in use.**

7. **In the [Available Printers:] list, select the printer whose name you changed, and then click [Choose].**

Restarting the printer

You can restart the printer.

1. **Select [Restart Printer] on the [File] menu.**

2. **Confirm the message that appears on the screen, and then click [Restart].**

   The printer restarts.

   The fonts downloaded in the printer memory will be deleted.

   If the printer restarts, all the printer settings return to the defaults.

Downloading PostScript files

You can download a PostScript file to the printer.

1. **Select [Download PostScript File...] on the [Utility] menu.**

2. **Select the file name to download, click the file name, and then click [Open].**

3. **Type the log file name, and then click [Save].**

   The selected file is downloaded.

   Errors are recorded in the log file.

Selecting the zone

You can change the zone to which the printer belongs under Apple Talk.

⭐ **Important**

- Confirm that a Macintosh and printer are connected with Apple Talk.

Mac OS

1. **On the [Utility] menu, click [Select Zone...].**

   The zone to which the printer belongs and the available zone list appear.

2. **Select the zone in which you want to locate the printer, and then click [Change].**

   A confirmation message appears.

3. **Click [Continue].**

   A confirmation message appears.

4. **Click [OK].**

5. **On the Apple menu, click [Chooser].**

6. **Click the [AdobePS] icon.**

7. **In the [AppleTalk zone:] list, select the zone you changed.**

8. **In the [Select a PostScript Printer:] list, select the printer you want to use.**

9. **Close the [Chooser] dialog box.**

Mac OS X

1. **On the [Utility] menu, click [Select Zone...].**

   The zone to which the printer belongs and the available zone list appear.

2. **Select the zone which you want to locate the printer in, and then click [Change].**

   A confirmation message appears.

3. **Click [Continue].**

   A confirmation message appears.

4. **Click [OK].**

5. **On the [Printer Utility for Mac] menu, click [Choose Printer...].**

6. **In the [Available Network Zones:] list, select the zone you changed.**

7. **In the [Available Printers:] list, select the model of printer in use, and then click [Choose].**

Displaying the printer status

You can display and confirm the current status of the printer.

1. **Select [Display Printer Status...] on the [Utility] menu.**

   The current status of the printer appears.

2. **Confirm the current status of the printer.**

   You can confirm the memory capacity, the VM (Virtual Memory) space, the hard disk drive status and available space on the hard disk drive. You can also confirm the zone to which the printer belongs.

3. **Click [OK].**

8

Launching the dialogue console

You can create and edit a PostScript file for printing, and then download it to the printer.

⭐ **Important**

- "Launch Dialogue Console" is recommended for users with an understanding of PostScript.

- Do not download any file other than PostScript files to the printer.

- "Launch Dialogue Console" must be used at your own responsibility.

1. **Select [Launch Dialogue Console...] on the [Utility] menu.**

   Open the editing screen. The Dialogue Console menu bar appears.

2. **Type the PostScript command in the editor screen.**

   To edit a PostScript file, select [Open] on the [File] menu to open it.

   You can search or replace a character string by using the [Search] menu.

3. **After editing the PostScript file, select [Download Top Window] on [Console] menu to start printing.**

   The PostScript file is sent to the printer.

   The [Reply from Printer] box opens, depending on the PostScript file you sent.

4. **Select [Return To Main Menu] on the [Console] menu to close the PostScript file.**

9. Security Measures Provided by this Printer

Using Authentication and Managing Users

This section explains how to improve this printer's security.

The setting can be done only by the administrator.

Enabling Authentication

To control administrators' and users' access to the printer, perform administrator authentication and user authentication using login user names and login passwords. To perform authentication, the authentication function must be enabled.

Specifying Authentication Information to Log on

Users are managed using the personal information managed in the printer's address book.

Enabling user authentication limits usage of printer to people registered in the address book to use the printer. Users can be managed in the address book by the user administrator.

Specifying Which Functions are Available

This can be specified by the user administrator. Specify the functions available to registered users. By making this setting, administrators can limit the functions available to users.

9

Preventing Information Leaks

Guarding Against Unauthorized Copying (Unauthorized Copy Prevention)

Using the printer driver, mask and pattern can be embedded in the printed document.

Guarding Against Unauthorized Copying (Data security for copying)

Using the printer driver with the data security for the copying function, a document can be printed with an embedded pattern of hidden text.

To gray out the copy or stored file of a copy-guarded document when the document is copied or stored , the optional security module is required.

Printing confidential files

Using the printer's Locked Print, files can be stored in the printer as confidential files and then print them. Those file can be printed using the printer's control panel and collected on the spot to prevent others from seeing it.

Preventing Data Leaks Due to Unauthorized Transmission

You can specify in the address book which users are allowed to send files using the scanner or fax function.

You can also limit the direct entry of destinations to prevent files from being sent to destinations not registered in the address book.

Protecting Registered Information in the Address Book

This function allows administrator to specify which users have permission to access the data in the address book. Usage of the data in the address book by unregistered users can be prevented.

Administrator can also encrypt the data in the address book to protect the data from unauthorized reading.

Managing Log Files

Data security can by improved by deleting log files stored in the printer. By transferring the log files, administrator can check the history data and identify unauthorized access.

To transfer the log data, the log collection server is required.

Overwriting the Data on the Hard Disk

Before disposing of the printer, make sure all data on the hard disk is deleted. Prevent data leakage by automatically deleting transmitted printer jobs from memory.

To overwrite the hard disk data, the optional ipp unit is required.

9

Limiting and Controlling Access

Preventing Modification or Deletion of Stored Data

Users with access permission to stored files can be specified. Permit selected users who have to access permissions to stored files to modify or delete the files.

Preventing Modification of Printer Settings

The printer settings that can be modified depend on the type of administrator account.

Register the administrators so that users cannot change the administrator settings.

Limiting Available Functions

This function allows administrator to specify which users have accessibility to each of the printer's functions, to prevent unauthorized operation.

Enhanced Network Security

Preventing Unauthorized Access

Limit IP addresses or disable ports to prevent unauthorized access over the network and protect the address book, stored files, and default settings.

Encrypting Transmitted Passwords

Prevent login passwords, group passwords for PDF files, and IPP authentication passwords being revealed by encrypting them for transmission.
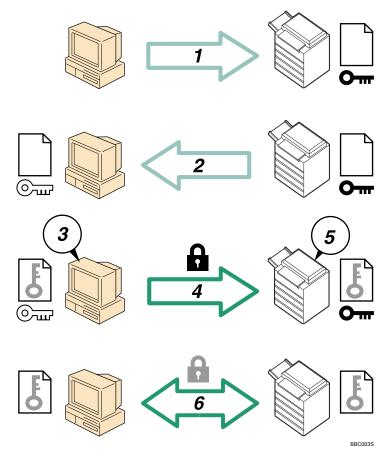
Also, encrypt the login password for administrator authentication and user authentication.

