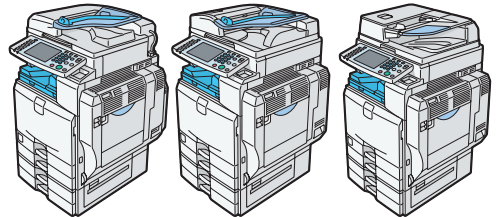




C9130/C9135/C9145/C9145A/C9155/C9155A
C9130G/C9135G/C9145G/C9145AG/C9155G/C9155AG
LD630C/LD635C/LD645C/LD645CA/LD655C/LD655CA
LD630CG/LD635CG/LD645CG/LD645CAG/LD655CG/LD655CAG
Aficio™ MP C3001/C3501/C4501/C4501A/C5501/C5501A
Aficio™ MP C3001g/C3501g/C4501g/C4501Ag/C5501g/C5501Ag

Operating Instructions Network and System Settings Reference



-
- 1 System Settings
 - 2 Connecting the Machine
 - 3 Using a Printer Server
 - 4 Monitoring and Configuring the Machine
 - 5 Registering Addresses and Users for Facsimile/Scanner Functions
 - 6 Special Operations under Windows
 - 7 Appendix

TABLE OF CONTENTS

- Manuals for This Machine..... 10
- Notice..... 12
 - Important..... 12
- How to Read This Manual..... 13
 - Symbols..... 13
 - Machine Types..... 13
 - Names of Major Items..... 14
 - Notes..... 14
 - About IP Address..... 15
- Laws and Regulations..... 16
 - Legal Prohibition..... 16
- Model-Specific Information..... 17
- Display Panel..... 18
- Accessing User Tools..... 19
 - Changing Default Settings..... 19
 - Quitting User Tools..... 20
- 1. System Settings**

- General Features..... 21
 - Output Tray Settings (Type 1 and 2)..... 23
 - Output Tray Settings (Type 3 and 4)..... 24
- Tray Paper Settings..... 27
- Timer Settings..... 36
- Interface Settings..... 39
 - Network..... 39
 - Parallel Interface..... 43
 - Wireless LAN..... 44
 - Print List..... 46
- File Transfer..... 48
- Administrator Tools..... 55
- Programming the LDAP server..... 66
 - Programming the LDAP server..... 66
 - Changing the LDAP server..... 70
 - Deleting the LDAP server..... 70

Programming the Realm.....	72
Programming the Realm.....	72
Changing the Realm.....	73
Deleting the Realm.....	74

2. Connecting the Machine

Connecting to the Interface.....	75
Connecting to the Ethernet Interface.....	76
Connecting to the Gigabit Ethernet Interface.....	77
Connecting to the USB (Type B) Interface.....	80
Connecting a Device to the Machine's USB Host Interface.....	80
Connecting to the IEEE 1284 Interface.....	81
Connecting to the Wireless LAN Interface.....	82
Network Settings Required to Use the Printer/LAN-Fax.....	85
Ethernet.....	85
Wireless LAN.....	86
Network Settings Required to Use Internet Fax.....	88
Ethernet.....	88
Wireless LAN.....	90
Network Settings Required to Use E-mail Function.....	92
Ethernet.....	92
Wireless LAN.....	93
Network Settings Required to Use Scan to Folder Function.....	96
Ethernet.....	96
Wireless LAN.....	97
Network Settings Required to Use the Network Delivery Scanner.....	99
Ethernet.....	99
Wireless LAN.....	100
Network Settings Required to Use WSD Scanner.....	102
Ethernet.....	102
Wireless LAN.....	103
Network Settings Required to Use Network TWAIN Scanner.....	105
Ethernet.....	105
Wireless LAN.....	106

Network Settings Required to Use Document Server.....	108
Ethernet.....	108
Wireless LAN.....	109
Using Utilities to Make Network Settings.....	111
Interface Settings.....	111
File Transfer.....	116
Connecting the Machine to a Telephone Line and Telephone.....	119
Connecting the Telephone Line (Type 1 and 2).....	119
Connecting the Telephone Line (Type 3 and 4).....	119
Selecting the Line Type.....	120

3. Using a Printer Server

Preparing Printer Server.....	121
Using NetWare.....	122
Setting Up as a Print Server (NetWare 3.x).....	122
Setting Up as a Print Server (NetWare 4.x, 5/5.1, 6/6.5).....	124
Using Pure IP in the NetWare 5/5.1 or 6/6.5 Environment.....	125
Setting Up as a Remote Printer (NetWare 3.x).....	127
Setting Up as a Remote Printer (NetWare 4.x, 5/5.1, 6/6.5).....	129

4. Monitoring and Configuring the Machine

Using Web Image Monitor.....	133
Displaying Top Page.....	134
When User Authentication is Set.....	136
About Menu and Mode.....	136
Access in the Administrator Mode.....	138
List of Setting Items.....	139
Displaying Web Image Monitor Help.....	146
When Using IPP with SmartDeviceMonitor for Client.....	148
Machine Status Notification by E-Mail.....	149
Setting the Account for E-mail Notification.....	151
Mail Authentication.....	151
Auto E-mail Notification.....	153
On-demand E-mail Notification.....	153
Format of On-demand E-mail Messages.....	154

Remote Maintenance Using telnet.....	155
Using telnet.....	155
access.....	156
authfree.....	157
autonet.....	158
bonjour.....	158
devicename.....	160
dhcp.....	160
dhcp6.....	161
diprint.....	162
dns.....	163
domainname.....	165
etherauth.....	165
etherconfig.....	165
help.....	166
hostname.....	166
ifconfig.....	167
info.....	168
ipp.....	168
ipsec.....	169
ipv6.....	169
logout.....	170
lpr.....	170
netware.....	171
passwd.....	172
pathmtu.....	172
prnlog.....	173
rhpp.....	173
route.....	174
set.....	175
show.....	178
slp.....	178
smb.....	179

snmp.....	180
sntp.....	183
spoolsw.....	184
ssdp.....	185
ssh.....	185
status.....	186
syslog.....	186
upnp.....	186
web.....	187
wiconfig.....	187
wins.....	192
wsmfp.....	193
8021x.....	194
SNMP.....	197
Getting Machine Information over the Network.....	198
Current Machine Status.....	198
Printer configuration.....	207
Understanding the Displayed Information.....	209
Print Job Information.....	209
Print Log Information.....	209
Configuring the Network Interface Board.....	210
Message List.....	216
System Log Information.....	216
5. Registering Addresses and Users for Facsimile/Scanner Functions	
Address Book.....	229
Managing names in the Address Book.....	232
Sending fax by Quick Dial.....	232
Sending e-mail by Quick Dial.....	233
Sending received fax documents or scanned files to a shared folder directly.....	233
Preventing unauthorized user access to shared folders from the machine.....	233
Managing users and machine usage.....	233
Registering Names.....	235
Registering Names.....	235

Changing a Registered Name.....	236
Deleting a Registered Name.....	237
Carrying Over Registered Data for Use by Address Book Auto Register.....	239
Authentication Information.....	240
Registering a User Code.....	240
Changing a User Code.....	242
Deleting a User Code.....	244
Displaying the Counter for Each User.....	245
Printing the Counter for Each User.....	246
Printing the Counter for All Users.....	247
Clearing the Number of Prints.....	248
Fax Destination.....	250
Registering a Fax Destination.....	252
Changing a Fax Destination.....	253
Deleting a Fax Destination.....	256
Registering an IP-Fax Destination.....	257
Changing a Registered IP-Fax Destination.....	258
Deleting a Registered IP-Fax Destination.....	261
E-mail Destination.....	263
Registering an E-mail Destination.....	263
Changing an E-mail Destination.....	265
Deleting an E-mail Destination.....	266
Registering Folders.....	268
Registering an SMB Folder.....	268
Changing an SMB Folder.....	272
Deleting an SMB Registered Folder.....	273
Registering an FTP Folder.....	274
Changing an FTP Folder.....	277
Deleting an FTP Folder.....	278
Registering an NCP Folder.....	279
Changing an NCP Registered Folder.....	283
Deleting an NCP Folder.....	284
Registering Names to a Group.....	286

Registering a Group.....	286
Registering Names to a Group.....	287
Adding a Group to Another Group.....	289
Displaying Names Registered in a Group.....	290
Removing a Name from a Group.....	291
Deleting a Group Within Another Group.....	292
Changing a Group Name.....	293
Deleting a Group.....	294
Registering a Protection Code.....	296
Registering a Protection Code to a Single User.....	296
Registering a Protection Code to a Group User.....	297
Registering SMTP and LDAP Authentication.....	299
SMTP Authentication.....	299
LDAP Authentication.....	300

6. Special Operations under Windows

Printing Files Directly from Windows.....	303
Setup.....	303
Using a Host Name Instead of an IPv4 Address.....	303
Printing Commands.....	304

7. Appendix

When Using Windows Terminal Service/Citrix Presentation Server/Citrix XenApp.....	307
Operating Environment.....	307
Supported Printer Drivers.....	307
Limitations.....	307
Using DHCP.....	309
Using AutoNet.....	309
Configuring the WINS Server.....	310
Using Web Image Monitor.....	310
Using telnet.....	311
Using the Dynamic DNS Function.....	312
Updating.....	312
DNS servers targeted for operation.....	313
DHCPv4 servers targeted for operation.....	313

Setting the dynamic DNS function.....	313
Precautions.....	315
Connecting a Dial-Up Router to a Network.....	315
NetWare Printing.....	316
When the IEEE 802.11 Interface Unit is Installed.....	318
Configuring IEEE 802.1X.....	319
Installing a Site Certificate.....	319
Installing Device Certificate.....	319
Setting Items of IEEE 802.1X for Ethernet.....	320
Setting Items of IEEE 802.1X for Wireless LAN.....	322
Specifications.....	325
Copyrights.....	327
Boost.....	327
expat.....	327
FreeBSD 4.6.2/netipx.....	327
Heimdal.....	328
ILU.....	328
IPST TM print language emulations.....	329
JPEG LIBRARY.....	329
libusb.....	329
libxml2.....	329
Lua.....	329
The m17n library.....	330
MD4.....	330
MD5.....	330
nana.....	331
Net-SNMP.....	331
NetBSD.....	335
Open LDAP.....	345
Open SSH.....	345
Open SSL.....	349
racoon.....	351
RSA BSAFE [®]	351

Sablotron (Version 0.82).....	352
Samba.....	352
SASL.....	358
SPX/IPX.....	359
TinyScheme.....	359
TrouSerS.....	359
WPA Supplicant.....	363
Zilb.....	364
Trademarks.....	365
INDEX	367

Manuals for This Machine

Read this manual carefully before you use 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.
- A Web browser must be installed in order to view the html manuals.

About This Machine

Before using the machine, be sure to read the section of this manual entitled Safety Information.

This manual introduces the machine's various functions. It also explains the control panel, preparation procedures for using the machine, how to enter text, how to install the CD-ROMs provided, and how to replace paper, toner, staples, and other consumables.

Troubleshooting

Provides a guide for resolving common usage-related problems.

Copy and Document Server Reference

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

Facsimile Reference

Explains Facsimile functions and operations.

Printer Reference

Explains Printer functions and operations.

Scanner Reference

Explains Scanner functions and operations.

Network and System Settings Reference

Explains how to connect the machine to a network, configure and operate the machine in a network environment, and use the software provided. Also explains how to change User Tools settings and how to register information in the Address Book.

Security Reference

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.

- Change the user name and password of the administrator using Web Image Monitor.

For details, see "Setting Up the Machine", Security Reference.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

PostScript 3 Supplement

Explains how to set up and use PostScript 3.

VM Card Extended Feature Settings Device Reference

Explains how to set up the extended features settings with the machine.

VM Card Extended Feature Settings Web Reference

Explains how to set up the extended features settings using Web Image Monitor.

