Network Guide

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Software Version Conventions Used in This Manual

- NetWare 3.x means NetWare 3.12 and 3.2.
- NetWare 4.x means NetWare 4.1, 4.11, 4.2 and IntranetWare.

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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 Professional
  Microsoft® Windows® 2000 Server
  Microsoft® Windows® 2000 Advanced Server
- The product names of Windows® XP are as follows:
  Microsoft® Windows® XP Home Edition
  Microsoft® Windows® XP Professional
- 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 NT® 4.0 are as follows:
  Microsoft® Windows NT® Workstation 4.0
  Microsoft® Windows NT® Server 4.0
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Manuals for This Machine

Refer to the manuals that are relevant to what you want to do with the machine.

⚠️**Important**

❒ Media differ according to manual.

❒ The printed and electronic versions of a manual have the same contents.

❒ Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.

❒ Depending on which country you are in, there may also be html manuals. To view these manuals, a Web browser must be installed.

❒ For details about the functions of RW-3600, refer to the manuals for this option.

❖ **About This Machine**

Be sure to read the Safety Information in this manual before using the machine. This manual provides an introduction to the functions of the machine. It also explains the control panel, preparation procedures for using the machine, how to enter text, and how to install the CD-ROMs provided.

❖ **General Settings Guide**

Explains User Tools settings, and Address Book procedures such as registering fax numbers, e-mail addresses, and user codes. Also refer to this manual for explanations on how to connect the machine.

❖ **Trouble Shooting**

Provides a guide to solving common problems, and explains how to replace paper, toner, and other consumables.

❖ **Security Reference**

This manual is for administrators of the machine. It explains security functions that the administrators can use to protect data from being tampered, or prevent the machine from unauthorized use.
Also refer to this manual for the procedures for registering administrators, as well as setting user and administrator authentication.

❖ **Copy/Document Server Reference**

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to place originals.

❖ **Printer Reference**

Explains Printer functions and operations.

❖ **Scanner Reference**

Explains Scanner functions and operations.

❖ **Network Guide**

Explains how to configure and operate the machine in a network environment, and use the software provided.

❖ **Other manuals**

- Manuals for This Machine
- Safety Information
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Scanner Guide
- PostScript3 Supplement
- UNIX Supplement
- Manuals for DeskTopBinder Lite
    - DeskTopBinder Lite Setup Guide
    - DeskTopBinder Introduction Guide
    - Auto Document Link Guide

🖉 **Note**

❒ Manuals provided are specific to machine types.

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

❒ "PostScript3 Supplement" and "UNIX Supplement" include descriptions of functions and settings that might not be available on this machine.

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1. Using a Printer Server

2. Monitoring and Configuring the Printer

3. Special Operations under Windows

4. Appendix

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 About This Machine.

⚠ *CAUTION:*

Indicates important safety notes.

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

⚡Important

Indicates points to pay attention to when using the machine, 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 machine'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 machine's display panel.

【 】

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

Setting Up the Machine on a Network

This section describes the network settings you can change with User Tools (System Settings). Make settings according to functions you want to use and the interface to be connected.

⚠️**Important**

❒ These settings should be made by the systems administrator, or after consulting with the systems administrator.

Initial Settings Overview

❖ **Interface Settings**

Menu	Description
Machine IPv4 Address	Specifies the machine IPv4 address and subnet mask in the network environment.
IPv4 Gateway Address	Configure the gateway address for the router or host computer used as a gateway.
Machine IPv6 Address	Specifies the machine IPv6 address and subnet mask in the network environment.
IPv6 Gateway Address	Configure the gateway address for the router or host computer used as a gateway.
IPv6 Stateless Address Autoconfiguration	Specifies the automatic configuration of the IPv6 Stateless Address.
DNS Configuration	Make settings for the DNS server.
DDNS Configuration	Specifies the DDNS settings.
Domain Name	Specifies the domain name.
WINS Configuration	Specifies the WINS server settings.
Effective Protocol	Select the protocol to use in the network.
NCP Delivery Protocol	Select the protocol for NCP delivery:
NW Frame Type	Select the frame type when you use NetWare.
LAN Type	Select interface, IEEE 802.11b (wireless LAN) or Ethernet when you have installed the optional IEEE 802.11b interface unit.
Ethernet Speed	Set the access speed for networks.
Ping Command	Check the network connection with ping command using given IP address.
SMB Computer Name	Specifies the SMB computer name.
SMB Work Group	Specifies the SMB work group.
Permit SNMPv3 Communication	Set the encrypted communication of SNMP v3.

Menu	Description
Permit SSL / TLS Communication	Set the encrypted communication of SSL/TLS.
Host Name	Specify the host name.
Machine Name	Specify the machine name.
Communication Mode	Specifies the communication mode of the wireless LAN.
SSID Setting	Specifies SSID to distinguish the access point in infrastructure mode or 802.11 ad hoc mode.
Channel	Specifies a channel when you select 802.11b ad hoc mode or ad hoc mode.
WEP (Encryption) Key	Specifies the encryption of the IEEE 802.11b (wireless LAN).
Transmission Speed	Specifies the communication speed of the IEEE 802.11b (wireless LAN).
Restore Factory Defaults	Return the IEEE 802.11b (wireless LAN) settings to their defaults.

❖ **File Transfer Settings**

Menu	Description
SMTP Server	Specifies the SMTP server name.
SMTP Authentication	Configures SMTP authentication (PLAIN, LOGIN, CRAM-MD5, DIGEST-MD5
POP before SMTP	Configures POP authentication (POP before SMTP).
Administrator's E-mail Address	This appears as the sender's address on e-mailed scanned documents, if the sender is not specified .
Program / Change / Delete E-mail Message	Specify the user name and password required when sending scan file directly to a shared folder on a computer running Windows, or to an FTP server.
Default User Name / Password (Send)	Specifies the user name and password required when sending scan file directly to a shared folder on a computer running Windows, or to an FTP server.
Program / Change / Delete Subject	Program, change, or delete the subject used when sending a scan file as an attachment.
Scanner Resend Interval Time	Specifies the interval the machine waits before resending scan file, if they cannot be sent to the delivery server or mail server.
Number of Scanner Resends	Sets a maximum number of times scan file is resent to the delivery server or mail server

Initial Settings

❖ **Printer**

Interface	Settings	
Ethernet	Interface Settings/Network	Machine IPv4 Address
		IPv4 Address
		IPv4 Gateway Address
		Machine IPv6 Address
		IPv6 Gateway Address
		IPv6 Stateless Address Autoconfiguration
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		Effective Protocol
		NCP Delivery Protocol
		NW Frame Type
		LAN Type
		Ethernet Speed
		SMB Computer Name
		SMB Work Group
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
		Machine Name

Interface	Settings	
IEEE 802.11b (wireless LAN)	Interface Settings/Network	Machine IPv4 Address
		IPv4 Address
		IPv4 Gateway Address
		Machine IPv6 Address
		IPv6 Gateway Address
		IPv6 Stateless Address Autoconfiguration
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		NW Frame Type
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		SMB Computer Name
		SMB Work Group
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
		Machine Name
	Interface Settings/IEEE 802.11b	Communication Mode
		SSID Setting
		Channel
		WEP (Encryption) Key
		Security Method
		Wireless LAN Signal
		Transmission Speed

❖ **E-Mail (IPv6 cannot be used on this function.)**

Interface	Settings	
Ethernet	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	File Transfer	SMTP Server
		SMTP Authentication
		POP before SMTP
		AAdministrator's E-mail Address
		Program / Change / Delete E-mail Message
		Program / Change / Delete Subject
		Scanner Resend Interval Time
		Number of Scanner Resends

Interface	Settings	
IEEE 802.11b (wireless LAN)	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	Interface Settings/IEEE 802.11b	Communication Mode
		SSID Setting
		Channel
		WEP (Encryption) Key
		Transmission Speed
	File Transfer	SMTP Server
		SMTP Authentication
		POP before SMTP
		Administrator's E-mail Address
		Program / Change / Delete E-mail Message
		Program / Change / Delete Subject
		Scanner Resend Interval Time
		Number of Scanner Resends

❖ **Scan to Folder (IPv6 cannot be used on this function.)**

Interface	Settings	
Ethernet	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Host Name
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
	File Transfer	Default User Name / Password (Send)
		Scanner Resend Interval Time
		Number of Scanner Resends

Interface	Settings	
IEEE 802.11b (wireless LAN)	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	Interface Settings/IEEE 802.11b	Communication Mode
		SSID Setting
		Channel
		WEP (Encryption) Key
		Transmission Speed
	File Transfer	Default User Name / Password (Send)
		Scanner Resend Interval Time
		Number of Scanner Resends

❖ **Network Delivery Scanner (IPv6 cannot be used on this function.)**

Interface	Settings	
Ethernet	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	File Transfer	Delivery Option
		Scanner Resend Interval Time
		Number of Scanner Resends

Interface	Settings	
IEEE 802.11b (wireless LAN)	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	Interface Settings/IEEE 802.11b	Communication Mode
		SSID Setting
		Channel
		WEP (Encryption) Key
		Transmission Speed
	File Transfer	Delivery Option
		Scanner Resend Interval Time
		Number of Scanner Resends

❖ **Network TWAIN Scanner (IPv6 cannot be used on this function.)**

Interface	Settings	
Ethernet	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
IEEE 802.11b (wireless LAN)	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	Interface Settings/IEEE 802.11b	Communication Mode
		SSID Setting
		Channel
		WEP (Encryption) Key
		Transmission Speed

❖ Document Server (IPv6 cannot be used on this function.)