9

Configuring SSL Encryption

When you access the printer using a Web Image Monitor or IPP, you can establish encrypted communication using SSL.

When you access the printer using an application such as SmartDeviceMonitor for Admin, you can establish encrypted communication using SNMPv3 or SSL. To protect data from interception, analysis, and tampering, you can install a server certificate in the printer, negotiate a secure connection, and encrypt transmitted data.

SSL (SSL (Secure Sockets Layer)Secure Sockets Layer)

BBC003S

1. **To access the printer from a user's computer, request for the SSL server certificate and public key.**

2. **The server certificate and public key are sent from the printer to the user's computer.**

3. **Create shared key from the user's computer, and then encrypt it using public key.**

4. **The encrypted shared key is sent to the printer.**

5. **The encrypted shared key is decrypted in the printer using private key.**

6. **Transmit the encrypted data using the shared key, and then decrypt the data at the printer to attain secure transmission.**

10. Appendix

Software and Utilities Included on the CD-ROM

This section explains the software and utilities included on the "Printer Drivers and Utilities" CD-ROM that comes with this printer.

Font Manager

For installing new screen fonts, or organizing and managing fonts already in the system. For details about Font Manager, see the manual on the CD-ROM labeled "Printer Drivers and Utilities".

SmartDeviceMonitor for Admin

For the system administrator to manage network printers.

DeskTopBinder - SmartDeviceMonitor for Client

For users to manage their network print status.

Printer Utility for Mac

This utility allows users to download and manage a variety of fonts as well as manage printers. For details about this utility, see "Printer Utility for Mac".

⬇ Note

- Some documentation about using the machine is included on the CD-ROM in PDF format. For details about using Adobe Acrobat Reader/Adobe Reader, see Adobe Acrobat Reader/Adobe Reader online Help.

🗐 Reference

Viewing the Contents of the CD-ROM

10

This section explains how to view the contents of the CD-ROM.

1. **Insert the CD-ROM into the CD-ROM drive.**

   The installer starts.

2. **Click [Browse This CD-ROM].**

   Explorer starts and displays the contents of the CD-ROM.

Printer Drivers for This Printer

This section explains printer drivers for this printer.

> ⭐ **Important**

- You can install the PCL printer drivers (PCL 5e and PCL 6), the RPCS printer driver, and the Adobe PostScript printer drivers from the CD-ROM provided with this machine or download them from the supplier's Web site. If your operating system is Windows XP x64/Vista x64, Windows Server 2003/2003 R2 x64, you must download the printer drivers from the supplier's Web site. Select this machine and the operating system you are using, and then download them.

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM labeled "Printer Drivers and Utilities".

Printer Language	PCL 6	PCL 5e	RPCS	PostScript 3
Windows 2000 [*1]	OK	OK	OK	OK
Windows XP [*2]	OK	OK	OK	OK
Windows Vista [*3]	OK	OK	OK	OK
Windows Server 2003 [*4]	OK	OK	OK	OK
Mac OS [*5]	—	—	—	OK
Mac OS X [*6]	—	—	—	OK

[*1] Microsoft Windows 2000 Professional /Microsoft Windows 2000 Server/Microsoft Windows 2000 Advanced Server

[*2] Microsoft Windows XP Professional/Microsoft Windows XP Home Edition

[*3] Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/ Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic

[*4] Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/ Microsoft Windows Server 2003 Web Edition/Microsoft Windows Server 2003 Datacenter Edition/Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise Edition/Microsoft Windows Server 2003 R2 Datacenter Edition

[*5] Versions 8.6 to 9.2 of the Mac OS (Mac OS X Classic mode is supported.)

[*6] Mac OS X 10.1 or later (Native mode)

PCL printer drivers

Two kinds of PCL printer driver (PCL 5e and PCL 6) are included. These drivers allow your computer to communicate with this machine via a printer language. To use these drivers, the Printer Enhance Option is required.

RPCS printer driver

This printer driver allows the computer to communicate with the printer using a printer language. In addition to the conventional user interface, another preset user interface is provided. In addition to the conventional user interface, another preset user interface is provided.

Adobe PostScript Printer Drivers and PPD files

Adobe PostScript printer drivers allow the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions. These drivers require the PostScript 3 Unit.

PPD files

PPD files allow the printer driver to enable specific printer functions.

Note

- Some applications may require installation of the PCL 5e printer driver. In this case, you can install PCL 5e without having to install PCL 6.

Reference

- For details, see p.17 "Preparing for Printing", p.59 "Setting Up the Printer Driver".

SmartDeviceMonitor for Admin

This section describes the file path and available functions of SmartDeviceMonitor for Admin.

SmartDeviceMonitor for Admin is an application that uses TCP/IP and IPX/SPX to monitor network printers. It can monitor multiple network printers using IP address. We recommend that network administrators use this application.

File path

SmartDeviceMonitor for Admin is stored in the following folder in the CD-ROM:

`\NETWORK\DEVMON\ADMIN\DISK1`

Operating system	Protocol stack
Windows 2000	TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client provided with Windows 2000
Windows XP	TCP/IP provided with Windows XP IPX/SPX provided with Windows XP NetWare Client provided with Windows XP Novell Client provided with Windows XP
Windows Vista	TCP/IP provided with Windows Vista Novell Client provided with Windows Vista
Windows Server 2003	TCP/IP provided with Windows Server 2003

10

Operating system	Protocol stack
	IPX/SPX provided with Windows Server 2003
	NetWare Client provided with Windows Server 2003
	Novell Client provided with Windows Server 2003

Available functions

SmartDeviceMonitor for Admin has the following functions to check the followings:

- Printer supplies such as paper or toner
- Results of print jobs executed from the computer

⬇Note

- For information about using SmartDeviceMonitor for Admin, see SmartDeviceMonitor for Admin Help.

DeskTopBinder - SmartDeviceMonitor for Client

This section describes the file path and system requirements of DeskTopBinder-SmartDeviceMonitor for Client.

SmartDeviceMonitor for Client has the following functions. We recommend that users install this application.

- Printing in a peer-to-peer network, using TCP/IP, and IPP from Windows 2000/XP/Vista or Windows Server 2003.
- Constantly monitoring the status of devices on the network using TCP/IP and IPX/SPX.

⭐Important

- To perform Recovery or Parallel printing, the same options that are installed on the original printer must be installed on the other printers also. Printers that lack a required option cannot be used for Recovery or Parallel printing.
- To perform Recovery or Parallel printing, the same paper loaded in the original printer must be loaded in the other printers also. Load all printers with the same paper as that loaded in the tray selected for printing.
- Results of Recovery or Parallel Printing might differ, depending on the model of the other printer and the options installed on it.
- If you select Sample Print or Locked Print, you cannot select Recovery Printing or Parallel Printing.

File path

SmartDeviceMonitor for Client is stored in the following folder on the CD-ROM.