Other manuals

- UNIX Supplement
- Quick Reference Copy Guide
- Quick Reference Printer Guide
- Quick Reference Fax Guide
- Quick Reference Scanner Guide
- App2Me Start Guide

↓ Note

- Manuals provided are specific to machine types.
- For "UNIX Supplement", please visit our Web site or consult an authorized dealer. This manual includes descriptions of functions and settings that might not be available on this machine.
- The following software products are referred to using general names:

Product Name	General name
DeskTopBinder Lite and DeskTopBinder Professional* 1	DeskTopBinder
ScanRouter EX Professional* 1 and ScanRouter EX Enterprise* 1	the ScanRouter delivery software

* 1 Optional

Notice

Important

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.

For good copy quality, the manufacturer recommends that you use genuine toner from the manufacturer.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

How to Read This Manual

Symbols

This manual uses the following symbols:

 **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 on the machine's display or control panels.

 **Region A** (mainly Europe and Asia)









 **Region B** (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see "Model-Specific Information".

Machine Types

This machine comes in several models which vary in copy/print speed.

Machine types for users of type 1 and 2

	Type 1	Type 2
Copy/print speed (Full Color)	30 sheets/minute (A4  , 8 1/2 × 11 )	35 sheets/minute (A4  , 8 1/2 × 11 )
Copy/print speed (B&W)	30 sheets/minute (A4  , 8 1/2 × 11 )	35 sheets/minute (A4  , 8 1/2 × 11 )

Machine types for users of type 3 and 4

	Type 3	Type 4
Copy/print speed (Full Color)	45 sheets/minute (A4☐, 8 1/2 × 11 ☐)	55 sheets/minute (A4☐, 8 1/2 × 11 ☐)
Copy/print speed (B&W)	45 sheets/minute (A4☐, 8 1/2 × 11 ☐)	55 sheets/minute (A4☐, 8 1/2 × 11 ☐)

Names of Major Items

Major items of this machine are referred to as follows in this manual:

Region **A** (mainly Europe and Asia)

- Auto Reverse Document Feeder(optional) → ARDF
- Auto Document Feeder(optional) → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large capacity tray (optional) → LCT
- Envelope Feeder EF3000 (optional) → Small size paper tray

Region **B** (mainly North America)

- Auto Reverse Document Feeder → ARDF
- Auto Document Feeder → ADF (in this manual, "ADF" refers to the ARDF and the one-pass duplex scanning ADF)
- Large capacity tray (optional) → LCT
- Envelope Feeder EF3000 (optional) → Small size paper tray

Notes

Contents of this manual are subject to change without prior notice.

Colors on color keys or the color circle may differ slightly from the colors of actual copies.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

About IP Address

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

Laws and Regulations

Legal Prohibition

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

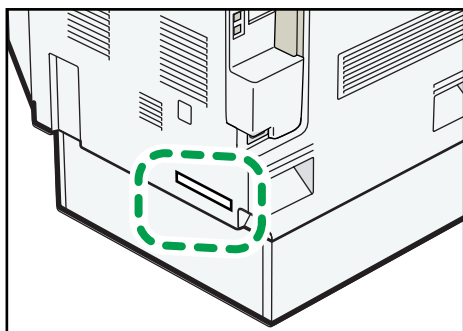
The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

Model-Specific Information

This section explains how you can identify the region your machine belongs to.

There is a label on the rear of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



BZU001

The following information is region-specific. Read the information under the symbol that corresponds to the region of your machine.

 **Region A** (mainly Europe and Asia)

If the label contains the following, your machine is a region A model:

- CODE XXXX -27, -29, -67, -69
- 220-240V

 **Region B** (mainly North America)

If the label contains the following, your machine is a region B model:

- CODE XXXX -17, -51, -52, -57
- 120-127V

Note

- Dimensions in this manual are given in two units of measure: metric and inch. If your machine is a Region A model, refer to the metric units. If your machine is a Region B model, refer to the inch units.

Display Panel

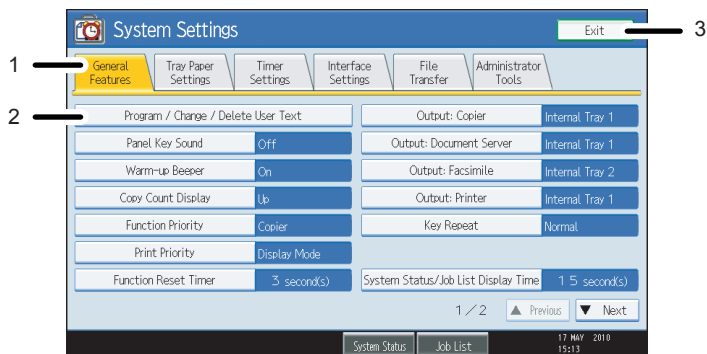
The display panel shows machine status, error messages, and function menus.

The function items displayed serve as selector keys. You can select or specify an item by lightly pressing it.

When you select or specify an item on the display panel, it is highlighted like **Program / Change**. Keys appearing as **OK** cannot be used.

To display the following screen, press the [User Tools/Counter] key to display the User Tools menu, and then press [System Settings].

Using the System Settings menu screen as an example, this section explains how to use the machine's display panel.



BZU005

1. The menu tabs for various settings appear. To display the setting you want to specify or change, press the appropriate menu tab.
2. A list of settings appears. To specify or change a setting, press the appropriate key in the list.
3. Press this to quit the User Tools menu.

Accessing User Tools

This section describes how to access User Tools menu.

User Tools allow you to change or set defaults.

↓ Note

- Operations for system settings differ from normal operations. Always quit User Tools when you have finished.
- Any changes you make with User Tools remain in effect even if the main power switch or operation switch is turned off, or the [Energy Saver] or [Clear Modes] key is pressed.

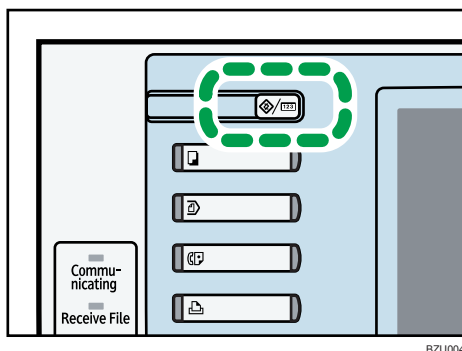
Changing Default Settings

This section describes how to change the settings of User Tools.

★ Important

- If **Administrator Authentication Management** is specified, contact your administrator.

1. Press the [User Tools/Counter] key.



2. Press [System Settings].

3. Select the user tool you want to change.

4. Change settings by following instructions on the display, and then press [OK].

↓ Note

- To cancel changes made to settings and return to the initial display, press the [User Tools/Counter] key.
- For details about specifying System Settings, see "System Settings".
- For details about changing the language, see "Changing the Display Language", About This Machine.
- For details about checking inquiry and counter, see "Remarks", About This Machine.

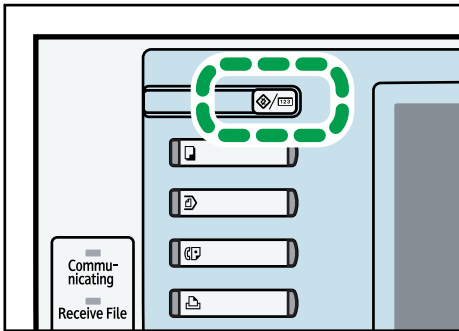
Reference

- p.21 "System Settings"

Quitting User Tools

This section describes how to quit the settings of User Tools.

1. Press the [User Tools/Counter] key.



Note

- You can also quit User Tools by pressing [Exit].

1. System Settings

This chapter describes user tools in the System Settings menu.

General Features

This section describes the user tools in the General Features menu under System Settings.

Program / Change / Delete User Text

You can register text phrases you often use when specifying settings, such as ".com" and "Regards".

You can register up to 40 entries.

- Program / Change
 1. Press the [User Tools/Counter] key.
 2. Press [System Settings].
 3. Check that [General Features] is selected.
 4. Press [Program / Change / Delete User Text].
 5. Check that [Program / Change] is selected.
 6. Select the user text you want to change.
 - To program new user text, press [*Not Programmed].
 7. Enter the user text, and then press [OK].
 - Enter the user text using up to 80 characters.
 8. Press [Exit].
 9. Press the [User Tools/Counter] key.
- Delete
 1. Press the [User Tools/Counter] key.
 2. Press [System Settings].
 3. Check that [General Features] is selected.
 4. Press [Program / Change / Delete User Text].
 5. Press [Delete].
 6. Select the user text you want to delete.
 7. Press [Yes].
 8. Press [Exit].
 9. Press the [User Tools/Counter] key.

Panel Key Sound

The beeper (key tone) sounds when a key is pressed.

Default: [Medium]

Warm-up Beeper (copier/Document Server)

You can have the beeper sound when the machine becomes ready to copy after leaving Energy Saver mode, or when the power is turned on.

Default: [On]

If the Panel Key Sound setting is [Off], the beeper does not sound, whatever the Warm-up Beeper setting.

Copy Count Display (copier/Document Server)

The copy counter can be set to show the number of copies made (count up) or the number of copies yet to be made (count down).

Default: [Up]

Function Priority

Specify the mode to be displayed immediately after the operation switch is turned on, or when System Reset mode is turned on.

Default: [Copier]

Print Priority

Print Priority is given to the mode selected.

Default: [Display Mode]

Function Reset Timer

You can set the length of time the machine waits before changing modes when using the multi-access function.

This is useful if you are making many copies and have to change settings for each copy. If you set a longer reset period, you can prevent interruption from other functions.

Default: [Set Time], [3 second(s)]

When you select [Set Time], enter the time (3-30 seconds, in 1 second increments) using the number keys.

The Function Reset Timer setting is ignored if [Interleave] or [Job Order] is set for Print Priority.

Output: Copier (copier)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Output: Document Server (Document Server)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Output: Facsimile (facsimile)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Output: Printer (printer)

Specify a tray to which documents are delivered.

Default: [Internal Tray 1]

Key Repeat

You can enable or disable repetition of an operation if a key on the screen or control panel is pressed continuously.

Default: [Normal]

ADF Original Table Elevation (Type 3 and 4 (models equipped with the one-pass duplex scanning ADF))

Set when to raise the ADF plate after placing originals on the Auto Document Feeder (ADF).

Default: [When Original is Set]

System Status/Job List Display Time

Specify how long to display the System Status and Job List display for.

Default: [On], [15 second(s)]

By selecting [On], you can specify a display time between 10 and 999 seconds.

Small Size Paper Tray

When printing on small paper sizes, specify this setting for each tray.

Default: [Off], [Tray 2]

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

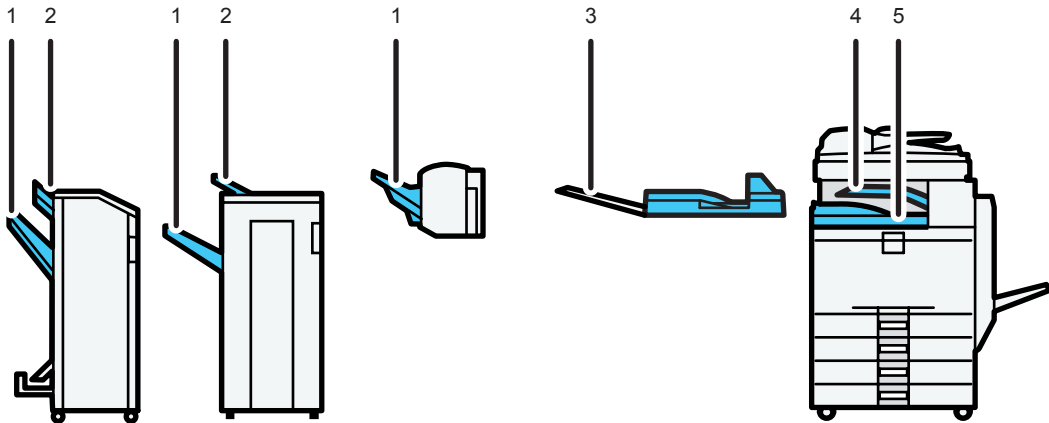
- p.19 "Accessing User Tools"

Output Tray Settings (Type 1 and 2)

This section describes the output tray settings.