Interface	Settings	
Ethernet	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
IEEE 802.11b (wireless LAN)	Interface Settings/Network	Machine IPv4 Address
		IPv4 Gateway Address
		DNS Configuration
		DDNS Configuration
		Domain Name
		WINS Configuration
		LAN Type
		Ethernet Speed
		Effective Protocol
		NCP Delivery Protocol
		Permit SNMPv3 Communication
		Permit SSL / TLS Communication
		Host Name
	Interface Settings/IEEE 802.11b	Communication Mode
		SSID Setting
		Channel
		WEP (Encryption) Key
		Transmission Speed

✎ Note

❒ Depending on which optional units you have installed or the printer language you have selected, some options are not displayed.

❒ Depending on the security settings, you might not be able to set certain options.

🔎Reference

For details, see "System Settings", General Settings Guide.

For details about copier features and system settings, see Copy Reference and General Settings Guide.

1. Using a Printer Server

Preparing Printer Server

This section explains how to configure the machine as a Windows network printer. The machine 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 2000, Windows XP Professional, or Windows Server 2003, to change printer properties in the **[Printer]** folder, you need Printer Management access authentication; under Windows NT 4.0, Full Control access authentication. Log on to the file server as an Administrator or member of the PowerUsers group.

A **Open the [Printers] window from the [Start] menu.**

The **[Printers]** window appears.

Under Windows XP or Windows Server 2003, **[Printer and Fax]** window appears.

B **Click the icon of the machine you want to use. On the [File] menu, click [Properties]. The printer properties appear.**

C **On the [Sharing] tab, click [Shared As:].**

D **To share the machine 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.

E **Click [OK], and then close the printer properties.**

Printing notification via SmartDeviceMonitor for Client

Follow the procedure below to configure the machine to use the printing notification function of SmartDeviceMonitor for Client.

Setting the print server

⚝Important

❒ Under Windows 2000, Windows XP Professional, or Windows Server 2003, to change printer properties in the **[Printer]** folder, you need Printer Management access authentication; under Windows NT 4.0, Full Control access authentication. Log on to the file server as an Administrator or member of the PowerUsers group.

A **On the [Start] menu, point to [Programs], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Print Server Setting].**

The print server setting dialog box appears.

B **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.

C **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.

Setting a Client

A **On the [Start] menu, point to [Program], [DeskTopBinder], [SmartDeviceMonitor for Client], and then click [Extended Features Settings].**

A dialog box for setting the expansion function appears.

B **Select the [Notify of printout/data-transmission when using print server] check box.**

C **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 machine as a "print server" or "remote printer".

❖ Important
❏ IPv6 cannot be used on this function.

❖ Setting procedure
When using the machine as a print server

① Installing SmartDeviceMonitor for Admin

② Setting the network interface board.

③ Turning the machine off and then back on.
When using the machine 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 machine 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 machine you want to configure, print configuration page, and then check the machine name.

❖ Note
❏ The NetWare Client provided by Novell is required to set the printing environment using SmartDeviceMonitor for Admin under the following environments:
- NDS mode in Windows 95/98/Me
- NDS or Bindery mode in Windows 2000/XP, Windows NT 4.0

🔎 Reference
p.40 "Installing SmartDeviceMonitor for Admin"

Setting Up as a Print Server (NetWare 3.x)

Follow the procedure below to connect the machine as a print server using NetWare 3.x.

A **Open a Web browser, and then enter "http://(printer's address)/" in the address bar. Top Page of Web Image Monitor appears.**

B **Click [Login].**

A dialog box for entering the login user name and password appears.

C **Enter the login user name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

D **Click [Configuration] in the left area, and then click [NetWare].**

- 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.

E Confirm the settings, and then click [OK].

Configuration is now complete. Wait several before restarting Web Image Monitor.

F 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 Printer Reference.

❒ 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 the login user name and password, see Security Reference.

Setting Up as a Print Server (NetWare 4.x, 5 / 5.1, 6 / 6.5)

Follow the procedure below to connect the machine 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.

A **Open a Web browser, and then enter "http://(printer's address)/" in the address bar. Top Page of Web Image Monitor appears.**

B **Click [Login].**

A dialog box for entering the login user name and password appears.

C **Enter the login user name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

D **Click [Configuration] in the left area, and then click [NetWare].**

E **Confirm the settings, and then click [OK].**

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

F **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 Printer Reference.

❒ 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 the login user name and password, see Security Reference.

Using Pure IP in the NetWare 5 / 5.1 or 6 / 6.5 Environment

Follow the procedure below to connect the machine 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

A **From Windows, start NWadmin.**

For details about NWadmin, see the NetWare manuals.

B **Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.**

C **In the [Class of new object] box, click [Print Queue], and then click [OK].**

D **In the [Print Queue Name] box, enter the name of the print queue.**

E **In the [Print Queue Volume] box, click [Browse].**

F **In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].**

G **Check the settings, and then click [Create].**

H **Select the object in which the printer is located, and then click [Create] on the [Object] menu.**

I **In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].**

J **In the [Printer name] box, enter the printer name.**

K **Select the [Define additional properties] check box, and then click [Create].**

L **Click [Assignments], and then click [Add] in the [Assignments] area.**

M **In the [Available objects] box, click the queue you created, and then click [OK].**

N **Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].**

O **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 using NIB Setup Tool, 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 NIB Setup Tool.

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].**

Setting up using Web Image Monitor

1 **Open a Web browser, and then enter "http://(printer's address)/" in the address bar. Top Page of Web Image Monitor appears.**

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].**

5 **Confirm the settings, and then click [OK].**

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

6 **Click [Logout].**

✎ **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 Printer Reference.

❒ 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 the login user name and password, see Security Reference.

Setting Up as a Remote Printer (NetWare 3.x)

Follow the procedure below to use the machine as a remote printer under NetWare 3.x.

Setting up using PCONSOLE

A **Enter "PCONSOLE" from the command prompt.**

`F:> PCONSOLE`

B **Create a print queue.**

When using the existing print queue, go to the procedure for creating a printer.

C **From the [Available Options] menu, select [Print Queue Information], and then press the 【Enter】 key.**

D **Press the 【Insert】 key, and then enter a print queue name.**

E **Press the 【Esc】 key to return to the [Available Options] menu.**

F **Set up the network connection to a printer.**

G **On the [Available Options] menu, click [Print Server Information], and then press the 【Enter】 key.**

H **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 NIB Setup Tool.

I **From the [Print Server Information] menu, select [Print Server Configuration].**

J **From the [Print Server Configuration] menu, select [Printer Configuration].**

K **Select the printer indicated as [Not Installed].**

Use the same printer number specified as the remote printer number using NIB Setup Tool.

L **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.

M **As type, select [Remote Parallel, LPT1].**

The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.

N **Press the 【Esc】 key, and then click [Yes] on the confirmation message.**

O **Press the 【Esc】 key to return to [Print Server Configuration Menu].**

P **Assign print queues to the created printer.**

Q **From [Print Server Configuration Menu], select [Queues Serviced By Printer].**

23

P **Select the printer created.**

Q **Press the [Insert] key to select a queue serviced by the printer.**

You can select several queues.

R **Follow the instructions on the screen to make other necessary settings.**

Following these steps, check that the queues are assigned.

S **Press the [Esc] key until "Exit?" appears, and then select [Yes] to exit PCONSOLE.**

T **Start the print server by entering the following from the console of the Net-Ware 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

Note

❒ If the printer works as configured, the message "Waiting for job" appears.

Setting up using Web Image Monitor

A **Open a Web browser, and then enter "http://(printer's address)/" in the address bar. Top Page of Web Image Monitor appears.**

B **Click [Login].**

A dialog box for entering the **[Login User Name]** and **[Login Password]** appears.

C **Enter the login user name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

D **Click [Configuration] in the left area, and then click [NetWare].**

E **Confirm the settings, and then click [OK].**

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

F **Click [Logout].**

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 Printer Reference.

❒ 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 the login user name and password, see Security Reference.

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

A **From Windows, start NWadmin.**
For details about NWadmin, see the NetWare manuals.

B **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.**

C **In the [Class of new object] box, click [Print Queue], and then click [OK].**

D **In the [Print Queue Name] box, enter the name of the print queue.**

E **In the [Print Queue Volume] box, click [Browse].**

F **In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].**

G **Check the settings, and then click [Create].**

H **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.**

I **In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].**

J **In the [Printer name] box, enter the printer name**

K **Select the [Define additional properties] check box, and then click [Create].**

L **Assign print queues to the created printer. Click [Assignments], and then click [Add] in the [Assignments] area.**

M **In the [Available objects] box, click the queue you created, and then click [OK].**

N **Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].**

O **Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].**

P **Set up the network connection to a print server. Select a context specified using NIB Setup Tool, and then click [Create] on the [Object] menu.**

Q **In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Sever (Non NDPS)].**

R **In the [Print Server Name:] box, enter the print server name.**
Use the same print server name specified using NIB Setup Tool.

25

S **Select the [Define additional properties] check box, and then click [Create].**

T **Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.**

U **In the [Available objects] box, click the queue you created, and then click [OK].**

V **In the [Printers] area, click the printer you assigned, and then click [Printer Number]**

W **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 NIB Setup Tool.

X **Start the print server by entering the following from the console of the Net-Ware 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

Y **Enter the printer server name as the context name, and then press the【Enter】key.**

Z **Select the printer name on the context menu, and then press the【Enter】key.**

Setting up using Web Image Monitor

A **Open a Web browser, and then enter "http://(printer's address)/" in the address bar. Top Page of Web Image Monitor appears.**

B **Click [Login].**

A dialog box for entering the **[Login User Name]** and **[Login Password]** appears.