`NETWORK\DEVMON\CLIENT\DISK1`

Operating system	Protocol stack
Windows 2000	TCP/IP provided with Windows 2000 IPX/SPX provided with Windows 2000 NetWare Client provided with Windows 2000 Novell Client provided with Windows 2000
Windows XP	TCP/IP provided with Windows XP IPX/SPX provided with Windows XP NetWare Client provided with Windows XP Novell Client provided with Windows XP
Windows Vista	TCP/IP provided with Windows Vista Novell Client provided with Windows Vista
Windows Server 2003	TCP/IP provided with Windows Server 2003 IPX/SPX provided with Windows Server 2003 NetWare Client provided with Windows Server 2003 Novell Client provided with Windows Server 2003

Available functions

SmartDeviceMonitor for Client has the following functions.

- Peer-to-peer print function

    - Prints directly on the network printer without sending any data to a print server.

    - Prints on a substitute printer when there are too many jobs waiting on the specified printer, or when an error disables printing (Recovery Printing).

    - Allocates multiple print jobs to multiple printers (Parallel Printing).

    - Executes prior group registration of printers specified for Recovery Printing or Parallel Printing.

- Notification function

    - Displays an error message when there is an error on the specified printer while transferring or printing data.

    - Notifies a print completion. You can also be notified of the print condition, such as displaying the notice only when Recovery Printing is executed.

- Monitoring function

    - Checks printer supplies such as paper or toner.

    - Simultaneously monitors multiple printers in use.

10

- Checks the printer's network settings and detailed information of printers.

- Enables you to check the print job log using the user ID.

Note

- For details about using SmartDeviceMonitor for Client, see SmartDeviceMonitor for Client Help.

Note

- For details about using SmartDeviceMonitor for Client, see SmartDeviceMonitor for Client Help.

Printing Files Directly from Windows

You can print files directly using Windows commands. For example, you can print PostScript files for PostScript 3.

Windows 2000/XP/Vista, Windows Server 2003/2003 R2

You can print files directly using "lpr", "rcp", or "ftp" command.

⬇Note

- To use "sftp" commands, use an sftp client software that is compatible with ssh v2.

Setup

Follow the procedure below to make network environment settings.

1. **Enable TCP/IP with the control panel, and then set up the printer's network environment about TCP/IP including IP addresses.**

   TCP/IP of the printer is set as default.

2. **Install a TCP/IP in Windows to set up the network environment.**

   Consult the administrator for the local setting information.

3. **To print under Windows 2000/XP/Vista or Windows Server 2003/2003 R2, install "Printing service for UNIX" as the network application.**

   ⬇Note

   - For details about setting up "IPv4 address", see Hardware Guide.

   📄Reference

   - For details about setting the "IPv4 address" of the printer using DHCP, see p.344 "Using DHCP".

Using a Host Name Instead of an IPv4 Address

When a host name is defined, you can specify a printer by host name instead of "IPv4 address". The host names vary depending on the network environment.

When using DNS

Use the host name set to the data file on the DNS server.

When setting the "IPv4 address" of a printer using DHCP

Use the printer name on the configuration page as the host name.

Reference

- For details about printing a configuration page, see p.147 "List/Test Print Menu".

In other cases

Add the IPv4 address and host name of the network printer to the hosts file on the computer used for printing. Methods of addition vary depending on operating systems.

Windows 2000/XP/Vista, Windows Server 2003/2003 R2

1. **Open the hosts file using memo pad files, for instance.**

   The hosts file is in the following folder:

   \WINNT\SYSTEM32\DRIVERS\ETC\HOSTS

   "\WINNT" is the directory of the installation destination for Windows 2000/XP/Vista, Windows Server 2003/2003 R2.

2. **Add an IPv4 address and host name to the hosts file using the following format:**

   192.168.15.16 host # NP

   "192.168.15.16" is the "IPv4 address", "host" is the printer's host name, and "#NP" is replaced by comments. Insert a space or tab between "192.168.15.16" and "host", between "host" and "#NP" respectively, using one line for this format.

3. **Save the file.**

   Note

   - When using a host name under Windows Server 2003 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

Printing Commands

The following explains printing operations using the "lpr", "rcp", and "ftp" commands.

Enter commands using the command prompt window. The location of the command prompts varies depending on operating systems:

- Windows 2000

  [Start] - [Programs] - [Accessories] - [Command Prompt]

- Windows XP, Windows Vista, Windows Server 2003/2003 R2

  [Start] - [All Programs] - [Accessories] - [Command Prompt]

10

😮 Note

- Match the data format of the file to be printed with the emulation mode of the printer.
- If the message "print requests full" appears, no print jobs can be accepted. Try again when sessions end. For each command, the amount of possible sessions is indicated as follows:
  - lpr: 10
  - rcp, rsh: 5
  - ftp: 3
- Enter the file name in a format including the path from the directory executing commands.
- The "option" specified in a command is an intrinsic printer option and its syntax is similar to printing from UNIX. For details, see UNIX Supplement.

lpr

When specifying a printer by IP address

```
c:> lpr -Sprinter's IP address [-Poption] [-ol] \pass name\file name
```

When using a host name instead of an IP address

```
c:> lpr -Sprinter's host name [-Poption] [-ol] \pass name\file name
```

When printing a binary file, add the "-ol" option (lowercase O, and lowercase L).

When using a printer with the host name "host" to print a PostScript file named "file 1" located in the "C: \PRINT" directory, the command line is as follows:

```
c:> lpr -Shost -Pfiletype=RPS -ol C:\PRINT\file1
```

rcp

First, register the printer's host name in the hosts file.

```
c:> rcp [-b] \pass name\file name [pass name\file name...] printer's host name: [option]
```

When using a printer with the host name "host" to print a PostScript file named "file 1" or "file 2" located in the "C:\PRINT" directory, the command line is as follows:

```
c:> rcp -b C:\PRINT\file1 C:\PRINT\file2 host:filetype=RPS
```

😮 Note

- In file names, "*" and "?" can be used as wild cards.
- When printing a binary file, add the "-b" option.

10

ftp

Use the "put" or "mput" command according to the number of files to be printed.

When one file is printed

```
ftp> put \pass name\file name [option]
```

When multiple files are printed

```
ftp> mput \pass name\file name [\pass name\file name...] [option]
```

1. **Formulate the printer's IP address or the host name of the hosts file printer as an argument and use the "ftp" command.**

   ```
   % ftp printer's IP address
   ```

2. **Enter the user name and password, and then press the [OK] key.**

   For details about the user name and password, consult your administrator.

   ```
   User:
   ```

   ```
   Password:
   ```

3. **When printing a binary file, set the file mode to binary.**

   ```
   ftp> bin
   ```

   When printing a binary file in ASCII mode, print may not come out correctly.

4. **Specify files to be printed.**

   The following shows the examples of printing a PostScript file named "file 1" in the "C:\PRINT" directory and printing file 1 and file 2.