- Depending on the options installed on the machine, some trays might not be displayed.
 - When the internal tray 2 is installed, [Internal Tray 2] is displayed.
 - When the external tray is installed, [External Tray] is displayed.
 - When Booklet Finisher SR3000 or Finisher SR790 is installed, [Finisher Upper Tray] is displayed.
 - When a finisher is installed, [Finisher Shift Tray] is displayed.
- If you select a setting that uses the finisher, the job might not be delivered to the specified output tray.

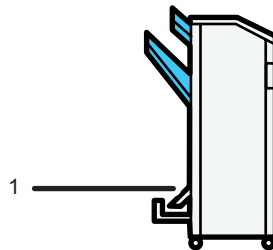
- If you select stapling or punching, the job will be delivered to the finisher upper tray or the finisher shift tray.
- If you select shift-sorting, the job will be delivered to the finisher shift tray.



BZU002

1. Finisher Shift Tray
2. Finisher Upper Tray
3. External Tray
4. Internal Tray 2
5. Internal Tray 1

- If you select center stapling, the job will be delivered to the finisher booklet tray.



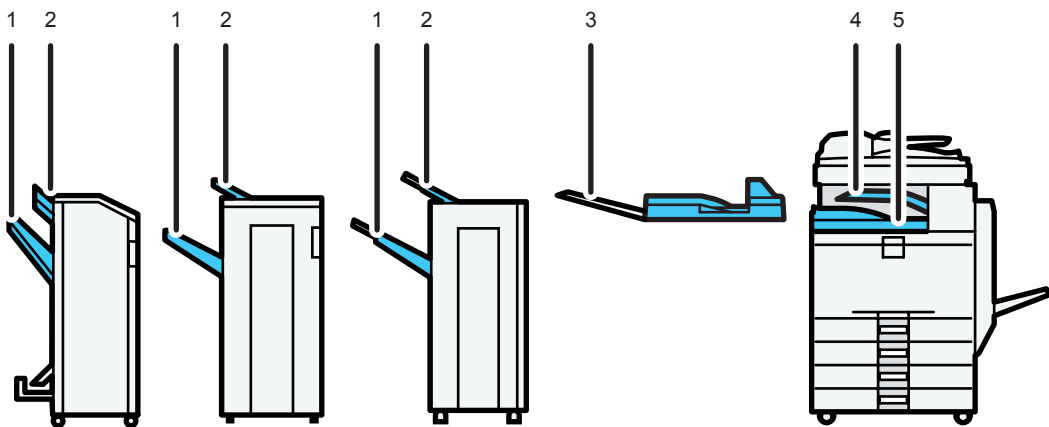
BZT013

1. Finisher Booklet Tray

Output Tray Settings (Type 3 and 4)

This section describes the output tray settings.

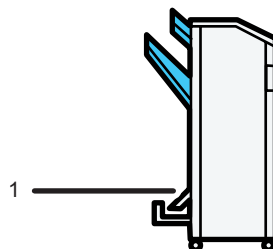
- Depending on the options installed on the machine, some trays might not be displayed.
 - When the internal tray 2 is installed, [Internal Tray 2] is displayed.
 - When the external tray is installed, [External Tray] is displayed.
 - When a finisher is installed, [Finisher Shift Tray] and [Finisher Upper Tray] are displayed.
- If you select a setting that uses the finisher, the job might not be delivered to the specified output tray.
 - If you select stapling or punching, the job will be delivered to the finisher upper tray or the finisher shift tray.
 - If you select shift-sorting, the job will be delivered to the finisher shift tray.



BZU003

1. Finisher Shift Tray
2. Finisher Upper Tray
3. External Tray
4. Internal Tray 2
5. Internal Tray 1

- If you select center stapling, the job will be delivered to the finisher booklet tray.



BZT013

1. Finisher Booklet Tray

1

Tray Paper Settings

This section describes the user tools in the Tray Paper Settings menu under System Settings.

★ Important

- If the specified paper size differs from the actual size of the paper loaded in the paper tray, a misfeed might occur because the correct paper size was not detected.

Paper Tray Priority: Copier (copier/Document Server)

Specify the tray to supply paper for output.

Default: [Tray 1]

Paper Tray Priority: Facsimile (facsimile)

Specify the tray to supply paper for output.

Default: [Tray 1]

Paper Tray Priority: Printer (printer)



Specify the tray to supply paper for output.

Default: [Tray 1]

Tray Paper Size: Tray 2

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 2 are as follows:

- [Auto Detect]
-  **Region A** (mainly Europe and Asia)
 - A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
 - 11 × 17, 11 × 15, 10 × 14, 8¹/₂ × 14, 8¹/₂ × 13,
 - 8¹/₂ × 11, 8¹/₂ × 11, 8¹/₄ × 14, 8¹/₄ × 13,
 - 8 × 13, 8 × 10, 7¹/₄ × 10¹/₂, 7¹/₄ × 10¹/₂, 4¹/₈ × 9¹/₂,
 - 8K, 16K, 16K
-  **Region B** (mainly North America)
 - 11 × 17, 11 × 15, 10 × 14, 8¹/₂ × 14, 8¹/₂ × 13,
 - 8¹/₂ × 11, 8¹/₂ × 11, 8¹/₄ × 14, 8¹/₄ × 13,
 - 8 × 13, 8 × 10, 7¹/₄ × 10¹/₂, 7¹/₄ × 10¹/₂, 4¹/₈ × 9¹/₂,
 - A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
 - 8K, 16K, 16K
- [Custom Size]

Default: [Auto Detect]



You can specify a custom size of between 182.0 - 297.0 mm (7.17 - 11.69 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

For details about auto detect paper size, see About This Machine.

1 Tray Paper Size: Tray 3-4 (when the lower paper trays are installed.)

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 3 - 4 are as follows:

- [Auto Detect]
-  **Region A** (mainly Europe and Asia)
 - A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
 - 11 × 17, 11 × 15, 10 × 14, 8¹/₂ × 14, 8¹/₂ × 13,
 - 8¹/₂ × 11, 8¹/₂ × 11, 8¹/₄ × 14, 8¹/₄ × 13,
 - 8 × 13, 8 × 10, 7¹/₄ × 10¹/₂, 7¹/₄ × 10¹/₂, 4¹/₈ × 9¹/₂,
 - 8K, 16K, 16K
-  **Region B** (mainly North America)
 - 11 × 17, 11 × 15, 10 × 14, 8¹/₂ × 14, 8¹/₂ × 13,
 - 8¹/₂ × 11, 8¹/₂ × 11, 8¹/₄ × 14, 8¹/₄ × 13,
 - 8 × 13, 8 × 10, 7¹/₄ × 10¹/₂, 7¹/₄ × 10¹/₂, 4¹/₈ × 9¹/₂,
 - A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
 - 8K, 16K, 16K
- [Custom Size]

Default: [Auto Detect]


You can specify a custom size of between 182.0 - 297.0 mm (7.17 - 11.69 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.


For details about auto detect paper size, see About This Machine.

Tray Paper Size: Tray 3 (when the lower paper tray is installed.) (Type 1 and 2)

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 3 are as follows:

- [Auto Detect]
-  **Region A** (mainly Europe and Asia)
 - A3, A4, A4, A5, B4 JIS, B5 JIS, B5 JIS, C5 Env,
 - 11 × 17, 11 × 15, 10 × 14, 8¹/₂ × 14, 8¹/₂ × 13,
 - 8¹/₂ × 11, 8¹/₂ × 11, 8¹/₄ × 14, 8¹/₄ × 13,
 - 8 × 13, 8 × 10, 7¹/₄ × 10¹/₂, 7¹/₄ × 10¹/₂, 4¹/₈ × 9¹/₂,
 - 8K, 16K, 16K

-  **Region B** (mainly North America)

11 × 17□, 11 × 15□, 10 × 14□, 8¹/₂ × 14□, 8¹/₂ × 13□,
 8¹/₂ × 11□, 8¹/₂ × 11□, 8¹/₄ × 14□, 8¹/₄ × 13□,
 8 × 13□, 8 × 10□, 7¹/₄ × 10¹/₂□, 7¹/₄ × 10¹/₂□, 4¹/₈ × 9¹/₂□,
 A3□, A4□, A4□, A5□, B4 JIS□, B5 JIS□, B5 JIS□, C5 Env□,
 8K□, 16K□, 16K□

- [Custom Size]

Default: [**Auto Detect**]

You can specify a custom size of between 182.0 - 297.0 mm (7.17 - 11.69 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

For details about auto detect paper size, see About This Machine.

Tray Paper Size: Tray 2-4 (when the small size paper tray is installed.)

Select the size of the paper loaded in the paper tray.

The paper sizes you can set for tray 2-4 are as follows:

- A4□, A5□, A5□, A6□, B5 JIS□, B6 JIS□,
 C5 Env□, C6 Env□, C6 Env□, DL Env□, DL Env□,
 8¹/₂ × 11□, 7¹/₄ × 10¹/₂□, 5¹/₂ × 8¹/₂□,
 4¹/₈ × 9¹/₂□, 3⁷/₈ × 7¹/₂□, 3⁷/₈ × 7¹/₂□,
- [Custom Size]

Default:

 **Region A** (mainly Europe and Asia)

[A4□]

 **Region B** (mainly North America)

[8¹/₂ × 11□]

You can specify a custom size of between 100.0 - 220.0 mm (3.94 - 8.66 inch) vertically, and between 148.0 - 432.0 mm (5.83 - 17.00 inch) horizontally.

You cannot replace the lower paper tray with the small size paper tray.

Printer Bypass Paper Size

Specify the size of the paper in the bypass tray when printing data from the computer.

The paper sizes you can set for bypass tray are as follows:

- [Auto Detect]
- A3□, A4□, A4□, A5□, A5□, A6□, B4 JIS□, B5 JIS□, B5 JIS□, B6 JIS□,
 C5 Env□, C5 Env□, C6 Env□, C6 Env□, DL Env□, DL Env□, 12 × 18□,
 11 × 17□, 11 × 15□, 10 × 14□, 8¹/₂ × 14□, 8¹/₂ × 13□,

$8\frac{1}{2} \times 11\text{□}$, $8\frac{1}{2} \times 11\text{□}$, $8\frac{1}{4} \times 14\text{□}$, $8\frac{1}{4} \times 13\text{□}$,
 $8 \times 13\text{□}$, $8 \times 10\text{□}$, $7\frac{1}{4} \times 10\frac{1}{2}\text{□}$, $7\frac{1}{4} \times 10\frac{1}{2}\text{□}$,
 $5\frac{1}{2} \times 8\frac{1}{2}\text{□}$, $4\frac{1}{8} \times 9\frac{1}{2}\text{□}$, $4\frac{1}{8} \times 9\frac{1}{2}\text{□}$, $3\frac{7}{8} \times 7\frac{1}{2}\text{□}$, $3\frac{7}{8} \times 7\frac{1}{2}\text{□}$,
 8K□ , 16K□ , 16K□

- [Custom Size]

Default: **[Auto Detect]**

For details about auto detect paper size, see About This Machine.

You can specify a custom size of between 90.0 - 305.0 mm (3.55 - 12.00 inch) vertically, and between 148.0 - 600.0 mm (5.83 - 23.62 inch) horizontally

To allow users to specify a horizontal dimension of 600-1260 mm in "Custom Size", other settings must first be specified. For details about specifying custom paper sizes, contact your sales or service representative.