C **Enter the user login name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

D **Click [Configuration] in the left area, and then click [NetWare].**

E **Confirm the settings, and then click [OK].**

Configuration is now complete. Wait several minutes before restarting Web Image Monitor.

F **Click [Logout].**

🖉 **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 Printer Reference.

❒ 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 the login user name and password, see Security Reference.

2. Monitoring and Configuring the Printer

Using Web Image Monitor

Using Web Image Monitor, you can check the machine status and change settings.

❖ **Available operations**

The following operations can be remotely performed using Web Image Monitor from a client computer.

- Displaying machine status or settings
- Checking the print job status or history
- Checking, modifying, printing, or deleting print jobs stored in the Document Server
- Interrupting currently printing jobs
- Resetting the printer
- Managing the Address Book
- Making machine settings
- Making network protocol settings
- Making security settings
- Downloading, deleting, or printing print jobs

❖ **Configuring the machine**

To perform the operations from Web Image Monitor, TCP/IP is required. After the machine 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.

❒ Machine 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 machine from outside the firewall.

❒ When using the machine under DHCP, the IP address may be automatically changed by the DHCP server settings. Enable DDNS setting on the machine, and then connect using the machine's host name. Alternatively, set a static IP address to the DHCP server.

❒ If the HTTP port is disabled, connection to the machine using the machine's URL cannot be established. SSL setting must be enabled on this machine. For details, consult your network administrator.

❒ When using the SSL encryption protocol, enter "https://(printer's address)/". 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 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.

A Start your Web browser.
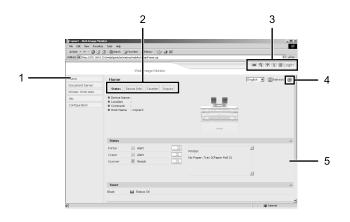
B Enter "http://(machine's address)/" in the address bar of a Web browser.

Top Page of Web Image Monitor appears.

If the machine'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://(machine's address)/".

Every Web Image Monitor page is divided into the following areas:

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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.

Machine information in the display area is not automatically updated. Click **[Refresh]** at the upper right in the display area to update the machine information. Click the Web browser's **[Refresh]** button to refresh the entire browser screen.

✐ 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.

When user authentication is set

Login (using Web Image Monitor)

Follow the procedure below to log on when user authentication is set.

A **Click [Login].**

B **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 **[User Name]**, and then click **[OK]**.

❒ The procedure may differ depending on the Web browser used.

Log Off (using Web Image Monitor)

Follow the procedure below to log on when user authentication is set.

Click **[Logout]** to log off.

✎ Note

❒ After you log on and change configurations, make sure to always **[Logout]**.
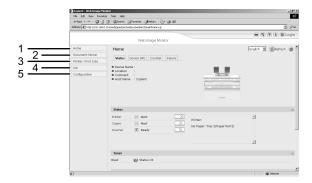
About Menu and Mode

There are two modes available with Web Image Monitor: user mode and administrator mode.

Displayed Items may differ depending on the machine type.

❖ **About Guest Mode**
In the guest mode, machine status, settings, and print job status can be viewed, but the machine settings cannot be changed.

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1. **Home**

The **[Status]**, **[Configuration]**, **[Counter]**, and **[Inquiry]** tab are displayed. Details of the tab menu are displayed on the work area.

2. **Document Server**

Display files stored in the Document Server.

3. **Printer: Print Jobs**

Allows you to display list of Sample Print, Locked Print, Hold Print, and Stored Print jobs.

4. **Job**
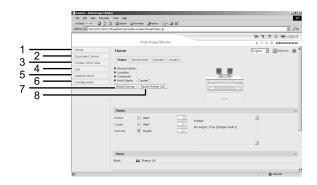
Display all print files.

5. **Configuration**

Display current machine and network settings.

❖ **Administrator Mode**

In the administrator mode, you can configure various machine settings.

ATW104S

1. **Home**

The **[Status]**, **[Configuration]**, **[Counter]**, and **[Inquiry]** tab are displayed. Details of the tab menu are displayed on the work area.

2. **Document Server**

Display files stored in the Document Server.

3. **Printer: Print Jobs**

Allows you to display list of Locked Print, Sample Print, Hold Print, and Stored Print jobs.

4. **Job**

Display all print files.

5. **Address Book**

User information can be registered, displayed, changed, and deleted.

6. **Configuration**

Make system settings for the machine, interface settings, and security.

7. **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.

8. **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.

A **On Top Page, click [Login].**

The dialog box for entering the user name and password appears.

B **Enter your login user name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

📝 **Note**

❒ For details about the login user name and password, see Security Reference.

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List of the Setting Items

The following tables show Web Image Monitor items that can be viewed or modified depending on the selected mode on the Web browser. Select one of the following modes to log on Web Image Monitor:

- User mode: logged on as a user
- Administrator mode: logged on as an administrator

❖ **Home**
   Status

Menu	User mode	Administrator mode
Status	Read	Read/Modify
Toner	Read	Read
Input Tray	Read	Read
Output Tray	Read	Read

   Device Info

Menu	User mode	Administrator mode
Functions	Read	Read
System	Read	Read
Version	Read	Read
Printer Language	Read	Read

   Counter

Menu	User mode	Administrator mode
Copier	Read	Read
Printer	Read	Read
Send/TX Total	Read	Read
Scanner Send	Read	Read

   Inquiry

Menu	User mode	Administrator mode
Machine Maintenance/Repair	Read	Read
Sales Representative	Read	Read

❖ **Address Book**

Menu	User mode	Administrator mode
Address Book	None	Read/Modify

❖ **Document Server**
   Document Server

User mode	Administrator mode
Read/Modify	Read/Modify

❖ **Printer: Print Jobs**
Print Job List

User mode	Administrator mode
Read/Modify	Read/Modify

❖ **Job**
Job List

Menu	User mode	Administrator mode
Current/Waiting Jobs	Read	Read/Modify
Job History	Read	Read

Printer

Menu	User mode	Administrator mode
Spool Printing	Read	Read/Modify
Job History	Read	Read/Modify
Error Log	Read	Read

Document Server

Menu	User mode	Administrator mode
Print Job History	Read	Read
Scanner Remote Send History	Read	Read

❖ **Configuration**
Device Settings

Menu	User mode	Administrator mode
System	Read	Read/Modify
Paper	Read	Read/Modify
Date/Time	Read	Read/Modify
Timer	Read	Read/Modify
Logs	None	Read/Modify
E-mail	Read	Read/Modify
Auto E-mail Notification	None	Read/Modify
On-demand E-mail Notification	None	Read/Modify
File Transfer	None	Read/Modify
User Authentication Management	None	Read/Modify
Administrator Authentication Management	None	Read/Modify
Program/Change Administrator	None	Read/Modify
LDAP Server	None	Read/Modify
Firmware Update	None	Read/Modify

Printer

Menu	User mode	Administrator mode
Basic Settings	Read	Read/Modify
Tray Parameters (PS)	None	Read/Modify
PDF Temporary Password	Modify	None
PDF Group Password	None	Modify
PDF Fixed Password	None	Modify

Interface

Menu	User mode	Administrator mode
Interface Settings	Read	Read/Modify
Wireless LAN Settings	Read	Read/Modify

Network

Menu	User mode	Administrator mode
IPv4	Read	Read/Modify
IPv6	Read	Read/Modify
NetWare	Read	Read/Modify
AppleTalk	Read	Read/Modify
SMB	Read	Read/Modify
SNMP	None	Read/Modify
SNMPv3	None	Read/Modify
SSDP	None	Read/Modify
Bonjour	Read	Read/Modify
System Log	Read	Read

Security

Menu	User mode	Administrator mode
Network Security	None	Read/Modify
Access Control	None	Read/Modify
IPP Authentication	None	Read/Modify
SSL/TLS	None	Read/Modify
ssh	None	Read/Modify
Site Certificate	None	Read/Modify
Device Certificate	None	Read/Modify

RC Gate

Menu	User mode	Administrator mode
Setup RC Gate	None	Read/Modify
Update RC Gate Firmware	None	Read/Modify
RC Gate Proxy Server	None	Read/Modify

Webpage

Menu	User mode	Administrator mode
Webpage	Read/Modify	Read/Modify

Extended Feature Settings

Menu	User mode	Administrator mode
Startup Setting	None	Read/Modify
Extended Feature Info	Read	Read
Install	None	Read/Modify
Uninstall	None	Read/Modify
Change Allocation	None	Read/Modify
Administrator Tools	None	Read/Modify
Copy Extended Features	None	Read/Modify
Copy Card Save Data	None	Read/Modify

🖉 Note

❒ Some items are not displayed depending on the security settings.

Displaying Web Image Monitor Help

When using Help for the first time, clicking either **[Help]** in the header area or the icon marked "?" in the display area 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. To view Help without connecting to the Internet, enter the path to your local Help files in your browser's URL bar.

🖉 **Note**
❒ By clicking **[Help]** in the header area, the contents of Help appear.
❒ You can view Help for a setting by clicking "?", the Help icon, in the display area.

Downloading Help

🄰 **In the [OS] list, select the operating system.**

🄱 **In the [Language] list, select the language.**

🄲 **Click [Download].**

🄳 **Download Help by following the instructions on the screen.**

🄴 **Store the downloaded compressed file in a location, and then decompress the file.**

To view the downloaded Web Image Monitor Help, set the path to the location of the decompressed file.

Linking the URL of the Help File to the [Help] Button.

You can link the URL of the help file on a computer or Web server to the **[Help]** button.