   ```
   ftp> put C:\PRINT\file1 filetype=RPS
   ```

   ```
   ftp> mput C:\PRINT\file1 C:\PRINT\file2
   ```

5. **Quit ftp.**

   ```
   ftp> bye
   ```

   ⬇ Note

   - "=", ",", "_", and ";"cannot be used for filenames. File names will be read as option strings.
   - For "mput" command, option can not be defined.
   - For "mput" command, "*" and "?" can be used as wild cards in file names.
   - When printing a binary file in ASCII mode, print may not come out correctly.

10

When Using Windows Terminal Service/MetaFrame

The following explains how to use Windows Terminal Service and Maintenance.

Operating Environment

The following operating systems and MetaFrame versions are supported.

Windows NT Server 4.0 Terminal Server Edition with SP6 or higher

- MetaFrame 1.8 SP3/FR1+SP3/SP4
- MetaFrame XP 1.0 SP1/SP2/FR1

Windows 2000 Server/Advanced Server

- MetaFrame 1.8 SP3/FR1+SP3/SP4
- MetaFrame XP 1.0 SP1/SP2/SP3/SP4/FR1/FR2/FR3
- MetaFrame Presentation Server 3.0
- Citrix Presentation Server 4.0

Windows Server 2003

- MetaFrame XP 1.0 FR3
- MetaFrame Presentation Server 3.0
- Citrix Presentation Cerver 4.0

Supported Printer Drivers

When Windows Terminal Service is operating

- PCL printer drivers
- PostScript 3
- RPCS drivers

Note

- Some RPCS printer driver functions do not work if Windows Terminal Service is installed.

Limitations

The following limitations apply to the Windows Terminal Service environment.

These limitations are built in Windows Terminal Service or MetaFrame.

10

Windows Terminal Service

In an environment where Windows Terminal Service is installed, some printer driver functions are unavailable, even if no Windows Terminal Service functions are used. Use the install mode to install SmartDeviceMonitor for Client in an environment where Terminal Service is running on a Windows NT Server 4.0 Terminal Server Edition or Windows 2000 Server family computer. The following are the two methods of installation using the install mode:

1. Use [Add/Remove Programs] in [Control Panel] to install SmartDeviceMonitor for Client.

2. Enter the following command in the MS-DOS command prompt:

   CHANGE USER /INSTALL

To quit the install mode, enter the following command in the MS-DOS command prompt:

CHANGE USER /EXECUTE

↓Note

- For more information, see Windows Help.

MetaFrame's [Auto-creating client printers]

Using [Auto-creating client printers], you can select a logical printer created by copying the client's local printer data to the MetaFrame server. We strongly recommend testing this function in your network environment before using it for your work.

- The settings for optional equipment will not be stored in the server after the equipment is disconnected. The settings for optional equipment will be restored to its defaults each time the client computer logs on to the server.

- When printing a large number of bitmap images or using the server in a WAN environment over dial-up lines such as ISDN, printing may not be possible or errors may occur, depending on data transfer rates.

- When using MetaFrame XP 1.0 or higher versions, we recommend making settings in [Client Printer bandwidth] under [Citrix Management Console] according to the environment.

- If a print error occurs on the server and the print job or a printer created in [Auto-creating client printers] cannot be deleted, we recommend the following:

  - MetaFrame 1.8 SP3, MetaFrame XP 1.0 SP1/FR1

    Make settings in [Delete unfinished print jobs] in the registry. For details, see the Readme file provided with MetaFrame.

  - MetaFrame XP 1.0 FR2

    Make settings in [Delete pending print jobs at logout] under [Printer Properties Management] of Citrix Management Console.

MetaFrame's [Printer driver replication]

Using [Printer driver replication], you can distribute printer drivers across all servers in a server farm. We strongly recommend testing this function in your network environment before using it for your work.

- If the printer drivers are not properly copied, install them directly onto each server.

10

Using DHCP

You can use the printer in a DHCP environment. You can also register the printer NetBIOS name on a WINS server when it is running.

- Printers that register the printer NetBIOS name on a WINS server must be configured for the WINS server.

- Supported DHCP servers are Microsoft DHCP Server included with Windows 2000 Server, Windows Server 2003, and the DHCP server included with NetWare and UNIX.

- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.

- To use the WINS server, change the WINS server setting to "active" using the control panel.

- Using the WINS server, you can configure the host name via the remote network printer port.

- DHCP relay-agent is not supported. If you use DHCP relay-agent on a network via ISDN, it will result in increased line charges. This is because your computer connects to the ISDN line whenever a packet is transferred from the printer.

- If there is more than one DHCP server, use the same setting for all servers. The machine operates using data from the DHCP server that responds first.

- DHCP servers can operate in an IPv6 environment, but they cannot be configured to allocate IPv6 addresses or obtain host names.

Using AutoNet

If the printer IPv4 address is not automatically assigned by the DHCP server, a temporary IP address starting with 169.254 and not used on the network can be automatically selected by the printer.

🔸Note

- The IP address assigned by the DHCP server is given priority over that selected by AutoNet.

- You can confirm the current IPv4 address on the configuration page. For more information about the configuration page, see Quick Installation Guide.

- When AutoNet is running, the NetBIOS name is not registered on the WINS server.

- The machine cannot communicate with devices that do not have the AutoNet function. However, this machine can communicate with Macintosh computers running Mac OS X 10.2.3. or higher.

Configuring the WINS Server

The printer can be configured to register its NetBIOS name with a WINS server when the power is turned on. This enables the NetBIOS name of the printer to be specified from SmartDeviceMonitor for Admin even in a DHCP environment.

This section explains configuring the WINS server.

♦Note

- The WINS server is supported with Windows 2000 Servers WINS Manager.

- For details about the WINS server settings, see Windows Help.

- If there is no reply from the WINS server, the NetBIOS name is registered by broadcast.

- The NetBIOS name can be entered using up to 13 alphanumeric characters.

Using Web Image Monitor

1. **Start a Web browser.**

2. **Enter "http://(printer's IP address or host name) /" in the address bar to access the printer whose settings you want to change.**

   Top Page of Web Image Monitor appears.

3. **Click [Login].**

   The dialog box for entering the user name and password appears.

4. **Enter the user name and password, and then click [Login].**

   Contact your administrator for information about the settings.

5. **In the left area, click [Configuration], and then click [Network].**

6. **Click [TCP/IP].**

7. **Check that [Enable] is selected for [WINS] in the [Ethernet + Wireless LAN] column, and then enter the WINS server IPv4 address in [Primary WINS Server] and [Secondary WINS Server].**

8. **Click [Apply].**

9. **Quit Web Image Monitor.**

Using telnet

You can also use telnet to configure WINS.

10

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record, AAAA record, CNAME, and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this printer, a DNS client, is connected, records can be dynamically updated using this function.

Updating

Updating procedure varies depending on whether the printer IP address is static or acquired by DHCP.