Paper Type: Bypass Tray

Sets the display so you can see what type of paper is loaded in the bypass tray.

The paper types you can set for the bypass tray are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Label Paper], [Preprinted Paper], [Bond Paper], [Cardstock], [OHP (Transparency)], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the bypass tray are as follows:

- [Thin Paper] (52 - 59 g/m², 14 - 16 lb.Bond)
- [Plain Paper] (60 - 81 g/m², 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)
- [Thick Paper 4] (257 - 300 g/m², 140 lb. Index - 110 lb. Cover)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 1

Sets the display so you can see what type of paper is loaded in the paper tray 1.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 1 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 1 are as follows:

- [Plain Paper] (60 - 81 g/m², 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

Default for "Apply Auto Paper Select": **[Yes]**

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 2

Sets the display so you can see what type of paper is loaded in the paper tray 2.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 2 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 2 are as follows:

- [Plain Paper] (60 - 81 g/m², 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

Default for "Apply Auto Paper Select": **[Yes]**

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 3 - 4 (when the lower paper trays are installed.)

Sets the display so you can see what type of paper is loaded in the paper tray 3 - 4.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 3 - 4 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 3 - 4 are as follows:

- [Plain Paper] (60 - 81 g/m², 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

Default for "Apply Auto Paper Select": **[Yes]**

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 3 (When the paper tray 3 (LCT) is installed.)

Sets the display so you can see what type of paper is loaded in the paper tray 3 (LCT).

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 3 (LCT) are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 3 are as follows:

- [Plain Paper] (60 - 81 g/m², 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

Default for "Apply Auto Paper Select": **[No]**

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: Tray 3 (when the lower paper tray is installed.) (Type 1 and 2)

Sets the display so you can see what type of paper is loaded in the paper tray 3.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the paper tray 3 are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Envelope], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the paper tray 3 are as follows:

- [Plain Paper] (60 - 81 g/m², 16 - 20 lb.Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb.Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)

- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

Default for "Apply Auto Paper Select": **[Yes]**

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Paper Type: LCT (When the LCT is installed.)

Sets the display so you can see what type of paper is loaded in the LCT.

The print function uses this information to automatically select the paper tray.

The paper types you can set for the LCT are as follows:

- [Do not Display], [Recycled Paper], [Colour Paper], [Letterhead], [Preprinted Paper], [Bond Paper], [Cardstock], [Special Paper 1], [Special Paper 2], [Special Paper 3], [Coated Paper], [Coated Paper: Gloss]

The paper thicknesses you can set for the LCT are as follows:

- [Plain Paper] (60 - 81 g/m², 16 - 20 lb. Bond)
- [Middle Thick] (82 - 105 g/m², 20 - 28 lb. Bond)
- [Thick Paper 1] (106 - 169 g/m², 28 lb. Bond - 90 lb. Index)
- [Thick Paper 2] (170 - 220 g/m², 65 - 80 lb. cover)
- [Thick Paper 3] (221 - 256 g/m², 80 lb. cover - 140 lb. Index)

Default for "Paper Type": **[Do not Display]**

Default for "Paper Thickness": **[Plain Paper]**

Default for "Apply Duplex": **[Yes]**

Default for "Apply Auto Paper Select": **[Yes]**

The key mark is displayed next to the paper tray if [No] is selected in "Apply Auto Paper Select".

Apply Auto Paper Select can only be selected for the copier function if [Do not Display] and [Recycled Paper] are selected. If [No] is selected, Auto Paper Select is not valid.

For details about the relations between possible paper sizes and thickness, see "Recommended Paper Sizes and Types", About This Machine.

For details about the recommended conditions for using thick paper, see "Thick Paper", About This Machine.

Cover Sheet Tray

You can specify and display the paper tray that is used to set front cover sheets.

After selecting the paper tray, you can also specify the display timing and copy method for two-sided copying.

Default: [Off]

When [At Mode Selected] is selected, front cover sheet tray settings only appear when the cover function or slip sheet function is selected.

When [Full Time] is selected, the front cover sheet tray is always displayed.

Slip Sheet Tray

You can specify and display the paper tray that is used for setting slip sheets.

You can also specify the display timing and copy method for two-sided copying.

Default: [Off]

When [At Mode Selected] is selected, slip sheet tray settings only appear when the cover function or slip sheet function is selected.

When [Full Time] is selected, the slip sheet tray is always displayed.

Note

- The paper types you can set for this machine are [Plain Paper 1] and [Plain Paper 2]. The default setting is [Plain Paper 2]. For details about setting the paper type, see "Changing Paper Thickness Settings", About This machine.
- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Timer Settings

This section describes the user tools in the Timer Settings menu under System Settings.

1

Auto Off Timer (Type 1 and 2)

After a specified period has passed, following job completion, the machine automatically turns off, in order to conserve energy. This function is called "Auto Off".

The machine status after the Auto Off operation is referred to as "Off mode", or "Sleep mode".

For the Auto Off Timer, specify the time to elapse before Auto Off.

You can specify this setting only if [Auto Off Setting] is set to [Enable] in [Administrator Tools] in [System Settings].

Default:

 **Region A** (mainly Europe and Asia)

[15 minute(s)]

The time can be set from 1 to 240 minutes, using the number keys.

 **Region B** (mainly North America)

[1 minute(s)]

The time can be set from 1 to 60 minutes, using the number keys.

Auto Off Timer may not work when error messages appear.

Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep Mode.

Auto Off Timer (Type 3 and 4)

After a specified period has passed, following job completion, the machine automatically turns off, in order to conserve energy. This function is called "Auto Off".

The machine status after the Auto Off operation is referred to as "Off mode", or "Sleep mode".

For the Auto Off Timer, specify the time to elapse before Auto Off.

You can specify this setting only if [Auto Off Setting] is set to [Enable] in [Administrator Tools] in [System Settings].

Default:

 **Region A** (mainly Europe and Asia)

[16 minute(s)]

The time can be set from 1 to 240 minutes, using the number keys.

 **Region B** (mainly North America)

[1 minute(s)]

The time can be set from 1 to 60 minutes, using the number keys.

Auto Off Timer may not work when error messages appear.

Depending on which Embedded Software Architecture application is installed on it, the machine might take longer than indicated to enter Sleep Mode.

Energy Saver Timer

Set the amount of time the machine waits before switching to lower-power mode after copying has finished or the last operation is performed.

Default:

 **Region A** (mainly Europe and Asia)

[On], [10 minute(s)]

The time can be set from 1 to 240 minutes, using the number keys.

 **Region B** (mainly North America)

[Off]

The time can be set from 1 to 30 minutes, using the number keys.

Energy Saver Timer may not work when error messages appear.

Panel Off Timer

Set the amount of time the machine waits before switching the panel off after copying has finished or the last operation is performed.

 **Region A** (mainly Europe and Asia)

Enter a time interval between 10 seconds and 240 minutes, using the number keys.

 **Region B** (mainly North America)

Enter a time interval between 10 seconds and 30 minutes, using the number keys.

Default: [On], [1 minute(s)]

Panel Off Timer may not work when error messages appear.

System Auto Reset Timer

The System Reset setting automatically switches the screen to that of the function set in Function Priority when no operations are in progress, or when an interrupted job is cleared. This setting determines the system reset interval.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [On], [60 second(s)]

Copier / Document Server Auto Reset Timer (copier/Document Server)

Specifies the time to elapse before copier and Document Server modes reset.

If [Off] is selected, the machine does not automatically switch to the user code entry screen.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [On], [60 second(s)]

Facsimile Auto Reset Timer (facsimile)

Specify the time to elapse before the facsimile mode resets.

The time can be set from 30 to 999 seconds, using the number keys.

Default: [30 second(s)]

Printer Auto Reset Timer (printer)

Specify the time to elapse before the printer function resets.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [On], [60 second(s)]

Scanner Auto Reset Timer (scanner)

Specify the time to elapse before the scanner function resets.

If [Off] is selected, the machine will not automatically switch to the user code entry screen.

The time can be set from 10 to 999 seconds, using the number keys.

Default: [On], [60 second(s)]

Set Date

Set the date for the copier's internal clock using the number keys.

To change between year, month, and day, press [←] and [→].

Set Time

Set the time for the copier's internal clock using the number keys.

To change between hours, minutes and seconds, press [←] and [→].

 **Region A** (mainly Europe and Asia)

Enter the time using the 24-hour format (in 1 second increments).

 **Region B** (mainly North America)

Enter the time using the 12-hour format (in 1 second increments).

Auto Logout Timer

Specify whether or not to automatically log out a user when the user does not operate the machine for a specified period of time after logging in.

The time can be set from 60 to 999 seconds, in one second increments, using the number keys.

Default: [On], [180 second(s)]

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Interface Settings

This section describes the user tools in the Interface Settings menu under System Settings.

1

Network

This section describes the user tools in the Network menu under Interface Settings.

Machine IPv4 Address

Specify the machine's IPv4 network address.

Default: [Auto-Obtain (DHCP)]

When you select [Specify], enter the IPv4 address and subnet mask as "xxx.xxx.xxx.xxx" ("x" indicates a number).

When you select [Specify], make sure that IPv4 address is different from that of other machines on the network.

The physical address (MAC address) also appears.

IPv4 Gateway Address

A gateway is a connection or interchange point between two networks.

Specify the gateway address for the router or host computer used as a gateway.

Default: [0.0.0.0]

Machine IPv6 Address

Displays the machine's IPv6 network address.

- Link-local Address
The machine's specified link-local address appears.
- Manual Configuration Address
The machine's manually configured address appears.
- Stateless Address: 1-5
The specified stateless address appears.

IPv6 Gateway Address

Displays the machine's IPv6 gateway address.

IPv6 Stateless Address Autoconfiguration

Specify IPv6 Stateless Address Autoconfiguration.

Default: [Active]

DNS Configuration

Make settings for the DNS server.

Default: **[Auto-Obtain (DHCP)]**

When you select **[Specify]**, enter the DNS Server IPv4 address as "xxx.xxx.xxx.xxx" ("x" indicates a number).

1

DDNS Configuration

Specify the DDNS settings.

Default: **[Active]**

IPsec

Specify the machine's IPsec function Active/Inactive.

Default: **[Inactive]**

For details about this function, consult your administrator.

Domain Name

Specify the domain name.

Default: **[Auto-Obtain (DHCP)]**

When you select **[Specify]**, enter the domain name using up to 63 characters.

WINS Configuration

Specify the WINS server settings.

Default: **[On]**

If **[On]** is selected, enter the WINS Server IPv4 address as "xxx.xxx.xxx.xxx" ("x" indicates a number).

If DHCP is in use, specify the Scope ID. Enter a Scope ID using up to 31 characters.

Do not enter "255.255.255.255" as the primary or secondary WINS server address.

Effective Protocol

Select the Protocol to use in the network.

Default for "IPv4": **[Active]**

Default for "IPv6": **[Inactive]**

Default for "NetWare": **[Inactive]**

"NetWare" is displayed only when Netware is installed.

Default for "SMB": **[Active]**

NCP Delivery Protocol

Select the protocol NCP delivery.

Default: **[TCP / IP Priority]**

If you select **[IPX Only]** or **[TCP / IP Only]**, you cannot switch the protocol even if you cannot connect with it. If "NetWare" in "Effective Protocol" is set to **[Inactive]**, you can only use TCP/IP.

NW Frame Type

Select the frame type when you use NetWare.

Default: **[Auto Select]**

SMB Computer Name

Specify the SMB computer name.

Enter the computer name using up to 15 characters.

"*+/,/;<>=?[\]| . and spaces cannot be entered.

Do not set a computer name starting with RNP and rnp.

Use uppercase letters for alphabets.

SMB Work Group

Specify the SMB work group.

Enter the computer name using up to 15 characters.

"*+/,/;<>=?[\]| . and spaces cannot be entered.

Use uppercase letters for alphabet.