🄰 **Log on to Web Image Monitor in the administrator mode.**

🄱 **In the menu area, click [Configuration].**

🄲 **Click [Webpage].**

🄳 **In the [URL] box, enter the URL of the help file.**

For example, 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/".

🄴 **Click [OK].**

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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 95/98/Me
  TCP/IP
  IPX/SPX
  NetWare
  NetWare Client32 for Windows 95
  IntraNetWare Client for Windows 95
  Novell Client for Windows 95/98/Me

- 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 NT 4.0
  TCP/IP
  IPX/SPX
  Client Service for NetWare
  NetWare Client32 for Windows NT
  IntraNetWare Client for Windows NT
  Novell Client for Windows NT/2000/XP

❖ **Available operations**

The following functions are available:

- Limits settings done from the control panel, and disables changes made to certain items.

- Enables selection of paper type loaded in the machine.

- Switches to, and comes out of Energy Save Mode.

- Checks information about printing, paper quantity, etc.

- Simultaneously monitors multiple printers. When there are many printers, you can create groups and classify printers to facilitate management.

- Checks the machine's network settings and detailed device information.

- Enables you to change the machine's network settings.

- You can check details of print jobs sent from a computer.

- Allows you to check job histories of printed, scanned, and photocopied documents identified by user codes.

- Allows selection of functions such as printing and scanning for each user code.

- You can make settings for and display the status changes of group devices.

- Using Address Management Tool, you can manage user names for Scan to Folder.

- The e-mail sender's name and folder can be protected.

Installing SmartDeviceMonitor for Admin

Follow the procedure below to install SmartDeviceMonitor for Admin

A Quit all applications currently running.

B Insert the CD-ROM into the CD-ROM drive.

The installer starts.

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

The following languages are available: Czech, Danish, German, English, Spanish, French, Italian, Hungarian, Dutch, Norwegian, Polish, Portuguese , Finnish, Swedish, Chinese Simple and Chinese Traditional.

D Click [SmartDeviceMonitor for Admin].

E Click [Next >].

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

F After reading through its contents, click [Next >].

G Follow the instructions on the screen.

A message appears when the installation is completed.

H 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 SmartDevice-Monitor 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.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **In the list, select a machine whose configuration you want to change.**

D **On the [Tools] menu, click [NIB Setup Tool].**

NIB Setup Tool starts when the network interface board is default. Click **[Web browser]**, and then click **[OK]**.

E **A Web browser opens and enter the login user name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

F **Configure settings using Web Image Monitor.**

G **Quit Web Image Monitor.**

H **Quit SmartDeviceMonitor for Admin.**

Note

❐ For details about the login user name and password, see Security Reference.

Reference

For details about Web Image Monitor, see p.27 "Using Web Image Monitor"

Locking the Menus on the Machine's Control Panel

Follow the procedure below to lock the menus on the machine's control panel.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **Select a machine.**

D **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.

E **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. Enter required setting items.

F **Quit Web Image Monitor.**

G **Quit SmartDeviceMonitor for Admin.**

Note

❒ For details about setting items, see Help in the **[General Settings]** on **[Configuration]** page.

❒ For details about the login user name and password, see Security Reference.

Changing the Paper Type

Follow the procedure below to change the paper type.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **In the list, select a machine whose configuration you want to change.**

D **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.

E **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. Enter required setting items.

F **Quit Web Image Monitor.**

G **Quit SmartDeviceMonitor for Admin.**

Note

❒ For details about setting items, see Help in the **[General Settings]** on **[Configuration]** page.

❒ For details about the login user name and password, see Security Reference.

Managing User Information

Follow the procedure below to manage the user's information using SmartDevice-Monitor for Admin.

Prints jobs can be managed and functions restricted by user codes.

Starting Address Management Tool

Follow the procedure below to start User Management Tool.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **In the list, select a machine you want to manage.**

D **On the [Tools] menu, click [User Management Tool].**

The dialog box for entering the login user name and password appears.

E **Enter the user name and password, and then click [OK].**

For details about the user name and password, consult your network administrator.

User Management Tool starts.

Note
❒ For details about User Management Tool, see SmartDeviceMonitor for Admin Help.
❒ For details about the login user name and password, see Security Reference.

Displaying the Number of Sheets Printed

Follow the procedure below to display the number of sheets printed under each user code.

A **Start SmartDeviceMonitor for Admin User Management Tool.**

B **Click the [User Counter Information] tab of User Management Tool.**

The number of pages printed under each user code appears.

C **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.

A **Start SmartDeviceMonitor for Admin User Management Tool.**

B **Click the [User Counter Information] tab of User Management Tool.**

C **On the [File] menu, click [Export User Statistics List].**

D **Specify the save location and file name, and then click [Save].**

E **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 code to 0.

A **Start SmartDeviceMonitor for Admin User Management Tool.**

B **Click the [User Counter Information] tab of User Management Tool.**

C **Click the user whose information you want to reset.**

D **On the [Edit] menu, click [Reset User Counters].**

E **Select the check box of the items you want to reset, and then click [OK].**

A confirmation message appears.

F **Click [OK].**

The number of pages printed is reset to 0.

G **On the [Edit] menu, click [Apply Settings].**

Changes are applied to information on the **[User Counter Information]** tab.

H **Click [Exit] on the [File] menu to quit User Management Tool.**

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Restricting Functions

Follow the procedure below to restrict use of individual functions.

A **Start SmartDeviceMonitor for Admin User Management Tool.**

B **Click the [User Counter Information] tab of User Management Tool.**

C **Click the user whose functions you want to restrict.**

D **On the [Edit] menu of User Management Tool, click [Restrict Access To Device].**

E **Select the check box of the functions you want to restrict.**

F **Click [OK].**

A confirmation message appears.

G **Click [Yes].**

The settings are applied.

Setting Applicable Functions to New Users

Follow the procedure below to add new users and set functions applicable to them.

A **Start SmartDeviceMonitor for Admin User Management Tool.**

B **Click the [Access Control List] tab of User Management Tool.**

C **On the [Edit] menu, click [Add New User].**

D **Enter the user code and user name.**

E **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.

F **Click [OK].**

The new user is added.

G **On the [Edit] menu, click [Apply Settings].**

The settings are applied.

H **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 Save Mode

Follow the procedure below to configure Energy Save Mode.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Yes], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **Select the machine whose settings you want to make.**

To make settings for all machines in the selected group, select no machine.

D **On the [Group:] menu, point to [Energy Save Mode], point to [Set Individually] to make the settings for only the selected machine or point to [Set By Group] to make the settings for all machines in the selected group, and then click [On] or [Off].**

E **Quit SmartDeviceMonitor for Admin.**

Note

❒ For details about the setting for Energy Save mode, see SmartDeviceMonitor for Admin Help.

Setting a Password

Follow the procedure below to set a password.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **In the list, select a machine whose configuration you want to change.**

D **On the [Tools] menu, click [NIB Setup Tool].**

NIB Setup Tool starts when the network interface board is default. Click **[Web browser]**, and then click **[OK]**.

E **A Web browser opens and enter the login user name and password, and then click [Login].**

For details about the user name and password, consult your network administrator.

F **Click [Configuration].**

G **Click [Program/Change Administrator] on the [Device Settings] area, and then change the settings.**

H **Quit Web Image Monitor.**

I **Quit SmartDeviceMonitor for Admin.**

✐ Note

❒ For details about the login user name and password, see Security Reference.

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Checking the Machine Status

Follow the procedure below to check machine status.

A Start SmartDeviceMonitor for Admin.

B On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C To obtain status details, select the machine in the list, and then click [Open] on the [Device] menu.

The machine status appears in the dialog box.

D Click [System] or [Printer].

The machine status appears in the dialog box.

E Quit SmartDeviceMonitor for Admin.

📝 Note

❒ For details about 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 machine.

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **Select a machine in the list, and then click [NIB Setup Tool] on the [Tools] menu.**

NIB Setup Tool starts when the network interface board is default. Click **[Web browser]**, and then click **[OK]**.

D **A Web browser opens and enter the login user name and password, and then click [Login].**

For details about the login user name and password, consult your network administrator.

E **Click [Configuration].**

F **Click [System] on the [Device Settings] area, and then change the settings.**

G **Quit Web Image Monitor.**

H **Quit SmartDeviceMonitor for Admin.**

✐ Note

❒ In the **[Device Name]** box, enter a device name on the machine using up to 31 characters.

❒ In the **[Comment]** box, enter a comment on the machine using up to 31 characters.

❒ For details about the login user name and password, see Security Reference.

Viewing and Deleting Spool Print Jobs

A **Start SmartDeviceMonitor for Admin.**

B **On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].**

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C **Select a machine in the list, and then click [Spool Printing Job List(Printer)] on the [Tools] menu.**

A Web browser opens and the dialog box for entering the login user name and password for the Web Image Monitor administrator appears.

D **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.

To delete the Spool Printing Job, select the document you want to delete and then click **[Delete]**.

✎ Note

❒ To display Spool Printing Job List, spool must be set to **[Enable]** on Web Image Monitor in advance.

❒ For details, see Help in the Spool Printing Job List area.

❒ For details about the login user name and password, see Security Reference.

Managing Address Information

A Start SmartDeviceMonitor for Admin.

B On the [Group:] menu, point to [Search Device], and then click [IPv4], [IPX/SPX] or [IPv4 SNMPv3].

A list of machines using the selected protocol appears.

Select the protocol of the machine whose configuration you want to change.

If you are using IPv4 SNMPv3, enter the user authentication.

C Select a machine in the list, and then click [Address Management Tool] on the [Tools] menu.