⭐ **Important**

- **Dynamic update using message authentication (TSIG, SIG(0)) is not supported.**

For a static IPv4 setting

If the IP address or host name is changed, the A and PTR records are updated. If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and wireless LAN

  RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

  However, if CNAME (PRNXXXXXX) overlaps with the host name, CNAME will not be registered.

For DHCPv4 settings

As a substitute for the printer, the DHCP server updates the record, and one of the following occurs:

- When the printer acquires the IP address from the DHCP server, the DHCP server updates the A and PTR records.

- When the printer acquires the IP address from the DHCP server, the printer updates the A record, and the DHCP server updates the PTR record.

If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and wireless LAN

RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

For IPv6 settings

This printer updates the AAAA record and PTR record.

It also updates CNAME when the AAAA record is updated.

When a stateless address is newly set, it is automatically registered on the DNS server also.

⬇ **Note**

- When the dynamic DNS function is not used, records managed by the DNS server must be updated manually, if the printer's IP address is changed.

- To update the record using the printer, the DNS server has to have one of the following:

- No security settings made.

- If security settings are made, an IP-specified client (this printer) permits updating.

DNS Servers Targeted for Operation

For static IP setting

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features

- BIND 8.2.3 or higher

For DHCP setup, when the printer updates the A record

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features

For DHCP setup, when the DHCP server updates records

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003 features

- BIND 8.2.3 or higher

- DNS servers with standard NetWare 5 (or a higher version) features

For IPv6 setting

- Microsoft DNS servers with standard Windows Server 2003 features

- BIND 9.2.3 or higher

DHCP Servers Targeted for Operation

As a substitute for the printer, DHCP servers capable of updating the A record and PTR record are as follows:

- Microsoft DHCP servers with standard Windows 2000 Server (Service Pack 3 or higher versions)/Windows Server 2003 features

- ISC DHCP 3.0 or higher

- DHCP server with standard NetWare 5 features

Setting the Dynamic DNS Function

Make settings with telnet using the "dns" command.

⬇Note

- For details, see "Remote Maintenance by telnet".

10

Reference

- p.216 "Remote Maintenance by telnet"

Precautions

Please pay attention to the following when using the network interface board. When configuration is necessary, follow the appropriate procedures below.

Connecting a Dial-Up Router to a Network

When using NetWare (file server)

If the NetWare file server and printer are on opposite sides of a router, packets are sent back and forth continuously, possibly incurring communications charges. Because packet transmission is a feature of NetWare, you need to change the configuration of the router. If the network you are using does not allow you to configure the router, configure the printer instead.

Configuring the router

Filter packets so they do not pass over the dial-up router.

Configuring the printer with NetWare

1. **Following the setup method described earlier in this manual, configure the file server.**

2. **Set the frame type for NetWare environment.**

Configuring the printer without NetWare

1. **When not printing, the network interface board sends packets over the network. Set NetWare to "inactive".**

🔵Note

- The MAC address of the filtering printer is printed on the printer configuration page. For more information about printing a configuration page, see "Test Printing", Quick Installation Guide.

- For more information about configuring the printer if the router cannot be configured, see the following instructions.

- For more information about selecting a frame type, see "Ethernet Configuration", Hardware Guide.

- For more information about selecting a protocol, see "Ethernet Configuration", Hardware Guide.

When the Wireless LAN Interface Unit Is Installed

When using the wireless LAN interface on the network, note the following:

When moving the printer

Detach the antennas when relocating the printer locally.

10

After moving the printer, reattach the antennas, ensuring that:

- The antennas are positioned clear of obstacles.

- There is 40 to 60 mm between the antennas, so that they do not touch.

- The exposure glass cover and the Auto Document Feeder (ADF) do not knock the antennas.

If the network area provides poor radio environment

Where radio wave conditions are bad, the network may not function due to interrupted or failed connections. When checking the wireless LAN signal and the access point, follow the procedure below to improve the situation:

- Position the access point nearer to the printer.

- Clear the space between access point and printer of obstructions.

- Move radio wave generating appliances, such as microwaves, away from the printer and access point.

⬇Note

- For information about how to check radio wave status, see "Wireless LAN Configuration", Hardware Guide.

- For more information about access point radio wave conditions, refer to the access point manual.

Copyrights

expat

- The software including controller, etc. (hereinafter "software") installed on this product uses the expat under the conditions mentioned below.

- The product manufacturer provides warranty and support to the software of the product including the expat, and the product manufacturer makes the initial developer and copyright holder of the expat, free from these obligations.

- Information relating to the expat is available at:

  http://expat.sourceforge.net/

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Centre, Ltd. and Clark Cooper.

Copyright (c) 2001, 2002 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

10

NetBSD

1. Copyright Notice of NetBSD

For all users to use this product:

This product contains NetBSD operating system:

For the most part, the software constituting the NetBSD operating system is not in the public domain; its authors retain their copyright.

The following text shows the copyright notice used for many of the NetBSD source code. For exact copyright notice applicable for each of the files/binaries, the source code tree must be consulted.

A full source code can be found at http://www.netbsd.org/.

Copyright (c) 1999, 2000 The NetBSD Foundation, Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

   This product includes software developed by The NetBSD Foundation, Inc. and its contributors.

4. Neither the name of The NetBSD Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

2. Authors Name List

All product names mentioned herein are trademarks or registered trade-marks of their respective owners.

The following notices are required to satisfy the license terms of the software that we have mentioned in this document:

- This product includes software developed by the University of California, Berkeley and its contributors.

- This product includes software developed by the NetBSD Foundation.

- This product includes software developed by The NetBSD Foundation, Inc. and its contributors.

- This product includes software developed for the NetBSD Project. See http://www.netbsd.org/ for information about NetBSD.

- This product contains software developed by Ignatios Souvatzis for the NetBSD project.

- This product contains software written by Ignatios Souvatzis and MichaelL. Hitch for the NetBSD project.

- This product contains software written by Michael L. Hitch for the NetBSD project.