Ethernet Speed

Set the access speed for networks.

Default: **[Auto Select]**

Select a speed that matches your network environment. [Auto Select] should usually be selected.

		Machine Setting				
		10Mbps Half Duplex	10Mbps Full Duplex	100Mbps Half Duplex	100Mbps Full Duplex	Auto Select
Connection	10Mbps Half Duplex	<input type="radio"/>	—	—	—	<input type="radio"/>
	10Mbps Full Duplex	—	<input type="radio"/>	—	—	—
	100Mbps Half Duplex	—	—	<input type="radio"/>	—	<input type="radio"/>
	100Mbps Full Duplex	—	—	—	<input type="radio"/>	—
	Auto Select*	<input type="radio"/>	—	<input type="radio"/>	—	<input type="radio"/>

*Terms will vary depending on the network.

Connectable

— Not Connectable

BZU022

IEEE 802.1X Authentication for Ethernet

Specify the IEEE 802.1X authentication for Ethernet.

Default: **[Inactive]**

For details about IEEE 802.1X authentication, see "Configuring IEEE 802.1X".

Restore IEEE 802.1X Authentication to Defaults

You can return the IEEE 802.1X authentication settings to their defaults.

For details about IEEE 802.1X authentication, see "Configuring IEEE 802.1X".

LAN Type

When you have installed the Wireless LAN interface unit, select the method of connection.

Default: **[Ethernet]**

[LAN Type] is displayed when wireless LAN board is installed. If Ethernet and Wireless LAN are both connected, the selected interface has priority.

Ping Command

Check the network connection with ping command using given IPv4 address.

If you fail to connect to the network, check the following, and then retry the ping command.

- Make sure that "IPv4" in [Effective Protocol] is set to [Active].
- Check that the machine with assigned IPv4 address is connected to the network.
- There is a possibility that the same IPv4 address is used for the specified equipment.

Permit SNMPv3 Communication

Set the encrypted communication of SNMPv3.

Default: **[Encryption / Cleartext]**

If you select to [Encryption Only], you need to set an encryption password for the machine.

Permit SSL / TLS Communication

Set the encrypted communication of SSL/TLS.

Default: **[Ciphertext Priority]**

If you set to [Ciphertext Only], you need to install the SSL certificate for the machine.

Host Name

Specify the host name.

Enter the host name using up to 63 characters.

You cannot enter a host name starting or ending with a hyphen.

You cannot enter a host name starting with "RNP" or "rnp".

Machine Name

Specify the machine name.

Enter the machine name using up to 31 characters.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"
- p.319 "Configuring IEEE 802.1X"

Parallel Interface

This section describes the user tools in the Parallel Interface menu under Interface Settings.

[Parallel Interface] is displayed when this machine is installed with the IEEE 1284 interface board.

Parallel Timing

Sets the timing for the control signal of the parallel interface.

Normally, you do not need to change this setting.

Default: [ACK Outside]

Parallel Communication Speed

Sets the communication speed for the parallel interface. If the speed is too high, data may not be transferred smoothly. If this happens, change the setting to [Standard].

Default: [High Speed]

Selection Signal Status

Sets the level for the select signal of the parallel interface.

Default: [High]

Input Prime

Sets whether to validate or invalidate the input prime signal upon reception.

Normally, you do not need to change this setting.

Default: [Inactive]

Bidirectional Communication

Sets the printer's response mode to a status acquisition request when using a parallel interface. If you experience problems using another manufacturer's machine, set this to [Off].

Default: [On]

When set to [Off], the bidirectional communication function will be disabled, and the printer driver will not be installed under Windows Auto Detect function.

Signal Control

Specifies how error during printing or sending facsimile from the computer is to be dealt with.

Normally, you do not need to change this setting.

Default: [Job Acceptance Priority]

 **Note**

- For details on how to access System Settings, see "Accessing User Tools".

 **Reference**

- p.19 "Accessing User Tools"

Wireless LAN

This section describes the user tools in the Wireless LAN menu under Interface Settings.

[Wireless LAN] is displayed when this machine is installed with the wireless LAN interface board.

Be sure to make all settings simultaneously.

Communication Mode

Specifies the communication mode of the wireless LAN.

Default: [Infrastructure Mode]

SSID Setting

Specifies SSID to distinguish the access point in [Infrastructure Mode] or [802.11 Ad-hoc Mode].

The characters that can be used are ASCII 0x20-0x7e (32 bytes).

If blank is specified in [802.11 Ad-hoc Mode], "ASSID" appears.

Ad-hoc Channel

Specify the channel to use when [802.11 Ad-hoc Mode] has been selected. Set the channel that matches the type of wireless LAN being used. The channel in use might differ depending on the country.

The following channels are available:

 **Region A** (mainly Europe and Asia)

- IEEE 802.11 a/b/g Wireless LAN

Frequency range:

2412 - 2472 MHz (1 - 13 channels)

5180 - 5240 MHz (36, 40, 44 and 48 channels)

In some countries, only the following channels are available:

- IEEE 802.11 b/g Wireless LAN

Frequency range:

2412 - 2462 MHz (1 - 11 channels)

Default: [11]

 **Region B** (mainly North America)

- IEEE 802.11 a/b/g Wireless LAN

Frequency range:

2412 - 2462 MHz (1 - 11 channels)

5180 - 5240 MHz (36, 40, 44 and 48 channels)

Default: [11]

Security Method

Specifies the encryption of the Wireless LAN.

Default: [Off]

If you select [WEP], always enter WEP key. If you select [WPA], specify the encryption and authentication methods.

Specify "WPA", when [Communication Mode] is set to [Infrastructure Mode].

- WEP

If you select [WEP], enter WEP key.

When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to 5 characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.

The number of characters that can be entered is limited to 10 or 26 for hexadecimal and 5 or 13 for ASCII.

- WPA

- WPA Encryption Method

Select either [TKIP] or [CCMP (AES)].

- WPA Authent. Method

Select either [WPA-PSK], [WPA], [WPA2-PSK], or [WPA2].

If you select [WPA-PSK] or [WPA2-PSK], enter the pre-shared key (PSK) of 8- 63 characters in ASCII code.

When [WPA] or [WPA2] are selected, authentication settings and certificate installation settings are required. For details about setting methods, see "Configuring IEEE 802.1X".

Wireless LAN Signal

When using in infrastructure mode, you can check the machine's radio wave status using the control panel.

Radio wave status is displayed when you press [Wireless LAN Signal].

Restore Factory Defaults

You can return the wireless LAN settings to their defaults.

↓ Note

- For details on how to access System Settings, see "Accessing User Tools".

📖 Reference

- p.19 "Accessing User Tools"

- p.319 "Configuring IEEE 802.1X"

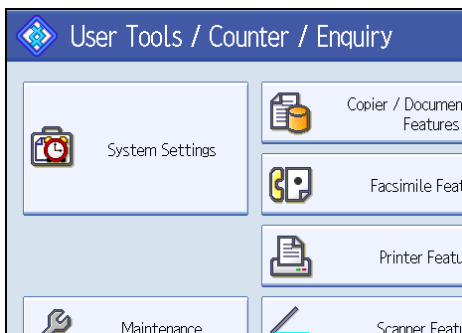
Print List

This section describes how to print the configuration page.

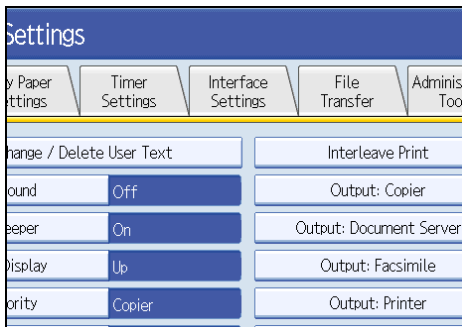
You can check items related to the network environment.

The configuration page shows the current network settings and network information.

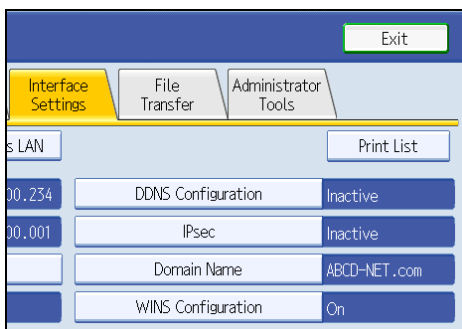
1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Interface Settings].



4. Press [Print List].



5. Press the [Start] key.

The configuration page is printed.

6. Press [Exit].**7. Press the [User Tools/Counter] key.****Note**

- You can also exit by pressing [Exit] on the User Tools main menu.
- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

File Transfer

This section describes the user tools in the File Transfer menu under System Settings.

1

Delivery Option

Enables or disables sending stored or scanned documents to the ScanRouter delivery server.

Default: [Off]

Specify this option when selecting whether or not to use the ScanRouter delivery software. If you do, you will have to preregister I/O devices in the ScanRouter delivery software.

Capture Server IPv4 Address

Specify the capture server IPv4 address.

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

Fax RX File Transmission

Specify how to deliver fax files received via the different lines.

- Setting per Line

Specifies whether or not received fax documents are sent to the ScanRouter delivery software for each fax line.

- G3 Port 1
- G3 Port 2
- G3 Port 3
- E-mail
- IP-Fax

Default: [Do not Deliver]

The lines appear according to the operating environment.

- RX File Delivery

Specifies whether or not received fax documents are sent to the ScanRouter delivery software for each fax line.

Default: [Do not Deliver]

- Print at Delivery

Specify whether or not received fax documents sent to the ScanRouter delivery software should also be printed at the same time.

Default: [Do not Print]

- File to Deliver

Specify whether all received fax documents or only received fax documents that include delivery codes (documents with an ID or SUB/SEP codes) are sent to the ScanRouter delivery software.

Default: **[All Files]**

- Delivery Failure File

If a fax is received but cannot be sent via the ScanRouter delivery software, it is stored in the machine's memory. If received document deletion is set to "1 (On)", documents that cannot be stored due to insufficient memory or an internal hard disk error will automatically be deleted, and a Reception File Erased Report will be printed.

For details about the Reception File Erased Report, see "Reception File Setting", Facsimile Reference. To print a stored file, select [Print File], and to delete stored files, select [Delete File].

- Print File
- Delete File

This setting appears when the delivery function is being used by the ScanRouter delivery software.

SMTP Server

Specify the SMTP server name.

If DNS is in use, enter the host name.

If DNS is not in use, enter the SMTP server IPv4 address.

Default for "Port No.": **[25]**

Default for "SSL": **[Off]**

Enter the server name using up to 127 characters. Spaces cannot be entered.

Enter port number between 1 and 65535 using the number keys, and then press the [#] key.

The SMTP server shares the same port number with the Direct SMTP server.

If you set SSL to [On], the port number automatically changes to "465".

SMTP Authentication

Specify SMTP authentication (PLAIN, LOGIN, CRAMMD5, DIGEST-MD5). When sending e-mail to an SMTP server, you can enhance the SMTP server security level using authentication that requires entering the user name and password.

If the SMTP server requires authentication, set [SMTP Authentication] to [On], and then specify the user name, password and encryption.

Enter the user name and password to be set for the Administrator's e-mail address when using Internet Fax.

Default: **[Off]**

- User Name

Enter the user name using up to 191 characters.

Spaces cannot be entered. Depending on the SMTP server type, "realm" must be specified. Add "@" after the user name, as in "user name@realm".

- E-mail Address

Enter the E-mail address using up to 128 characters.

- Password

Enter the password using up to 128 characters.

Spaces cannot be entered.

- Encryption

Select Encryption as follows:

[Auto]

Use if the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.

[On]

Use if the authentication method is CRAMMD5 or DIGEST-MD5.

[Off]

Use if the authentication method is PLAIN, or LOGIN.

POP before SMTP

Specify POP authentication (POP before SMTP).