The dialog box for entering the login user name and password appears.

D Enter the login user name and password, and then click [OK].

Address Management Tool starts.

For details about the login user name and password, consult your network administrator.

✐ Note

❒ For details, see Address Management Tool Help.

❒ For details about the login user name and password, see Security Reference.

Using SmartDeviceMonitor for Client

To view the status of machines using SmartDeviceMonitor for Client, configure SmartDeviceMonitor for Client beforehand.

Monitoring Printers

Follow the procedure below to monitor the machine using SmartDeviceMonitor for Client.

A **Right-click the SmartDeviceMonitor for Client icon on the task tray, point to [Properties], and then click [Options...].**

The **[SmartDeviceMonitor for Client - Options]** dialog box appears.

B **Select the machine you want to monitor, and then select the [To be Monitored] check box in the Monitoring Information Settings area.**

To display the machine status in the task tray using the SmartDeviceMonitor for Client icon, select the **[Displayed on Task Bar]** check box.

C **Click [OK].**

The dialog box closes and the configured machine is monitored.

Note
❒ For details about status icons, see SmartDeviceMonitor for Client Help.

Checking the Machine Status

Follow the procedure below to check machine status using SmartDeviceMonitor for Client.

A **For status details, right-click the SmartDeviceMonitor for Client icon on the task tray, and then click the machine.**

The machine 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://(machine's address)/". 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 machine 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 is jammed, an e-mail alert is issued to the registered addresses to notify the printer status.

For this notification, you can make the e-mail notification settings.

Notification timing and e-mail content can be set.

You can be notified of the following events:

- Service call.
- Toner cartridge is empty.
- Toner cartridge is nearly empty.
- Waste toner bottle (waste toner ink tank) is full.
- Waste toner bottle (waste toner ink tank) is nearly full.
- Punch dust is full
- Paper has jammed.
- Open door is detected.
- The paper tray is empty.
- The paper tray is nearly empty.
- A paper tray error occurred.
- Output paper tray is full.
- Unit connection error.
- Duplex unit error.
- Hard disk drive is full.

Note
❒ When the service call is set, following call results can be sent.
- Failure automatic call success
- Failure automatic call out of time
- Failure automatic call failure
- Consumable automatic call success
- Consumable automatic call success
- Remote machine check failure
- Firmware update confirmed

❒ Other call results can be displayed, depending on the machine type.
❒ For details about the service call, contact your service or sales representative.

A **Open a Web browser, and then enter "http://(machine'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://(machine's address)/".

B **Click [Login] on Top Page of Web Image Monitor.**

The window for entering the login user name and password appears.

C **Enter the login user name and password, and then click Login.**

For details about the login user name and password, consult your network administrator.

D **In the menu area, click [Configuration].**

E **Click [E-mail] on the [Device Settings] area.**

F **Make the following settings:**

- Administrator E-mail Address: Make the address settings for receiving e-mail notification when there is a problem with the machine or consumables need replacing.

- 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: Items in the E-Mail Notification Account column: Specify these items if you want to use on-demand e-mail notification.

G **Click [OK].**

H **Click [Logout].**

I **Quit Web Image Monitor.**

✎ **Note**

❒ For details about the login user name and password, see Security Reference.

Auto E-mail Notification

A **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.

B **Make the following settings:**

- Items in Notification Message column: You can set this according to your needs, for example, the machine'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 machine status and error.
  To make detailed settings for these items, click **[Edit]** next to **[Detailed Settings of Each Item]**.

C **Click [OK].**

D **Click [Logout].**

E **Quit Web Image Monitor.**

On-demand E-mail Notification

A **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.

B **Make the following settings:**

- Notification Subject: Enter a text string to be added to the subject line of return e-mails.

- Notification Message: You can set this according to your needs, for example, the machine'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.

C **Click [OK].**

D **Click [Logout].**

E **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 Click **[Configuration]** In the menu area, and then click **[On-demand E-mail Notification]** on the **[Device Settings]** area.

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.
  [Encryption]-**[Auto Select]**: If the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.
  [Encryption]-**[Active]**: If the authentication method is CRAM-MD5 or DIGEST-MD5.
  [Encryption]-**[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 Click **[Configuration]** In the menu area, and then click **[On-demand E-mail Notification]** on the **[Device Settings]** area.

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.

Using On-demand E-mail Notification

To use on-demand e-mail notification, perform the following configuration tasks in Web Image Monitor.

① Click **[Configuration]** In the menu area, and then click **[On-demand E-mail Notification]** on the **[Device Settings]** area.

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 machine.
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.

📝 **Note**
❐ A mail message must be within 1 MB in size.
❐ E-mail may be incomplete if sent immediately after power on.

❖ **Subject field**
Format: devicestatus?parameter-name=parameter[&=parameter][&=parameter]...

📝 **Note**
❐ The Subject field is case-insensitive.
❐ Parameter names can be written in any order.

❖ **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
Device status information	status

❖ **Parameters specifying the mail format**

Mail format	Parameter
Text	text
HTML	html
XML	xml

Note

❏ HTML and XML can be selected for subject field, but output is text only.

❖ **Parameters that specify the language for mail bodies**

Language	Parameter
Japanese	ja
English	en

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 command cannot be set depending on the model type.

Using telnet

Follow the procedure below to use telnet.

⚜️Important

❒ Only one user at a time can log on to perform remote maintenance.

A **Use the IP address or the host name of the machine to start telnet.**

```
% telnet IP_address
```

B **Enter your user name and password.**

For details about the user name and password, consult your network administrator.

For user authentication, enter a login user name and password.

For user code authentication, enter a user code in User Name.

C **Enter a command.**

D **Quit telnet.**

```
msh> logout
```

The configuration message about saving the changes appears.

E **Enter "yes" to save the changes, and then press the 【Enter】 key.**

If you do not want to save the changes, enter "no", and then press the 【Enter】 key. To make further changes, enter "return" at the command line, and then press the 【Enter】 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"
   - The star mark 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 range 192.168.0.10 192.168.0.20

❖ **IPv6 Configuration**
   msh> access ☆ range6 "start-address end-address"
   - The star mark 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"
   - The star mark 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 machine 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.

❒ 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.

authfree

Use the "authfree" command to display and configure authentication exclusion control settings.

❖ **View 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 settings**

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

📝 **Note**

❒ For IPv4 and IPv6, up to five access ranges can be registered and selected.

autonet

Use the "autonet" command to 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 IEEE 802.11b interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11b 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 (rendezvous)

Use the "bonjour (rendezvous)" command to display bonjour (rendezvous) - 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.

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❖ **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 IEEE 802.11b interface is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11b interface

❖ **Setting IPP-SSL Printing**

```
msh> bonjour ippport {ipp | ssl}
```

- If IPP-SSL Printing is set to ssl, the IPP port number will appear as 443, and IPP-SSL printing can be performed with higher security.

- If IPP-SSL Printing is set to ipp, the IPP port number will appear as 631. Port 631 is the port for normal IPP printing.