- This product includes cryptographic software written by Eric Young(eay@cryptsoft.com)

- This product includes cryptographic software written by Eric Young(eay@mincom.oz.au)

10

- This product includes software designed by William Allen Simpson.
- This product includes software developed at Ludd, University of Lulea, Sweden and its contributors.
- This product includes software developed at Ludd, University of Lulea.
- This product includes software developed at the Information Technology Division, US Naval Research Laboratory.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by David Jones and Gordon Ross
- This product includes software developed by Gordon W. Ross and Leo Weppelman.
- This product includes software developed by Hellmuth Michaelis and Joerg Wunsch
- This product includes software developed by Internet Research Institute, Inc.
- This product includes software developed by Leo Weppelman and Waldi Ravens.
- This product includes software developed by Mika Kortelainen
- This product includes software developed by Aaron Brown and Harvard University.
- This product includes software developed by Adam Ciarcinski for the NetBSD project.
- This product includes software developed by Adam Glass and Charles M.Hannum.
- This product includes software developed by Adam Glass.
- This product includes software developed by Advanced Risc Machines Ltd.
- This product includes software developed by Alex Zepeda, and Colin Wood for the NetBSD Projet.
- This product includes software developed by Alex Zepeda.
- This product includes software developed by Alistair G. Crooks.
- This product includes software developed by Alistair G. Crooks. for the NetBSD project.
- This product includes software developed by Allen Briggs
- This product includes software developed by Amancio Hasty and Roger Hardiman
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by Bill Paul.
- This product includes software developed by Bodo Moeller. (If available, substitute umlauted o for oe)
- This product includes software developed by Boris Popov.
- This product includes software developed by Brad Pepers
- This product includes software developed by Bradley A. Grantham.
- This product includes software developed by Brini.
- This product includes software developed by Causality Limited.
- This product includes software developed by Charles D. Cranor and Seth Widoff.

- This product includes software developed by Charles D. Cranor and Washington University.

- This product includes software developed by Charles D. Cranor, Washington

- University, and the University of California, Berkeley and its contributors.

- This product includes software developed by Charles D. Cranor, Washington University, the University of California, Berkeley and its contributors.

- This product includes software developed by Charles D. Cranor.

- This product includes software developed by Charles Hannum.

- This product includes software developed by Charles M. Hannum, by the University of Vermont and State Agricultural College and Garrett A.Wollman, by William F. Jolitz, and by the University of California, Berkeley, Lawrence Berkeley Laboratory, and its contributors.

- This product includes software developed by Charles M. Hannum.

- This product includes software developed by Christian E. Hopps, Ezra Story, Kari Mettinen, Markus Wild, Lutz Vieweg and Michael Teske.

- This product includes software developed by Christian E. Hopps.

- This product includes software developed by Christian Limpach

- This product includes software developed by Christopher G. Demetriou for the NetBSD Project.

- This product includes software developed by Christopher G. Demetriou.

- This product includes software developed by Christos Zoulas.

- This product includes software developed by Chuck Silvers.

- This product includes software developed by Colin Wood for the NetBSD Project.

- This product includes software developed by Colin Wood.

- This product includes software developed by Cybernet Corporation and Nan Yang Computer Services Limited

- This product includes software developed by Daishi Kato

- This product includes software developed by Dale Rahn.

- This product includes software developed by Daniel Widenfalk and Michael L. Hitch.

- This product includes software developed by Daniel Widenfalk for the NetBSD Project.

- This product includes software developed by Darrin B. Jewell

- This product includes software developed by David Miller.

- This product includes software developed by Dean Huxley.

- This product includes software developed by Eduardo Horvath.

- This product includes software developed by Eric S. Hvozda.

- This product includes software developed by Eric S. Raymond

- This product includes software developed by Eric Young (eay@@mincom.oz.au)

- This product includes software developed by Eric Young (eay@cryptsoft.com)
- This product includes software developed by Eric Young (eay@mincom.oz.au)
- This product includes software developed by Ezra Story and by Kari Mettinen.
- This product includes software developed by Ezra Story, by Kari Mettinen and by Bernd Ernesti.
- This product includes software developed by Ezra Story, by Kari Mettinen, Michael Teske and by Bernd Ernesti.
- This product includes software developed by Ezra Story, by Kari Mettinen, and Michael Teske.
- This product includes software developed by Ezra Story.
- This product includes software developed by Frank van der Linden for the NetBSD Project.
- This product includes software developed by Gardner Buchanan.
- This product includes software developed by Gary Thomas.
- This product includes software developed by Gordon Ross
- This product includes software developed by Gordon W. Ross
- This product includes software developed by HAYAKAWA Koichi.
- This product includes software developed by Harvard University and its contributors.
- This product includes software developed by Harvard University.
- This product includes software developed by Herb Peyerl.
- This product includes software developed by Hubert Feyrer for the NetBSD Project.
- This product includes software developed by Iain Hibbert
- This product includes software developed by Ian F. Darwin and others.
- This product includes software developed by Ian W. Dall.
- This product includes software developed by Ichiro FUKUHARA.
- This product includes software developed by Ignatios Souvatzis for the NetBSD Project.
- This product includes software developed by Internet Initiative Japan Inc.
- This product includes software developed by James R. Maynard III.
- This product includes software developed by Jared D. McNeill.
- This product includes software developed by Jason L. Wright
- This product includes software developed by Jason R. Thorpe for And Com-munications, http://www.and.com/
- This product includes software developed by Joachim Koenig-Baltes.
- This product includes software developed by Jochen Pohl for The NetBSD Project.
- This product includes software developed by Joerg Wunsch
- This product includes software developed by John Birrell.
- This product includes software developed by John P. Wittkoski.

10

- This product includes software developed by John Polstra.
- This product includes software developed by Jonathan R. Stone for the NetBSD Project.
- This product includes software developed by Jonathan Stone and Jason R. Thorpe for the NetBSD Project.
- This product includes software developed by Jonathan Stone.
- This product includes software developed by Jukka Marin.
- This product includes software developed by Julian Highfield.
- This product includes software developed by Kazuhisa Shimizu.
- This product includes software developed by Kazuki Sakamoto.
- This product includes software developed by Kenneth Stailey.
- This product includes software developed by Kiyoshi Ikehara.
- This product includes software developed by Klaus Burkert,by Bernd Ernesti, by Michael van Elst, and by the University of California, Berkeley and its contributors.
- This product includes software developed by LAN Media Corporation and its contributors.
- This product includes software developed by Leo Weppelman for the NetBSD Project.
- This product includes software developed by Leo Weppelman.
- This product includes software developed by Lloyd Parkes.
- This product includes software developed by Luke Mewburn.
- This product includes software developed by Lutz Vieweg.
- This product includes software developed by MINOURA Makoto, Takuya Harakawa.
- This product includes software developed by Manuel Bouyer.
- This product includes software developed by Marc Horowitz.
- This product includes software developed by Marcus Comstedt.
- This product includes software developed by Mark Brinicombe for the NetBSD project.
- This product includes software developed by Mark Brinicombe.
- This product includes software developed by Mark Murray
- This product includes software developed by Mark Tinguely and Jim Lowe
- This product includes software developed by Markus Wild.
- This product includes software developed by Martin Husemann and Wolfgang Solfrank.
- This product includes software developed by Masanobu Saitoh.
- This product includes software developed by Masaru Oki.
- This product includes software developed by Mats O Jansson and Charles D.Cranor.
- This product includes software developed by Mats O Jansson.
- This product includes software developed by Matt DeBergalis