When sending e-mail to an SMTP server, you can enhance the SMTP server security level by connecting to the POP server for authentication.

Default: [Off]

If you set POP before SMTP to [On], specify the waiting time after authentication, user name, e-mail address, and password.

- Wait Time after Authent.

Default: [300 msec.]

Specify [Wait Time after Authent.] from zero to 10,000 milliseconds, in increments of one millisecond.

- User Name

Enter the user name using up to 191 characters. Spaces cannot be entered.

- E-mail Address

Enter the E-mail Address using up to 128 characters. Spaces cannot be entered.

- Password

Enter the password using up to 128 characters. Spaces cannot be entered.

To enable POP server authentication before sending e-mail via the SMTP server, set [POP before SMTP] to [On]. E-mail is sent to the SMTP server after the time specified for [Wait Time after Authent.] has elapsed.

If you select [On], enter server name in POP3/IMAP4 Settings. Also, check POP3 port number in E-mail Communication Port.

Reception Protocol

Specify the Reception Protocol for receiving Internet Fax.

Default: [POP3]

POP3 / IMAP4 Settings

Specify the POP3/IMAP4 server name for receiving Internet faxes.

The specified POP3/IMAP4 server name is used for [POP before SMTP].

Default: [Auto]

- Server Name

If DNS is in use, enter the host name.

If DNS is not in use, enter the POP3/IMAP4 or server IPv4 address.

Enter POP3/IMAP4 server name using up to 127 characters. Spaces cannot be entered.

- Encryption

Select Encryption as follows:

[Auto]

Password encryption is automatically set according to the POP/IMAP server settings.

[On]

Encrypt password.

[Off]

Do not encrypt password.

Administrator's E-mail Address

Specify the Administrator's E-mail Address.

On e-mailed scanned documents, if the sender is not specified this appears as the sender's address.

When sending e-mail under the Internet fax function, administrator's e-mail address will appear as the sender's address under the following conditions:

- The sender has not been specified and the machine's e-mail address has not been registered.
- The specified sender is not registered in the machine's Address Book and the machine's e-mail address has not been registered.

When conducting SMTP authentication for the transmitted files under the Internet fax function, the Administrator's E-mail Address will appear in the "From:" box. If you have specified the user name and e-mail address in [SMTP Authentication], make sure to specify this setting.

Enter up to 128 characters.

On e-mailed scanned documents, if [Auto Specify Sender Name] is [Off], specify the sender.

E-mail Communication Port

Specify the port numbers for receiving Internet faxes. The specified POP3 port number is used for [POP before SMTP].

Default for "POP3": [110]

Default for "IMAP4": [143]

Enter a port number between 1 and 65535 using the number keys, and then press the [#] key.

E-mail Reception Interval

Specify, in minutes, the time interval for receiving Internet faxes via POP3 or IMAP4 server.

Default: [On], [15 minute(s)]

If [On] is selected, the time can be set from 2 to 1440 minutes in increments of one minute.

Max. Reception E-mail Size

Specify the maximum reception e-mail size for receiving Internet faxes.

Default: [2 MB]

Enter a size from 1 - 50 MB in increments of one megabyte.

E-mail Storage in Server

Specify whether or not to store received Internet fax e-mails on the POP3 or IMAP4 server.

Default: [Off]

Default User Name / Password (Send)

Specify the user name and password required when sending scan files directly to a shared folder on a computer running Windows, to an FTP server, or to a NetWare server.

Enter in up to 64 characters.

Program / Change / Delete E-mail Message

You can program, change, or delete the e-mail message used when sending an Internet fax or scan file as an attachment.

- Program/Change:
 1. Press the [User Tools/Counter] key.
 2. Press [System Settings].
 3. Press [File Transfer].
 4. Press [▼Next].
 5. Press [Program / Change / Delete E-mail Message].
 6. Check that [Program / Change] is selected.
 7. Press [*Not Programmed].

To change the registered e-mail message, select the e-mail message to change.

8. Press [Change] under the "Name".

9. Enter a name, and then press [OK].
Enter the name using up to 20 characters.
 10. Press [Edit].
To start a new line, press [OK] to return to the e-mail message screen, and then press [▼] in "Select Line to Edit:".
 11. Enter the text, and then press [OK].
Enter up to five lines of text. Each line can consist of up to 80 characters.
 12. Press [OK].
 13. Press [Exit].
 14. Press the [User Tools/Counter] key.
- Delete:
 1. Press the [User Tools/Counter] key.
 2. Press [System Settings].
 3. Press [File Transfer].
 4. Press [▼Next].
 5. Press [Program / Change / Delete E-mail Message].
 6. Press [Delete].
 7. Select the e-mail message to delete.
The confirmation message about deleting appears.
 8. Press [Yes].
 9. Press [Exit].
 10. Press the [User Tools/Counter] key.

Auto Specify Sender Name

Set whether or not to specify the name of the sender when sending e-mail.

Default: [Off]

- On

If you select [On], the specified e-mail address will appear in the "From:" box. If you do not specify the sender's address, the administrator's e-mail address will appear in the "From:" box.

If you do not specify the sender when sending a file by e-mail under the fax function, or if the specified e-mail address is not registered in the machine's Address Book, the machine's e-mail address will appear in the "From:" box. If the machine does not have an e-mail address, the administrator's e-mail address will appear in the "From:" box.
- Off

If you select [Off], the specified e-mail address will appear in the "From:" box, but you cannot send e-mail without specifying the sender's e-mail address. Under the fax function, you cannot

send e-mail if the specified sender's e-mail address is not registered in the machine's Address Book.

Fax E-mail Account

Specify e-mail address, user name and password for receiving Internet faxes.

Default: **[Do not Receive]**

- E-mail Address
Enter an e-mail address using up to 128 characters.
- User Name
Enter a user name using up to 191 characters.
- Password
Enter a password using up to 128 characters.

Scanner Resend Interval Time

Specifies the interval the machine waits before resending a scan file, if it cannot be sent to the delivery server or mail server.

Default: **[300 second(s)]**

The interval time can be set from 60 to 900 seconds in one second increments, using the number keys.

This setting is for the scanner function.

This setting is not valid for the WSD scanner function.

Number of Scanner Resends

Sets a maximum number of times a scan file is resent to the delivery server or mail server.

Default: **[On], [3 time(s)]**

If [On] is selected, the number of times can be set from 1 to 99.

This setting is for the scanner function.

This setting is not valid for the WSD scanner function.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"

Administrator Tools

This section describes the user tools in the Administrator Tools menu under System Settings.

Administrator Tools are used by the administrator. To change these settings, contact the administrator.

We recommend specifying Administrator Authentication before making Administrator Tools settings.

Address Book Management

You can add, change or delete information registered in the Address Book.

For details, see "Address Book".

- Program / Change

You can register and change names as well as user codes.

- Names

You can register a name, key display, registration number, and title selection.

- Auth. Info

You can register a user code, and specify the functions available to each user code. You can also register user names and passwords to be used when sending e-mail, sending files to folders, or accessing an LDAP server.

- Protection

You can register a protection code.

- Fax Dest.

You can register a fax number, international TX mode, fax header, label insertion, IP-Fax destination, and protocol.

- E-mail

You can register an e-mail address.

- Folder

You can register the protocol, path, port number, and server name.

- Add to Group

You can put names registered in the Address Book into a group.

- Delete

You can delete a name from the Address Book.

You can register up to 2,000 names.

You can register up to 500 user codes.

You can also register and manage names in the Address Book using Web Image Monitor.

1

Address Book: Program / Change / Delete Group

Names registered in the Address Book can be added into a group. You can then easily manage the names registered in each group.

- Program/Change

You can register and change groups.

- Names

You can register a name, key display, registration number, and title selection.

- Programmed User/Group

You can check the names or groups registered in each group.

- Protection

You can register a protection code.

- Add to Group

You can put groups registered in the Address Book into a group.

- Delete

You can delete a group from the Address Book.

You can register up to 100 groups.

You can also register and manage groups in the Address Book using Web Image Monitor.

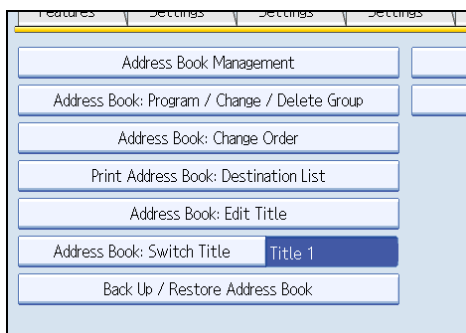
Address Book: Change Order

Changes the order of registered names.

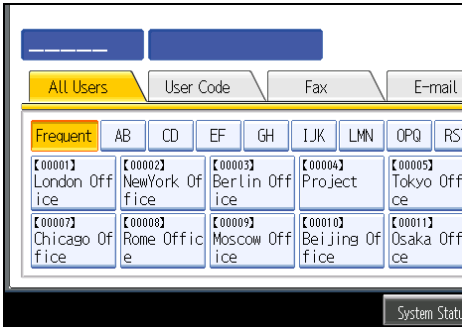
You can rearrange the order of items on the same page, but you cannot move items to another page.

For example, you cannot move an item from "PLANNING" ([OPQ]) to "DAILY" ([CD]).

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book: Change Order].

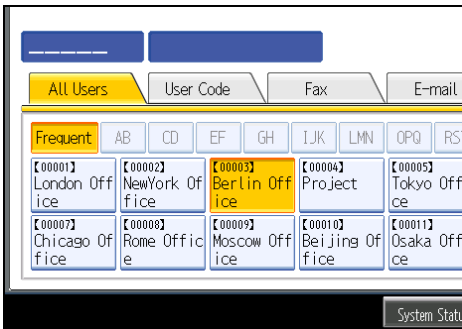


5. Press the name key to be moved.



You can select a name using the number keys.

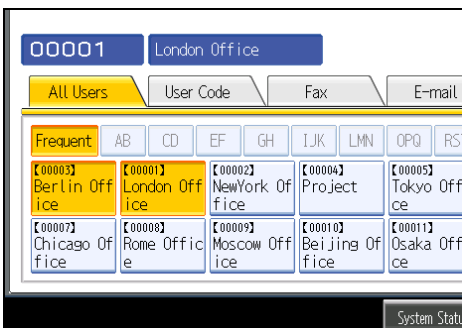
6. Press the name key in place you want to move it to.



The user key is moved to the selected position, and the user key currently at the selected position is moved forward or backward.

If you move the selected user key forward, the user key currently at the selected position is moved backward.

If you move the selected user key backward, the user key currently at the selected position is moved forward.



You can also select a name using the number keys.

Print Address Book: Destination List

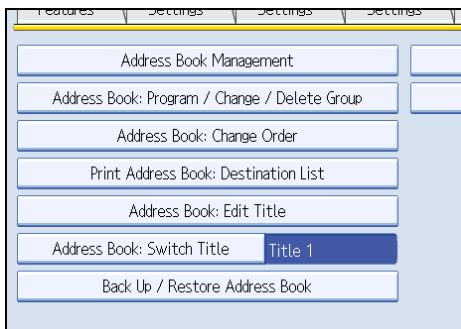
You can print the destination list registered in the Address Book.

- Print in Title 1 Order
Prints the Address Book in Title 1 order.
- Print in Title 2 Order
Prints the Address Book in Title 2 order.
- Print in Title 3 Order
Prints the Address Book in Title 3 order.
- Print Group Dial List
Prints the group Address Book.
 1. Press the [User Tools/Counter] key.
 2. Press [System Settings].
 3. Press [Administrator Tools].
 4. Press [Print Address Book: Destination List].
 5. Select the print format.
 6. To print the list on two-sided pages, select [Print on 2 Sides].
 7. Press the [Start] key.The list prints out.