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> devicename clear name
```

- 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 IEEE 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 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".

$\mathcal{P}$**Reference**

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diprint

The direct printing port enables direct printing from a network-connected computer.

Use the "diprint" command to change direct printing port settings.

❖ **View settings**

The following command displays the current direct printing port settings:

msh> diprint
Example output:

port 9100
timeout=300(sec)
bidirect on
con multi
apl async

- The "port" specifies the port number of the direct printing port.
- The "bidirect" setting indicates whether the direct printing port is bidirectional or not.

❖ **Setting timeout**

msh> diprint timeout [30~65535]

- You can specify the timeout interval to use when the printer is expecting data from the network.
- The default is 300 seconds.

❖ **Specifying the number of concurrent connections**

msh> diprint con {multi | single}

- The above command specifies the number of concurrent diprint connections. Specify "multi" for multiple connections or "single" for a single connection.
- The default is "multi".

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 IPv4 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 IEEE 802.11b interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11b 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.

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❖ **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 IEEE 802.11b 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 IEEE 802.11b interface will have the same domain name.
- wlan can be specified only when the IEEE 802.11b interface is installed.

Interface	Interface set
ether	Ethernet interface
wlan	IEEE 802.11b 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 beginning "RNP" (in either upper or lower case).
- The Ethernet interface and IEEE 802.11b interface will have the same printer name.
- wlan can be specified only when the IEEE 802.11b interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11b interface

❖ **Initializing the printer name for each interface**

`msh>hostname "interface_name" clear name`

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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 IEEE 802.11b interface is installed.

Interface name	Interface configured
ether	Ethernet Interface
wlan	IEEE 802.11b 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 " "printer_name"

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 IEEE 802.11b interface when using the optional IEEE 802.11b interface unit.

🖉 **Note**

❑ To get the above addresses, contact your network 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 IEEE 802.11b interface.

❑ TCP/IP configuration is the same for both Ethernet and IEEE 802.11 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**

   p.94 "Getting Printer Information over the Network"

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".

   • 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.

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ipv6

Use the "ipv6" command to display and configure IPv6 settings.

❖ **View Setting**

   msh> ipv6

❖ **IPv6 stateless address**

   msh> ipv6 stateless {on|off}
   If "on" is selected, IPv6 requests information required for maintaining stateful connection to the router for as long as the printer power is turned on. This setting allows information from the router to be obtained constantly, and periodically refreshes the effective period of the stateless address.

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 view and 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 character string
   • 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
ipx	IPX

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}

You can delete the administrator password or set up a new one.

- 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" optimizes 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

- Display 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**

route

Use the "route" command to view and control the routing table.

❖ **Specified 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 the 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.

❖ **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, AppleTalk, Netware, and SMB appears.

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"to 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

   p.100 "Configuring the Network Interface Board"

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. 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 Name**

   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.

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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.

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spoolsw

Use the "spoolsw" command to view and configure Job Spool settings.

You can only specify diprint, trap, lpr, ipp, ftp, sftp, and smb(TCP/IP) protocol.

- The "spoolsw" command for configuring Job Spool settings is available only when the optional hard disk is installed.

❖ **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, ftp, sftp, and smb.

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.

❖ **view messages**

msh> status

Reference

syslog

Use the "syslog" command to display the information stored in the printer's system log.

❖ **View message**

msh> syslog

🔍 **Reference**
p.106 "System Log Information"

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.

❖ **Deleting Public URL**

msh> upnp clear url

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"/

❖ **Resetting 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/

❖ **Resetting Help URL**

    msh> web clear help

wiconfig

Use the "wiconfig" command to make settings for IEEE 802.11b.

❖ **View settings**

   msh> wiconfig

❖ **View IEEE 802.11b settings**

   msh> wiconfig cardinfo

   • If IEEE 802.11b is not working correctly, its information is not displayed.

❖ **Configuration**

   msh> wiconfig "parameter"

Parameter	Value configured
mode [ap | adhoc | 802.11adhoc]	You can set the infrastructure mode (ap), the 802.11 Ad hoc mode (802.11adhoc), or the ad hoc mode (adhoc).
	The default is ad hoc 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 802.11 ad hoc mode, the same value as for the infrastructure mode or an ASSID value is automatically set. The default is blank.
channel frequency "**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.
	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.

Parameter	Value configured
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. The default is blank.
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 IEEE 802.11b transmitting speed.
	The speed you specify here is the speed at which data is sent. You can receive data at any speed.
	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)
	wep: WEP encryption
	wpa: WPA encryption
wpaenc {tkip|ccmp}	You can specify WPA encryption key when using WPA encryption.
	tkip: TKIP
	ccmp: CCMP (AES) (default)
wpaauth {wpapsk|wpa|wpa2psk |wpa2}	You can specify the WPA authentication mode when using WPA encryption.
	wpapsk: WPA-PSK authentication (default)
	wpa: WPA authentication
	wpa2psk: WPA2-PSK authentication
	wpa2: WPA2 authentication
psk "character string"	You can specify the Pre-Shared key.
	Usable characters: ASCII 0x20-0x7e (8 to 63 bytes).
	The default is blank.

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Parameter	Value configured
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.
	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.

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 IEEE 802.11b interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11b 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 IP address.
- Use the "secondary" command to configure a secondary WINS server IP address.
- Do not use "255.255.255.255" as the IP 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 IEEE 802.11b interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11b interface

SNMP

The SNMP agent operating on UDP and IPX is incorporated into the built-in Ethernet board and optional IEEE 802.11b interface unit of this printer.

Using the SNMP manager, you can get information about the printer.

⚠️Important

❒ If you changed the machine'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 95/98/Me, Windows 2000, Windows NT 4.0:
  Click the **[Start]** button.
  Point to **[SmartDeviceMonitor for Admin]** on the **[Programs]** menu.
  Click **[SNMP Setup Tool]**.

- Windows XP:
  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
- RicohPrivateMIB

❖ **Supported MIBs (SNMPv3)**

- MIB-II
- PrinterMIB
- HostResourceMIB
- RicohPrivateMIB
- SNMP-FRAMEWORK-MIB
- SNMP-TARGET-MIB
- SNMP-NOTIFICATION-MIB
- SNMP-USER-BASED-SM-MIB
- SNMP-VIEW-BASED-ACM-MIB

Getting Printer Information over the Network

This section explains details of each item displayed in the printer status and information.

This manual covers all models, and therefore contains functions and settings that may not be available for your model.

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 machine is initializing or calibrating.
Call Service Center	There is a malfunction in the machine.
Canceled	The job is reset.
Canceling Job...	The job is being reset.
Cannot Eject Original Through	Cannot output prints to the Rear Paper Exit.
Card/Counter not inserted	The machine is waiting for prepaid card or key.
Coin or amount not inserted	The machine is waiting for coin to be inserted.
Coin/Key Counter not inserted	The machine is waiting for coin or key counter.
Configuring...	Setting is being changed.
Cooling Down Fusing Unit...	The fusing unit is cooling down.
Cover Open: Finisher Cover	The cover of Finisher is open.
Data Size Error	The data size error occurred.
Empty: Black Toner	The black toner cartridge is almost empty.
Energy Saver Mode	The machine is in Energy Save Mode.
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 machine.
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: Memory Switch	A memory switch error has occurred.
Error: Optional Font	An error has occurred in the font file of the machine.
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 sever renewal.
Error: USB Interface	An error has occurred in the USB interface.
Error: Wireless Board	A wireless board error has occurred.
Error: Wireless Card	Wireless card is not inserted during start up, or the IEEE 802.11b interface unit or the wireless card is taken out after start up .
Full: Hole Punch Receptacle	Punch Chip receptacle for hole punch is full.
Full: Waste Toner	Waste toner is full.
Hex Dump Mode	It is a hex dump mode.
In Use: Copier	The copier is being used.
In Use: Finisher	Other functions is using Finisher.
In Use: Input Tray	Other functions is using the input tray.
Independent-supplier Toner	Toner that is not recommended is set.
Key Card not inserted	The machine is waiting for key card to be inserted.
Key Card/Counter not inserted	The machine is waiting for key card or key counter to be inserted.
Key Counter not inserted	The machine is waiting for key counter to be left in it.
Loading Toner...	Toner is being supplied.
Low: Black Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Low: Toner	The toner cartridge is not set correctly, or toner is almost running out.
Malfunction: Finisher	There is a problem with the finisher.
Malfunction: Output Tray	There is a problem with the output tray.
Malfunction: Punch Unit	There is a problem with the punch unit.
Memory Low: Copy	Memory shortage has occurred while the copy was operating.
Memory Low: Data Storage	Memory shortage has occurred while the document was being accumulated.
Memory Low: Scanning	Memory shortage has occurred while the scanner was working.
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.
Nearly Full: Waste Toner	Waste toner bottle is nearly full.
No Paper: Selected Tray	There is no paper in specified tray.
Not Detected: Black Toner	Black toner is not correctly set.

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Messages	Description
Not Detected: Develop. Unit (K)	The development unit (black) is not correctly set.
Not Detected: Finisher	Finisher is not correctly set.
Not Detected: Fusing Unit	The fusing unit is not correctly set.
Not Detected: Input Tray	The paper feed tray is not correctly set.
Not Detected: PCU (K)	The photoconductor unit (black) is not correctly set.
Not Detected: WasteToner Bottle	Waste toner bottle is not correctly set.
Offline	Printer is offline.
Operating Thermo-range Error	The machine is operating outside the permissible temperature range.
Panel Off Mode	The machine is in Panel-Off mode.
Panel Off Mode>>Printing ava.	The machine is in Control Panel-Off mode.
Paper in Finisher	The paper remains in Finisher.
Prepaid Card not inserted	The machine is waiting for prepaid card to be inserted.
Print Complete	The print was completed.
Printing...	Printing is in progress.
Processing	Data is being processed.
Proxy Address/Port Incorrect	The proxy address and port setting is incorrect.
Proxy User/Password Incorrect	The proxy user name and password setting is incorrect.
Ready	The machine is ready to print.
Renewing Remote Certificate	The remote certificate is being renewed.
Replace Black PCU	It is time to replace the black photoconductor unit.
Replace Cleaning Web	It is time to replace the Cleaning Web.
Replace Develop. Unit	It is time to replace the development unit.
Replace Fusing Unit	It is time to replace the fusing unit.
Replace PCU	It is time to replace the photoconductor unit.
Retarding...	Printing has stopped momentarily to allow printed sheets to dry.
SD Card Authentication failed	SD card authentication failed.