- This product includes software developed by Matthew Fredette.
- This product includes software developed by Matthias Pfaller.
- This product includes software developed by Michael Graff for the NetBSD Project.
- This product includes software developed by Michael Graff.
- This product includes software developed by Michael L. Hitch.
- This product includes software developed by Michael Shalayeff.
- This product includes software developed by Michael Smith.
- This product includes software developed by Mike Glover and contributors.
- This product includes software developed by Mike Pritchard.
- This product includes software developed by Minoura Makoto.
- This product includes software developed by Nan Yang Computer Services Limited.
- This product includes software developed by Niels Provos.
- This product includes software developed by Niklas Hallqvist, Brandon Creighton and Job de Haas.
- This product includes software developed by Niklas Hallqvist.
- This product includes software developed by Onno van der Linden.
- This product includes software developed by Paul Kranenburg.
- This product includes software developed by Paul Mackerras.
- This product includes software developed by Per Fogelstrom
- This product includes software developed by Peter Galbavy.
- This product includes software developed by Phase One, Inc.
- This product includes software developed by Philip A. Nelson.
- This product includes software developed by Philip L. Budne.
- This product includes software developed by RiscBSD.
- This product includes software developed by Roar Thronaes.
- This product includes software developed by Rodney W. Grimes.
- This product includes software developed by Roger Hardiman
- This product includes software developed by Roland C. Dowdeswell.
- This product includes software developed by Rolf Grossmann.
- This product includes software developed by Ross Harvey for the NetBSD Project.
- This product includes software developed by Ross Harvey.
- This product includes software developed by Scott Bartram.
- This product includes software developed by Scott Stevens.
- This product includes software developed by Shingo WATANABE.

10

- This product includes software developed by Softweyr LLC, the University of California, Berkeley, and its contributors.
- This product includes software developed by Soren S. Jorvang.
- This product includes software developed by Stephan Thesing.
- This product includes software developed by Steve Woodford.
- This product includes software developed by Takashi Hamada
- This product includes software developed by Takumi Nakamura.
- This product includes software developed by Tatoku Ogaito for the NetBSD Project.
- This product includes software developed by Terrence R. Lambert.
- This product includes software developed by Tetsuya Isaki.
- This product includes software developed by Thomas Gerner
- This product includes software developed by Thomas Klausner for the NetBSD Project.
- This product includes software developed by Tobias Weingartner.
- This product includes software developed by Todd C. Miller.
- This product includes software developed by Tohru Nishimura and Reinoud Zandijk for the NetBSD Project.
- This product includes software developed by Tohru Nishimura for the NetBSD Project.
- This product includes software developed by Tohru Nishimura for the NetBSD Project.
- This product includes software developed by TooLs GmbH.
- This product includes software developed by Toru Nishimura.
- This product includes software developed by Trimble Navigation, Ltd.
- This product includes software developed by WIDE Project and its contributors.
- This product includes software developed by Waldi Ravens.
- This product includes software developed by Wasabi Systems for Zembu Labs, Inc. http://www.zembu.com/
- This product includes software developed by Winning Strategies, Inc.
- This product includes software developed by Wolfgang Solfrank.
- This product includes software developed by Yasushi Yamasaki
- This product includes software developed by Zembu Labs, Inc.
- This product includes software developed by the Alice Group.
- This product includes software developed by the Center for Software Science at the University of Utah.
- This product includes software developed by the Charles D. Cranor, Washington University, University of California, Berkeley and its contributors.

10

- This product includes software developed by the Computer Systems Engineering Group at Lawrence Berkeley Laboratory.

- This product includes software developed by the David Muir Sharnoff.

- This product includes software developed by the Harvard University and its contributors.

- This product includes software developed by the Kungliga Tekniska Hogskolan and its contributors.

- This product includes software developed by the Network Research Group at Lawrence Berkeley Laboratory.

- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.OpenSSL.org/)

- This product includes software deve

Netatalk(NetBSD)/NetaTalk 1.4b2+asun2.1.3

Copyright (c) 1990,1991 Regents of The University of Michigan. All Rights Reserved.

FreeBSD 4.6.2/netipx

Copyright (c) 1984, 1985, 1986, 1987, 1993

The Regents of the University of California. All rights reserved.

Modifications Copyright (c) 1995, Mike Mitchell

Modifications Copyright (c) 1995, John Hay

Sablotron

Sablotron (Version 0.82) Copyright (c) 2000 Ginger Alliance Ltd. All Rights Reserved

a) The application software installed on this product includes the Sablotron software Version 0.82 (hereinafter, "Sablotron 0.82"), with modifications made by the product manufacturer. The original code of the Sablotron 0.82 is provided by Ginger Alliance Ltd., the initial developer, and the modified code of the Sablotron 0.82 has been derived from such original code provided by Ginger Alliance Ltd.

b) The product manufacturer provides warranty and support to the application software of this product including the Sablotron 0.82 as modified, and the product manufacturer makes Ginger Alliance Ltd., the initial developer of the Sablotron 0.82, free from these obligations.

c) The Sablotron 0.82 and the modifications thereof are made available under the terms of Mozilla Public License Version 1.1 (hereinafter, "MPL 1.1"), and the application software of this product constitutes the "Larger Work" as defined in MPL 1.1. The application software of this product except for the Sablotron 0.82 as modified is licensed by the product manufacturer under separate agreement(s).

10

d) The source code of the modified code of the Sablotron 0.82 is available at: http://support-download.com/services/device/sablot/notice082.html

e) The source code of the Sablotron software is available at: http://www.gingerall.com

f) MPL 1.1 is available at: http://www.mozilla.org/MPL/MPL-1.1.html

JPEG LIBRARY

- The software installed on this product is based in part on the work of the Independent JPEG Group.

SASL

CMU libsasl

Tim Martin

Rob Earhart

Rob Siemborski

Copyright (c) 2001 Carnegie Mellon University. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. The name "Carnegie Mellon University" must not be used to endorse or promote products derived from this software without prior written permission.

   For permission or any other legal details, please contact:

   Office of Technology Transfer

   Carnegie Mellon University

   5000 Forbes Avenue

   Pittsburgh, PA 15213-3890

   (412) 268-4387, fax: (412) 268-7395

   tech-transfer@andrew.cmu.edu

4. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by Computing Services at Carnegie Mellon University (http://www.cmu.edu/computing/)."

CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL

CARNEGIE MELLON UNIVERSITY BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Samba(Ver 3.0.4)

For SMB transmission, this machine uses Samba ver 3.0.4 (hereinafter referred to as Samba 3.0.4).

Copyright (c) Andrew Tridgell 1994-1998

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA.

🔽 Note

- The source code for SMB transmission by this machine can be downloaded from the following website: http://support-download.com/services/scbs

RSA BSAFE®

- This product includes RSA BSAFE (c) cryptographic software from RSA Security Inc.
- RSA, BSAFE are either registered trademarks or trademarks of RSA Security Inc. in the United States and/or other countries.
- RSA Security Inc. All rights reserved.

10

Open SSL

Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License

Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

10

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related :-).

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence

[including the GNU Public Licence.]