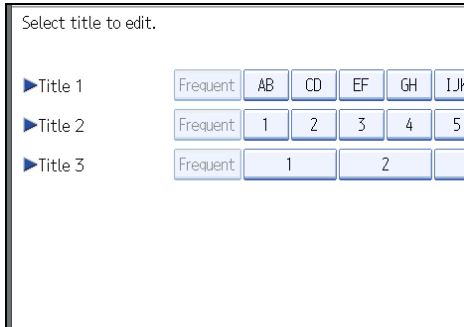
Address Book: Edit Title

You can edit the title to easily find a user.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Address Book: Edit Title].



5. Press the title key you want to change.



6. Enter the new name, and then press [OK].
7. Press [OK].
8. Press the [User Tools/Counter] key.

Address Book: Switch Title

Specifies the title to select a name.

Default: [Title 1]

Back Up / Restore Address Book

You can back up the machine's Address Book to external storage or restore the backup copy from the external storage.

Backup requires a removable SD card to be installed in this machine.

For details about installing and removing the SD card, contact your sales or service representative.

Restore data overwrites Address Book data stored on the machine, and clears the counter of each registered user of the machine.

You can also back up and restore the machine's Address Book using Web Image Monitor. For details, see the Help files of Web Image Monitor.

- Back Up
 - You can back up the machine's Address Book to external storage.
- Restore
 - You can restore the backup copy of the Address Book from external storage.
- Format
 - You can format the external storage.
- Obtain Memory Device Info
 - The free space and occupied space of the external storage are displayed.

Data Carry-over Setting for Address Book Auto-program

By using Data Carry-over Setting for Address Book Auto-program, you can carry over user authentication information that has already been registered to the Address Book of the Windows authentication, LDAP authentication, or integration server authentication.

Default: [Do not Carry-over]

If you select [Carry-over Data], use the number keys to enter the registration number of the data you wish to carry over from an Address Book.

For details about the Windows authentication, LDAP authentication, or Integration server authentication, consult your administrator.

Display / Print Counter

Allows you to view and print the number of prints.

- Display / Print Counter

Displays the number of prints for each function (Total, Copier, Printer, A3/DLT, Duplex, Fax Prints, Send / TX Total, Fax Transmission, Scanner Send).

- Print Counter List

Prints out a list of the number of prints made under each function.

Display / Clear / Print Counter per User

Allows you to view and print the numbers of prints accessed with user codes, and to set those values to 0.

Press [▲Previous] and [▼Next] to show all the numbers of prints.

The number of prints may differ from the counter values shown in Display/Print Counter.

- Print Counter List for All Users

Prints the counter value for all the users.

- Clear Counter List for All Users

Resets the counter value for all the users.

- Print Counter List Per User

Prints the counter value for each user.

- Clear Counter List Per User

Resets the counter value for each user.

- Select All on the Page

Select all the users on the page.

For details about printing the counter, see "Printing the Counter for Each User" and "Printing the Counter for All Users".

Machine Action When Limit is Reached

For details about this function, consult your administrator.

Print Volume Use Limitation: Unit Count Setting

For details about this function, consult your administrator.

User Authentication Management

- User Code Auth.

Using User Code Authentication, you can limit the available functions and supervise their use.

When using User Code Authentication, register the user code.

Using the Printer PC Control function, you can obtain a log of prints corresponding to the codes entered using the printer driver.

For details about Basic Authentication, Windows Authentication, LDAP Authentication, and Integration Server Authentication, consult your administrator.

Function to Restrict

- Copier:
 - [Restrict All (B & W / Single Colour / Two-colour / Full Colour)], [Single Colour / Two-colour / Full Colour], [Two-colour / Full Colour], [Full Colour], [Do not Restrict]
- Printer:
 - [Black & White / Colour], [Colour], [PC Control], [Do not Restrict]
- Other Functions:
 - [Document Server], [Facsimile], [Scanner]
- Printer Job Authentication:
 - [Entire], [Simple (Limitation)], [Simple (All)]
- Limitation Range:
 - [Change]
- Basic Auth.
- Windows Auth.
- LDAP Auth.
- Integration Svr. Auth.
- Off

Default: [Off]

Administrator Authentication Management

For details about this function, consult your administrator.

Program / Change Administrator

For details about this function, consult your administrator.

Key Counter Management

Specify the functions you want to manage with the key counter.

- Copier:
 - [Full Colour], [Black & White], [Single Colour], [Two-colour]

- Printer:
[Colour], [Black & White]
- Other Functions:
[Document Server], [Facsimile], [Scanner]

External Charge Unit Management

You can use the key card to specify an upper limit on machine use.

- Copier
- Document Server
- Facsimile
- Printer
- Scanner

For details about this function, consult your administrator.

Enhanced External Charge Unit Management

Specify whether or not to make available enhanced features for enhanced external charge unit management.

For details about this function, consult your administrator.

Extended Security

Specify whether or not to use the extended security functions. For details about the extended security functions, consult your administrator.

Auto Delete File in Document Server

Specify whether documents stored in the Document Server will or will not be deleted after a specified period of time.

Default: [On], [3 day(s)]

If you select [On], documents stored subsequently are deleted after the specified period.

If you select [Off], documents are not automatically deleted.

If you select [On], enter a number of days from 1 to 180 (in 1 day increments).

The default is 3 days, this means documents are deleted 3 days (72 hours) after they are stored.

Delete All Files in Document Server

You can delete files stored in the Document Server, including files stored for Sample Print, Locked Print, Hold Print, and Stored Print under the printer function.

Even if a password is always set, all documents are deleted.

A confirmation message appears. To delete all documents, select [Yes].

Capture Priority

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Delete All Unsent Files

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Ownership

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Public Priority

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Capture: Owner Defaults

This setting appears when the File Format Converter is installed, and when the capture function is being used by the ScanRouter delivery software.

For details about this function, consult your administrator.

Program / Change / Delete LDAP Server

Program the LDAP server to find up e-mail destinations in the LDAP server Address Book directly. This function is possible when sending scan files by e-mail using the scanner or fax function.

- Name
- Server Name
- Search Base
- Port Number
- Use Secure Connection (SSL)
- Authentication
- User Name
- Password
- Realm Name
- Search Conditions
- Search Options

This function supports LDAP Version 2.0 and 3.0. Digest authentication can only be used under LDAP Ver.3.0.

To use the LDAP server, select [On] under LDAP Search.

For details about how to program the LDAP Server, see "Programming the LDAP server".

LDAP Search

Specify whether or not to use the LDAP server for searching.

Default: [Off]

If you select [Off], LDAP server list will not appear on the searching display.

Auto Off Setting

Specify whether or not to use Auto Off.

Default: [Enable]

Energy Saver Level

Specify the level for Energy Saver mode.

Default: [Level 2]

If you specify [Level 1], the machine switches from Energy Saver mode to Normal mode and is ready to begin copying in about three seconds.

If you specify [Level 2], the machine switches from Energy Saver mode to Normal mode and is ready to begin copying about ten seconds. When set to [Level 2], the machine consumes less power than when set to [Level 1].

Service Test Call

You can make a test call to the @Remote center.

This function is available only if the @Remote service is enabled and active.

Notify Machine Status

You can send notification of the machine's status to the @Remote center.

This function is available only if the @Remote service is enabled and active.

Service Mode Lock

For details about this function, consult your administrator.

Firmware Version

You can check the version of the software installed in this machine.

Network Security Level

For details about this function, consult your administrator.

Auto Erase Memory Setting

For details about this function, consult your administrator.

Erase All Memory

For details about this function, consult your administrator.

Delete All Logs

For details about this function, consult your administrator.

Transfer Log Setting

For details about this function, consult your administrator.

Fixed USB Port

Specify whether or not to fix the USB port.

Default: [Off]

If set to [Level 1]

It is not necessary to install a new driver when the printer driver of this machine has already been installed on the PC.

If set to [Level 2]

Please contact your service representative for details.

Program / Change / Delete Realm

Program the realm to be used for Kerberos authentication.

- Realm Name
- KDC Server Name
- Domain Name

Be sure to set both the realm name and KDC server name when programming a realm.

For details about Program/Change/Delete Realm, see "Programming the Realm".

Machine Data Encryption Settings

For details about this function, consult your administrator.

Note

- For details on how to access System Settings, see "Accessing User Tools".

Reference

- p.19 "Accessing User Tools"
- p.66 "Programming the LDAP server"
- p.72 "Programming the Realm"
- p.246 "Printing the Counter for Each User"
- p.247 "Printing the Counter for All Users"

Programming the LDAP server

This section describes how to specify the LDAP server settings.

This function supports LDAP version 2.0 and 3.0.

Program the LDAP server to find e-mail destinations in the LDAP server Address Book directly.

This function is possible when sending scan files by e-mail using the scanner or fax function.

To start an LDAP search, make sure that the items listed below are set. For other items, check your environment and make any necessary changes.

- Server Name
- Search Base
- Port Number
- Authentication
- Search Conditions

If [Kerberos Authentication] is selected be sure to set the "User Name", "Password", and the "Realm Name".

If [Digest Authentication] or [Cleartext Authentication] is selected be sure to set the "User Name" and "Password".

To use the LDAP server in Administrator Tools, select [On] under "LDAP Search".

The LDAP version 2.0 does not support Digest Authentication.

To select Kerberos Authentication, a realm must be registered in advance.

Programming the LDAP server

This section describes how to program the LDAP server.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Program / Change / Delete LDAP Server].
6. Check that [Program / Change] is selected.
7. Select the LDAP server you want to program or change.

When programming the server, select [*Not Programmed].

8. Press [Change] under "Name".
9. Enter the name, and then press [OK].
10. Press [Change] under "Server Name".

11. Enter the server name, and then press [OK].**12. Press [Change] under "Search Base".**

Select a root folder to start the search from e-mail addresses registered in the selected folder are search targets.

13. Enter the search base, and then press [OK].

For example, if the search target is the sales department of ABC company, enter "dc=sales department, o=ABC". (In this example, the description is for an active directory. "dc" is for the organization unit, and "o" is for the company.)

Search base registration may be required depending on your server environment. When registration is required, unspecified searches will result in error.

Check your server environment and enter any required specifications.

14. Press [Change] under "Port Number".

Specify the port number for communicating with the LDAP server. Specify a port that is compliant with your environment.

15. Enter the port number using the number keys, and then press the [#] key.**16. Under "Use Secure Connection (SSL)", press [On].**

Use SSL to communicate with the LDAP server.

For SSL to function, the LDAP server must support SSL.

If you set SSL to [On], the port number automatically changes to "636".

If you do not enable SSL, security problems may occur. To enable SSL, you must use the machine's settings. For details, consult your network administrator.

17. Press [▼Next].**18. Select the authentication method.**

To make a search request to the LDAP server, use the administrator account for authentication.

Authentication settings must comply with your server's authentication settings. Check your server settings before setting this machine.

[Digest Authentication] is available only with LDAP Version 3.0.

If you select [Cleartext Authentication], a password is sent to the LDAP server as is, without any encryption processing.

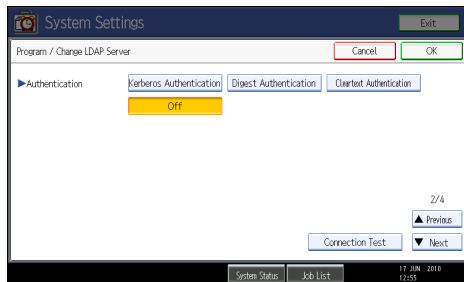
If you select [Digest Authentication], a password is sent using an encryption process that prevents passwords from being revealed during transmission to the LDAP server.

If you select [Kerberos Authentication], a password is sent using an encryption process that prevents passwords from being revealed during transmission to the KDC server where authentication occurs.

If you select [Off], proceed to step 24.

If you select [Digest Authentication] or [Cleartext Authentication], proceed to step 19 to 22, and then proceed to step 24.