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.
Waiting for Job Suspension	The machine is waiting for Job Suspension.
Warming Up...	The machine is warming up.

Note

❒ For details about UNIX commands, see UNIX Supplement.

❒ Check the error contents that may be printed in the configuration page. For details about printing a configuration page, see Printer Reference.

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
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

❖ **Printer Language**

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.

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", "ftp", and "sftp" parameters.
- mshell: Use the "info" command.

Item	Description
Rank	Print job status. • Active 　Printing or preparing for printing. • Waiting 　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.

Print Log Information

This is a record of the most recent jobs printed.

Use the following command to display print log information:

- UNIX: Use the "prnlog" command and "rsh", "rcp", "ftp", and "sftp" parameters.
- telnet : Use the "prnlog" command.

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.

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	
TCP/IP	
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	
Type	
Zone	

Item	Description
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	
IPv4	
DHCP	
Address	
Netmask	
Broadcast	
Gateway	
IPv6	
Stateless	
Manual	
Gateway	
EncapType	
Host name	
DNS Domain	

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Item	Description
Access Control	Access Control settings
IPv4	X can be set between 1 and 5.
AccessEntry[X]	
IPv6	
AccessEntry[X]	X can be set between 1 and 5.
Time server	Time settings
Time Zone	
Time server polling time	
SYSLOG server	Websys settings
Home page URL1	
Home page linkname1	
Home page URL2	
Home page linkname2	
Help page URL	
Netware	
EncapType	
RPRINTER number	
Print server name	
File server name	
Context name	
Switch	
Mode	
NDS/Bindery	
Packet negotiation	
Login Mode	
Print job timeout	
Protocol	
SAP interval time	
NDS Tree Name	
Transfer Protocol	

Item	Description
SMB	SMB settings
Switch	
Mode	
Direct print	
Notification	
Workgroup name	
Computer name	
Comment	
Share name[1]	
Protocol	
IEEE 802.11b	IEEE 802.11b settings
Host Name	
Communication mode	
SSID	
Channel range	
Channel	
TX Rate	
Security	
WEP Authentication	
WEP Encryption key number	
WEP encryption	
WEP Encryptionkeys [X]	X can be set between 1 and 5.
WPA Encryption	
WPA Authentication	
Pre-Shared Key	
User name	
Domain name	
EAP Type	
Password	
Phase 2 username	
Phase 2 Method TTLS	
Phase 2 Method PEAP	
Server cert	
IntermediateCA	
Server ID	

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Item	Description
DNS	DNS settings
IPv4	
Server[X]	X can be set between 1 and 3.
Selected IPv4 DNS Server	
IPv6	
Server[X]	X can be set between 1 and 3.
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>	
Local Hostname<wlan>	
Location	
Priority <diprint>	
Priority <lpr>	
Priority <ipp>	
IP TTL	
LinkLocal Route for MultiI/F	

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Item	Description

SNMP
  SNMPv1v2
  SNMPv3
  protocol
  v1Trap
  v2Trap
  v3Trap
  SNMPv1v2 Remote Setting
  SNMPv3 Privacy
	SNMP settings

ssh Compression Port TimeOut Login TimeOut	ssh settings

AuthFree
  IPv4
    AuthFreeEntry[X]
  IPv6
    AuthFreeEntry[X]
  Parallel
  USB
	Authfree settings
	
	X can be set between 1 and 5.
	
	X can be set between 1 and 5

LPR lprm check host	
Certificate Verification	
Shell mode	Remote maintenance tool mode

Message List

This is a list of messages that appear in the machine'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
Access to NetWare server <file server name> denied. Either there is no account for this print server on the NetWare server or the password was incorrect.	(In the print server mode) Login to the file server failed. Make sure that the print server is registered on the file server. If a password is specified for the print server, delete it.
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.
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.
Attach FileServer= <file servername>	Connection to the file server as the nearest server has been established.

Message	Problem and solutions
Attach to print queue <print queue name>	(In the print server mode) Attached to the print queue.
Authentication mode mismatch< SSID >	Authentication mode is different to the AP. The required SSID is the SSID of the access point connected to when in infrastructure mode.
centrod is disabled.	Communication via parallel connection is unavailable because centrod is disabled in the security mode. Enable centrod in the security mode.
Cannot create service connection	(In the remote printer mode) Connection to the file server has not been established. The number of file server users may have exceeded the maximum capacity of the file server.
Cannot find rprinter (<print server name>/<printer number>)	The printer with the number displayed on the print server does not exist. Make sure that the printer number is registered on the print server.
Change IP address from DHCP Server.	The IP address changes when DHCP lease is renewed. To always assign the same IP address, set a static IP address to the DHCP server.
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.
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.
Connected DHCP Server(<DHCP server address>).	The IP address was successfully received from the DHCP server.
Could not attach to FileServer<error number>	(In the remote printer mode) Connection to the file server has not been established. The file server has refused the connection. Check the file server configuration.
Could not attach to PServer<print server>	(In the remote printer mode) Connection to the print server has not been established. The print server has refused the connection. Check the print server configuration.
Current Interface Speed:xxxMbps	Speed of the network (10Mbps, 100 Mbps, or 1Gbps).
Current IP address <current IP address>	Current IPv4 address.
Current IPX address<IPX address>	Current IPX address
DHCP lease time expired.	DHCP lease time has expired. The printer tries to discover the DHCP server again. The IP address until now becomes invalid.
DHCP server not found.	The DHCP server was not found. Make sure that the DHCP is on the network.

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Message	Problem and solutions
dhcpcd start.	The DHCPCD service (dhcp client service) has started.
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].
Established SPX Connection with PServer,(RPSocket=<socketnumber>, connID=<connection ID>)	(In the remote printer mode) Connection to the print server has been established.
exiting	The lpd service has ended and the system is exiting the process.
Exit pserver	(In the print server mode) The print server function is disabled because the necessary print server settings have not been made.
Frametype =<frame type name>	The frame type name is configured to be used on NetWare.
httpd start.	The httpd service has started.
IEEE 802.11b <communication mode> mode	Displays IEEE 802.11b 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 IPv6 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.
IPP cancel-job: permission denied.	The printer could not authenticate the name of the user attempting to cancel a job.
ipp disable.	Printing with ipp is disabled.
ipp enable.	Printing with ipp is enabled.
IPP job canceled. jobid=%d.	The spooled job was canceled due to error or user request.
LeaseTime=<lease time>(sec), RenewTime=<renewtime>(sec).	The resource lease time received from the DHCP server is displayed in [lease time] in seconds. The renewal time is displayed in [renew time] in seconds.
Login to fileserver <file server name> (<IPX | IPv4 | IPv6,<NDS | BINDERY | NDS | BINDERY>)	(In the print server mode) Login to the file server is in the NDS or BINDERY mode.
Memory allocate error.	Data cannot be obtained. Disconnect the USB cable, and then connect it.
Name registration success. WINS Server=<WINS server address> NetBIOS Name=<NetBIOS name>	Name registration of <NetBIOS Name> to <WINS server address> was successful.

Message	Problem and solutions
Name registration success in Broadcast name=<NetBIOS Name>	Name registration by Broadcast name of <Net-BIOS Name> was successful.
Name registration failed. name=<NetBIOS name>	Name registration of <NetBIOSName> failed. Change to different NetBIOS name.
nbtd start.	The nbtd service has started.
nprinter start (Netware)	(In the remote printer mode) The NetWare service has started.
nwstart start. (NetWare)	The service for NetWare protocol stack setting has started.
Open log file <file name>	(In the print server mode) The specified log file has been opened.
phy release file open failed.	Replacing the network interface board is required. Contact your sales or service representative.
Print queue <print queue name> cannot be serviced by printer 0, <print server name>	(In the print server mode) The print queue cannot be established. Make sure that print queue exists on the specified file server.
Print server <print servername>has no printer.	(In the print server mode) The printer is not assigned to the print server. Using NWadmin, assign the printer, and then restart it.
print session full	No more print jobs can be accepted.
Printer <printer name> has no queue	(In the print server mode) The print queue is not assigned to the printer. Using NWadmin, assign the print queue to the printer, and then restart it.
pserver start. (NetWare)	(In the print server mode) The NetWare service has started.
Required file server (<file servername>) not found	The required file server is not found.
received EAP Failure	EAP reception failed.
restarted.	The lpd service has started.
sap enable, saptype=<SAP type>, sapname=<SAP name>	The SAP function has started. The SAP packet is issued to advertise the service on the SAP table on the NetWare server.
server identity invalid	The server ID is disabled. Check the server authentication.
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 <community name> already defined.	The requested community name is not defined.
session_ipx <community name> not defined.	The requested community name is not defined.
Set context to <NDS context name>	An NDS context name has been set.
smbd start. (NETBIOS)	The smbd service has started.

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Message	Problem and solutions
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.
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.

Message	Problem and solutions
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.
terminated.	The bonjour (rendezvous) function is disabled.
The print server received error <error number> during attempt to log in to the network. Access to the network was denied. Verify that the print server name and password are correct.	Login to the file server failed. The print server is not registered or a password is specified. Register the print server without specifying a password.
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.
usbd is disable.	Plug and Play function and printing is disabled because usbd is disabled in the security mode. Enable usbd in the security mode.
WINS name registration: No response to server <WINS server address>	There was no response from the WINS server. Check the correct WINS server address is entered. Alternatively, check the WINS server is functioning properly.
WINS wrong scopeID=<Scope ID>	An invalid scope ID was used. Use a valid scope ID.
wpa authentication Failed	WPA authentication failed. Check the WPA configuration.
wpa authentication started	WPA authentication has started.
wpa IEEE802.1X started	WPA authentication has started.
wpa connecting to authenticator	WPA is connecting to authenticator.
wpa link up	WPA key exchange has finished, and communication has been terminated.
wpa probe response doesn't have IE.	WPA probe response does not have IE.
wpa success authenticated	WPA authentication was successful.
wpa success key received	WPA key reception was successful.
wpa waiting for key	Waiting for WPA key.
wpasupd start	wpasupd has started.
wpasupd stop	wpasupd has ended.

🖉 Note

❒ For details about UNIX commands and parameters, see UNIX Supplement.

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3. Special Operations under Windows

Printing Files Directly from Windows

You can print files directly using Windows commands. For example, you can print PostScript files for PostScript 3.

❖ **Windows 95/98/Me**
   You can print files directly using ftp command.

❖ **Windows 2000/XP, Windows Server 2003, Windows NT 4.0**
   You can print files directly using lpr, rcp ftp command.

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 network administrator for the local setting information.

3 **To print under Windows 2000/XP, Windows Server 2003, install "Printing service for UNIX" as the network application. To print under Windows NT 4.0, install "Microsoft TCP/IP printing" as the network application.**

   🔍**Reference**

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 IP 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.

✒ Note
❒ For details about printing a configuration page, see General Setting Guide.

In other cases

Add the IP 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 95/98/Me

A **Copy \WINDOWS\HOSTS.SAM to the same directory and name it "HOSTS" with no extension.**

B **Open the "\WINDOWS\HOSTS" file created using memo pad files, for instance.**

C **Add an IP address and host name to the hosts file using the following format:**

`192.168.15.16    host    # NP`

"192.168.15.16" is the IP 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.

D **Save the file.**

Windows 2000/XP, Windows Server 2003, Windows NT 4.0

A **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, Windows Server 2003, and Windows NT 4.0.

B **Add an IPv4 or IPv6 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.