Open SSH

The licences which components of this software fall under are as follows. First, we will summarize and say that all components are under a BSD licence, or a licence more free than that.

10

OpenSSH contains no GPL code.

1)

Copyright (c) 1995 Tatu Ylonen <ylo@cs.hut.fi>, Espoo, Finland All rights reserved

As far as I am concerned, the code I have written for this software can be used freely for any purpose. Any derived versions of this software must be clearly marked as such, and if the derived work is incompatible with the protocol description in the RFC file, it must be called by a name other than "ssh" or "Secure Shell".

[Tatu continues]

However, I am not implying to give any licenses to any patents or copyrights held by third parties, and the software includes parts that are not under my direct control. As far as I know, all included source code is used in accordance with the relevant license agreements and can be used freely for any purpose (the GNU license being the most restrictive); see below for details.

[However, none of that term is relevant at this point in time. All of these restrictively licenced software components which he talks about have been removed from OpenSSH, i.e.,

- RSA is no longer included, found in the OpenSSL library

- IDEA is no longer included, its use is deprecated

- DES is now external, in the OpenSSL library

- GMP is no longer used, and instead we call BN code from OpenSSL

- Zlib is now external, in a library

- The make-ssh-known-hosts script is no longer included

- TSS has been removed

- MD5 is now external, in the OpenSSL library

- RC4 support has been replaced with ARC4 support from OpenSSL

- Blowfish is now external, in the OpenSSL library

[The licence continues]

Note that any information and cryptographic algorithms used in this software are publicly available on the Internet and at any major bookstore, scientific library, and patent office worldwide. More information can be found e.g. at "http://www.cs.hut.fi/crypto".

The legal status of this program is some combination of all these permissions and restrictions. Use only at your own responsibility. You will be responsible for any legal consequences yourself; I am not making any claims whether possessing or using this is legal or not in your country, and I am not taking any responsibility on your behalf.

NO WARRANTY

BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

2)

The 32-bit CRC compensation attack detector in deattack.c was contributed by CORE SDI S.A. under a BSD-style license.

Cryptographic attack detector for ssh - source code

Copyright (c) 1998 CORE SDI S.A., Buenos Aires, Argentina.

All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that this copyright notice is retained.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES ARE DISCLAIMED. IN NO EVENT SHALL CORE SDI S.A. BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THIS SOFTWARE.

Ariel Futoransky <futo@core-sdi.com>

<http://www.core-sdi.com>

3)

One component of the ssh source code is under a 3-clause BSD license, held by the University of California, since we pulled these parts from original Berkeley code.

Copyright (c) 1983, 1990, 1992, 1993, 1995

The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

10

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

4)

Remaining components of the software are provided under a standard 2-term BSD licence with the following names as copyright holders:

Markus Friedl

Theo de Raadt

Niels Provos

Dug Song

Kevin Steves

Daniel Kouril

Wesley Griffin

Per Allansson

Jason Downs

Solar Designer

Todd C. Miller

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT

10

(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

5)

Portable OpenSSH contains the following additional licenses:

c) Compatibility code (openbsd-compat)

Apart from the previously mentioned licenses, various pieces of code in the openbsd-compat/ subdirectory are licensed as follows:

Some code is licensed under a 3-term BSD license, to the following copyright holders:

Todd C. Miller

Theo de Raadt

Damien Miller

Eric P. Allman

The Regents of the University of California

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

10

Open LDAP

The OpenLDAP Public License Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,

2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and

3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Copyright (c) 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

Heimdal

Copyright (c) 1997-2005 Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm, Sweden). All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

IPS^{TM} print language emulations

Copyright (c) 1987-2006 Zoran Corporation. All rights reserved.

racoon

Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.

All rights reserved.

TrouSerS

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and

b) its license agreement:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and

iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

a) it must be made available under this Agreement; and

b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS),

10

HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2 (a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

↓Note

- To obtain the source code for opening TrouSerS (Version 0.27), which is provided with this machine, access the Web site at the following URL: http://trousers.sourceforge.net/

- TrouSerS version control is by SourceForge CVS. For methods of obtaining the source code, access the Web site at the following URL: http://sourceforge.net/cvs/?group_id=126012

10

10

INDEX

MEMO

MEMO

MEMO

Trademarks

Microsoft®, Windows®, Windows Server®, Windows NT®, and Windows Vista® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Adobe®, Acrobat®, Adobe Type Manager®, PageMaker® and PostScript® are either registered trademarks or trademarks of AdobeSystems Incorporated in the United States and/or other countries.

Apple, AppleTalk, Bonjour, EtherTalk, Macintosh, Mac OS, and True Type are trademarks of Apple Inc., registered in the U.S. and other countries.

Safari is a trademark of Apple Inc.

PCL® is a registered trademark of Hewlett-Packard Company.

Citrix® and MetaFrame® are registered trademarks of Citrix Systems, Inc.

IPS™ is a trademark of Zoran Corporation and/or its subsidiaries in the United States or other countries.

UNIX® is a registered trademark of The Open Group.

Netware®, IPX™, IPX/SPX™, Novell Client™ are either registered trademarks or trademarks of Novell, Inc.

Netscape® and Netscape Navigator® are registered trademarks of Netscape Communications Corporation.

Solaris™ is trademark of Sun Microsystems, Inc. in the U.S. and other countries.

Monotype® is a registered trademark of Monotype Imaging, Inc.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

* The product name of Windows 95 is Microsoft® Windows® 95
* The product name of Windows 98 is Microsoft® Windows® 98
* The product name of Windows Me is Microsoft® Windows® Millennium Edition (Windows Me)
* The product names of Windows 2000 are as follows:
  Microsoft® Windows® 2000 Advanced Server
  Microsoft® Windows® 2000 Server
  Microsoft® Windows® 2000 Professional
* The product names of Windows XP are as follows:
  Microsoft® Windows® XP Professional
  Microsoft® Windows® XP Home Edition
* The product names of Windows Vista are as follows:
  Microsoft® Windows Vista® Ultimate
  Microsoft® Windows Vista® Enterprise
  Microsoft® Windows Vista® Business
  Microsoft® Windows Vista® Home Premium
  Microsoft® Windows Vista® Home Basic
* The product names of Windows Server 2003 are as follows:
  Microsoft® Windows Server® 2003 Standard Edition
  Microsoft® Windows Server® 2003 Enterprise Edition
  Microsoft® Windows Server® 2003 Web Edition
* The product names of Windows Server 2003 R2 are as follows:
  Microsoft® Windows Server® 2003 R2 Standard Edition
  Microsoft® Windows Server® 2003 R2 Enterprise Edition
  Microsoft® Windows Server® 2003 R2 Web Edition
* The product names of Windows NT 4.0 are as follows:
  Microsoft® Windows NT® Server 4.0
  Microsoft® Windows NT® Workstation 4.0

Some illustrations in this manual might be slightly different from the machine.