```
2001:DB::100 host # NP
```

"2001:DB::100" is the IPv6 address, "host" is the printer's host name, and "#NP" is replaced by comments. Insert a space or tab between "2001:DB::100" and "host", between "host" and "#NP" respectively, using one line for this format.

C **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.

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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 95/98
  [Start] - **[Programs]** - **[MS-DOS Prompt]**

- Windows Me
  [Start] - **[Programs]** - **[Accessories]** - **[MS-DOS Prompt]**

- Windows 2000
  [Start] - **[Programs]** - **[Accessories]** - **[Command Prompt]**

- Windows XP, Windows Server 2003
  [Start] - **[All Programs]** - **[Accessories]** - **[Command Prompt]**

- Windows NT 4.0
  [Start] - **[Programs]** - **[Command Prompt]**

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: 5 (When the spool printing function is available: 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]
```

📎 Note

❒ In file names, "*" and "?" can be used as wild cards.

❒ When printing a binary file, add the "-b" 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
```

🔎 Reference

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]
```

Follow the procedure below to print using the "ftp" command.

A 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
```

B Enter the user name and password, and then press the 【Enter】 key.

For details about the user name and password, consult your network administrator.

```
User:
Password:
```

When user authentication is set, enter a login user name and password.

C 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.

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D **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
```

E **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.

4. Appendix

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**
- 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 / FR1 / FR2 / FR3
- MetaFrame Presentation Server 3.0
- Citrix Presentation Server 4.0

❖ **Windows 2003 Server**
- MetaFrame XP 1.0 FR3
- MetaFrame Presentation Server 3.0
- Citrix Presentation Server 4.0

Supported Printer Drivers

❖ **When Windows Terminal Service is operating**
- 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.

❖ **Windows Terminal Service**

In the Windows Terminal Service environment, some of the printer driver's functions is unavailable. In an environment where Windows Terminal Service is installed, some of the printer driver's functions is unavailable, even if any function of Windows Terminal Service is not used. When you install SmartDeviceMonitor for Client in an environment where the Terminal Service is running on a Windows NT Server 4.0 Terminal Server Edition or the Windows 2000 Server family computer, be sure to install it using the install mode. 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:
To quit the install mode, enter the following command in the MS-DOS command prompt.

❖ **MetaFrame's [Auto-creating client printers]**

Using **[Auto-creating client printers]** 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]** 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.

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 Windows NT 4.0, 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.

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 General Settings 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 NT 4.0 Server Service Pack 4 or higher, and 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

A **Start a Web browser.**

B **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.

C **Click [Login].**

The dialog box for entering the user name and password appears.

D **Enter the user name and password, and then click [Login].**

Contact your administrator for information about the settings.

E **In the left area, click [Configuration], and then click [Network].**

F **Click [TCP/IP].**

G **Check that [Enable] is selected for [WINS] in the [Ethernet+IEEE 802.11b] column, and then enter the WINS server IPv4 address in [Primary WINS Server] and [Secondary WINS Server].**

H **Click [Apply].**

I **Quit Web Image Monitor.**

Using telnet

See p.61 "Remote Maintenance by telnet".

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record 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.

✎ 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.

❖ For a static IP 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 IEEE 802.11b
  RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

❖ For DHCP 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 IEEE 802.11b
  RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

⚠Important

❒ Dynamic update using message authentication (TSIG, SIG(0)) is not supported.

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
- BIND 8.2.3 or higher

❖ **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. For details, see p.61 "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 machine instead.

❖ **Configuring the router**
Filter packets so they do not pass over the dial-up router.

   📝 **Note**
   ❒ The MAC address of the filtering printer is printed on the printer configuration page. For more information about printing a configuration page, see **Printer Reference**.
   ❒ For more information about configuring the printer if the router cannot be configured, see the following instructions.

Configuring the printer with NetWare

A **Following the setup method described earlier in this manual, configure the file server.**

B **Set the frame type for NetWare environment.**

   🔍 **Reference**
   For more information about selecting a frame type, see the General Settings Guide.

Configuring the printer without NetWare

A **When not printing, the network interface board sends packets over the network. Set NetWare to "inactive".**

   🔍 **Reference**
   For more information about selecting a protocol, see General Settings Guide.

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When Using Network Utility

If the machine is connected to a network, observe the following points when setting up the machine or changing settings:

For more details, see the operating instructions and Help for ScanRouter V2 Professional and DeskTopBinder Lite/Professional.

❖ **When a dial-up router is connected in a network environment**
The settings for the delivery server to be connected must be made appropriately for the machine with ScanRouter V2 Professional, Auto Document Link, or DeskTopBinder Lite/Professional. In addition, set up connected devices using the I/O settings of ScanRouter V2 Administration Utility.
If the network environment changes, make the necessary changes for the delivery server using the machine, the administration utility of client computers, Auto Document Link, and DeskTopBinder Lite/Professional. Also, set the correct information for the connected devices using the I/O settings of ScanRouter V2 Administration Utility.

 Important

❒ If the machine is set up to connect to the delivery server via a dial-up router, the router will dial and go online whenever a connection to the delivery server is made. Telephone charges may be incurred.

❖ **When connected to a computer that uses dial-up access**

- Do not install ScanRouter V2 Professional on a computer which uses dial-up access.

- When using ScanRouter V2 Professional, DeskTopBinder Lite/Professional, Auto Document Link, or a TWAIN driver on a computer with dial-up access, a dial-up connection may be performed when connecting to the delivery server and other equipment, depending on the setup. If the computer is set up to connect to the Internet automatically, the confirmation dialog box will not appear, and telephone charges may be incurred without your being aware of it. To prevent unnecessary connections, the computer should be set up so the confirmation dialog box always appears before establishing a connection. Do not make unnecessary connections when using the above listed software.

NetWare Printing

Form feed

You should not configure form feed on NetWare. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer might not work properly. If you want to change form feed settings, always configure them using Windows.

- Under Windows 95/98/Me, clear the **[Form feed]** check box on the **[Printer Settings]** tab in the printer properties dialog box.
- Under Windows 2000/XP and Windows Server 2003, clear the **[Form feed]** check box on the **[NetWare Settings]** tab in the printer properties dialog box.
- Under Windows NT 4.0, clear the **[Form feed]** check box on the **[NetWare Settings]** tab in the printer properties dialog box.

Banner page

You should not configure a banner page on NetWare. If you want to change the banner page setting, always configure it using Windows.

- Under Windows 95/98/Me, clear the **[Enable banner]** check box on the **[Printer Settings]** tab in the printer properties dialog box.
- Under Windows 2000/XP and Windows Server 2003, clear the **[Enable banner]** check box on the **[NetWare Settings]** tab in the printer properties dialog box.
- Under Windows NT 4.0, clear the **[Enable banner]** check box on the **[NetWare Settings]** tab in the printer properties dialog box.

Printing after resetting the machine

After resetting the remote printer, the connection from the print server will be cut off for about 30-40 seconds before re-connecting. Depending on the NetWare specification, print jobs may be accepted, but they will not be printed during this interval.

When using the machine as a remote printer, wait about two minutes after resetting before attempting to print.

When the optional IEEE 802.11b interface unit Is Installed

When using the wireless LAN interface on the network, note the following:

❖ **When moving the machine**
Detach the antennas when relocating the machine locally.
After moving the machine, 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.

❖ **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 machine.
- Clear the space between access point and machine of obstructions.
- Move radio wave generating appliances, such as microwaves, away from the machine and access point.

✎ **Note**

❒ For information about how to check radio wave status, see the General Settings Guide.

❒ For more information about access point radio wave conditions, refer to the access point manual.

Information about Installed Applications

RSA® BSAFE

- This product includes RSA® BSAFE cryptographic or security protocol software from RSA Security Inc.
- RSA is a registered trademark and BSAFE is a registered trademark of RSA Security Inc. in the United States and/or other countries.
- RSA Security Inc. All rights reserved.

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Specifications

Interface	1000BASE-T, 100BASE-TX, 10BASE-T, IEEE 802.11b
Frame type	EthernetII, IEEE 802.2, IEEE 802.3, SNAP
Printer	IPv4 　LPR 　RSH 　RCP 　DIPRINT 　FTP 　IPP IPX/SPX (NetWare) AppleTalk SMB
Network Scanner	IPv4 　RSH 　FTP 　SMTP POP3 SMB NCP
Document Server	IPv4 　FTP 　HTTP
Management Function	IPv4 　RSH 　RCP 　FTP 　SNMP 　HTTP TELNET (mshell) 　NBT 　DHCP 　DNS 　LDAP
SNMP v1/v2	MIB-II, PrinterMIB, HostResourceMIB, RicohPrivateMIB
SNMP v3	MIB-II, PrinterMIB, HostResourceMIB, RicohPrivateMIB, SNMP-FRAMEWORK-MIB, SNMP-TARGET-MIB, SNMP-NOTIFICATION-MIB, SNMP-USER-BASED-SM-MIB, SNMP-VIEW-BASED-ACM-MIB

To use IPP and SMB, use the SmartDeviceMonitor for Client port.

To use IPP under Windows XP, Windows Server 2003, use the Standard IPP port. To use IPP under Windows 98, Windows 2000, Windows NT, use SmartDeviceMonitor for Client.

Functions

The following functions are available with the machine:

- Copy
- Printer
- Scanner
- Document Server

Note

❒ The machine must be equipped with the Printer/Scanner Unit in order to use the printer or scanner function.

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