If you select [Kerberos Authentication], proceed to step 19 to 23, and then proceed to step 24.



19. Press [Change] under "User Name".

When [Kerberos Authentication], [Digest Authentication], or [Cleartext Authentication] is selected for the authentication setting, use the administrator account name and password. Do not enter the administrator account name and password when using authentication for each individual or each search.

20. Enter the user name, and then press [OK].

Procedures for the user name setting differ depending on server environment. Check your server environment before making the setting.

Example: Domain Name\User Name, User Name@Domain Name, CN=Name, OU=Department Name, DC=Server Name

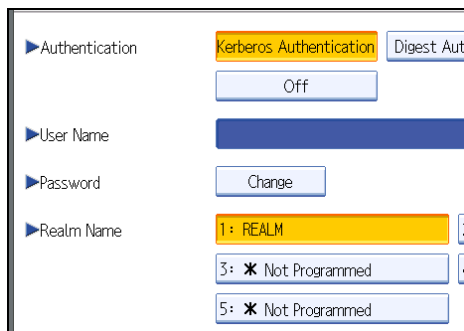
21. Press [Change] under "Password".

22. Enter the password, and then press [OK].

The user name and password are required for administrator authentication to access the LDAP server. You can connect to the LDAP server using a user name and password stored in the Address Book. For details, see "Registering SMTP and LDAP Authentication".

If you select [Digest Authentication] or [Cleartext Authentication], proceed to step 24.

23. Select the Realm.



24. Press [Connection Test].

Access the LDAP server to check that the proper connection is established. Check authentication works according to the authentication settings.

25. Press [Exit].

If the connection test fails, check your settings and try again.

This function does not check search conditions or the search base.

26. Press [▼Next].**27. Press [Change] for items you want to use as search conditions from the following: "Name", "E-mail Address", "Fax Number", "Company Name", and "Department Name".**

You can enter an attribute as a typical search keyword. Using the entered attribute, the function searches the LDAP server's Address Book.

28. Enter the attribute you want to use when searching for e-mail addresses, and then press [OK].

The attribute value may change depending on the server environment. Check that the attribute value complies with your server environment before setting it.

You can leave items blank, but you cannot leave attributes blank when searching for e-mail addresses from the LDAP server Address Book.

29. Press [▼Next].**30. Press [Change] under "Attribute".****31. Enter the attribute you want to use when searching for e-mail addresses, and then press [OK].**

The attribute value may change depending on the server environment. Check that the attribute complies with your server environment before setting it.

32. Press [Change] under "Key Display".**33. Enter the key display, and then press [OK].**

The registered "Key Display" appears as a keyword for searching LDAP.

- Without key display registration

Name	Beginning Word	End Word	Exact Match
Fax Destination	Beginning Word	End Word	Exact Match
E-mail Address	Beginning Word	End Word	Exact Match
Company Name	Beginning Word	End Word	Exact Match
Department Name	Beginning Word	End Word	Exact Match

- With key display registration

Name	Beginning Word	End Word	Exact Match
Fax Destination	Beginning Word	End Word	Exact Match
E-mail Address	Beginning Word	End Word	Exact Match
Company Name	Beginning Word	End Word	Exact Match
Department Name	Beginning Word	End Word	Exact Match
Emp LoyeeNo.	Beginning Word	End Word	Exact Match

The key does not appear on the search screen unless both "Attribute" and "Key Display" are registered. Make sure you register both to use the optional search.

34. Press [OK].
35. Press [Exit].
36. Press the [User Tools/Counter] key.

Reference

- p.299 "Registering SMTP and LDAP Authentication"

Changing the LDAP server

This section describes how to change the programmed LDAP server.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Program / Change / Delete LDAP Server].
6. Check that [Program / Change] is selected.
7. Select the LDAP server you want to change.
8. Change the settings as necessary.
9. Press [OK] after changing each item.
10. Press [Exit].
11. Press the [User Tools/Counter] key.

Deleting the LDAP server

This section describes how to delete the programmed LDAP server.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Program / Change / Delete LDAP Server].
6. Press [Delete].
7. Select the LDAP server you want to delete.
8. Press [Yes].
9. Press [Exit].
10. Press the [User Tools/Counter] key.

Programming the Realm

This section describes how to specify the Realm settings.

Program the realm to be used for Kerberos authentication.

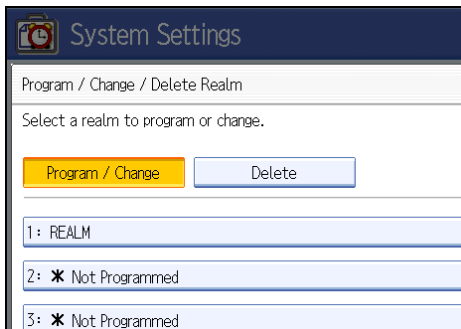
A realm is the network area in which Kerberos authentication is used. After confirming the network environment, specify the necessary items.

You can register up to 5 realms.

Programming the Realm

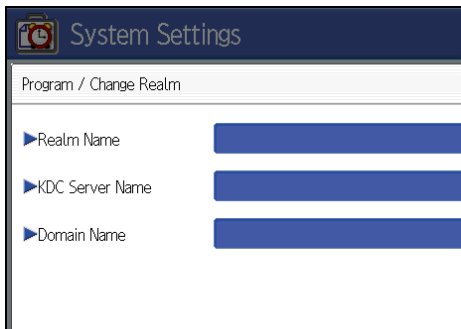
This section describes how to program the Realm.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Program / Change / Delete Realm].
6. Check that [Program / Change] is selected.



7. Press [*Not Programmed].

8. Press [Change] under "Realm Name".



9. Enter the realm name, and then press [OK].

Enter the realm name, or host name.

You can enter a realm name using up to 64 characters.

10. Press [Change] under "KDC Server Name".

11. Enter the KDC server name, and then press [OK].

Enter the KDC server name, host name, or IPv4 address.

You can enter a KDC server name using up to 64 characters.

12. Press [Change] under "Domain Name".

13. Enter the domain name, and then press [OK].

Enter the domain name, or host name.

You can enter a domain name using up to 64 characters.

14. Press [OK].

15. Press [Exit].

16. Press the [User Tools/Counter] key.

Changing the Realm

This section describes how to change the programmed Realm.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Program / Change / Delete Realm].
6. Check that [Program / Change] is selected.
7. Select the Realm you want to change.

8. To change the realm name, press [Change] under "Realm Name".

9. Enter the realm name, and then press [OK].

You can enter a realm name using up to 64 characters.

10. To change the KDC server name, press [Change] under "KDC Server Name".

11. Enter the KDC server name, and then press [OK].

You can enter a KDC server name using up to 64 characters.

12. To change the domain name, press [Change] under "Domain Name".

13. Enter the domain name, and then press [OK].

You can enter a domain name using up to 64 characters.

14. Press [OK].

15. Press [Exit].

16. Press the [User Tools/Counter] key.

Deleting the Realm

This section describes how to delete the programmed Realm.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].

3. Press [Administrator Tools].

4. Press [▼Next] three times.

5. Press [Program / Change / Delete Realm].

6. Press [Delete].

7. Select the realm you want to delete.

8. Press [Yes].

9. Press [Exit].

10. Press the [User Tools/Counter] key.

2. Connecting the Machine

This chapter describes how to connect the machine to the network and specify the network settings.

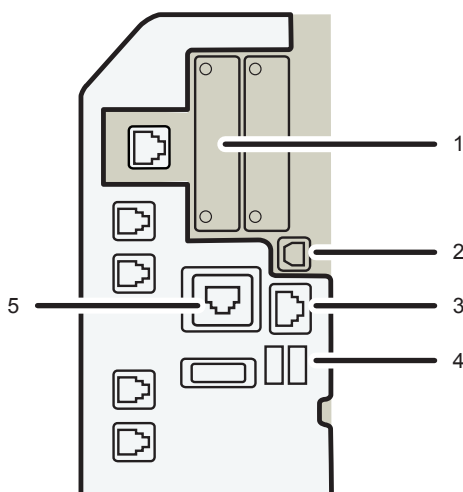
Connecting to the Interface

This section explains how to identify the machine's interface and connect the machine according to the network environment.

2

⚠ CAUTION

- A network interface cable with a ferrite core must be used for RF interference suppression.



B2U006

1. Slot A

Install an optional interface board in this slot.

The slot can accommodate one of the following interface boards:

- IEEE1284 interface board: Required if you want to connect an IEEE 1284 cable to this machine. When installed in Slot A, this board allows you to connect the machine to a computer through an IEEE 1284 cable.
- Wireless LAN interface unit: Required if you want to connect this machine to a wireless LAN. When installed in Slot A, this unit allows you to connect the machine to an IEEE 802.11 a or IEEE 802.11 b/g wireless LAN.

2. USB 2.0 [Type B] port

Port for connecting the USB2.0 [Type B] interface cable

3. 10BASE-T/100BASE-TX port

Port for connecting the 10BASE-T or 100BASE-TX cable

4. USB Host Interface

Port for connecting the USB interface cable

Use this interface to connect the machine to a card authentication device or memory card reader.

5. Gigabit Ethernet port (optional)

Port for using the 1000BASE-T, 100BASE-TX, or 10BASE-T cable

↓ Note

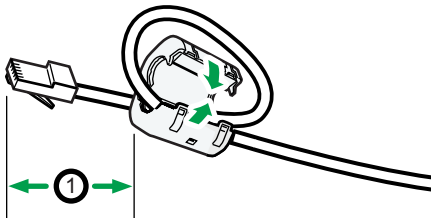
- Slot A can contain one module only: You can install only one IEEE 1284 interface board or one Wireless LAN interface unit at a time in this slot.
- The Ethernet and Gigabit Ethernet port cannot be used simultaneously. If the optional Gigabit Ethernet board is installed, connect the Ethernet cable to the port on the Gigabit Ethernet board. Communication with the machine will fail if cables are connected to both ports simultaneously.

Connecting to the Ethernet Interface

This section describes how to connect an Ethernet cable to the Ethernet interface.

★ Important

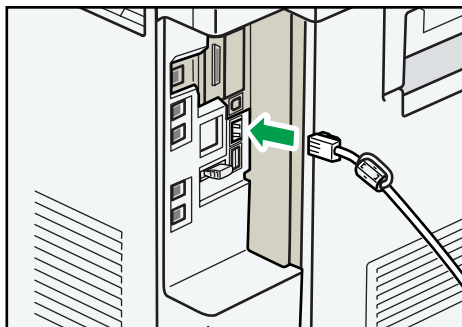
- If the main power switch is on, turn it off.
 - Use the following Ethernet cables.
 - Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5 or more
1. Make a loop 5 cm (2.1 inch) (1) from the end of the Ethernet cable and attach the included ferrite core to the loops as shown.



BZU007

2. Make sure the main power is switched off.

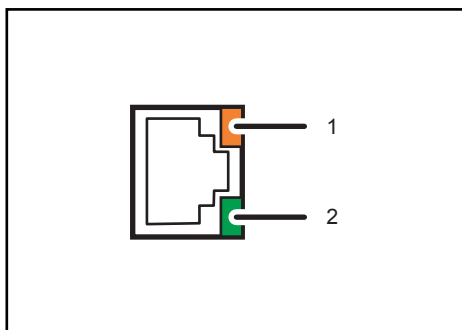
3. Connect the Ethernet interface cable to the 10BASE-T/100BASE-TX port.



BZU008

4. Connect the other end of the Ethernet interface cable to a network connection device such as a hub.

5. Turn on the main power switch of the machine.



BZU009

1. Indicator (orange)

When 100BASE-TX is operating, the LED is lit orange. When 10BASE-T is operating or the machine is not connected to the network, it is turned off.

2. Indicator (green)

When 10BASE-T is operating, the LED is lit green. When 100BASE-TX is operating or the machine is not connected to the network, it is turned off.

↓ Note

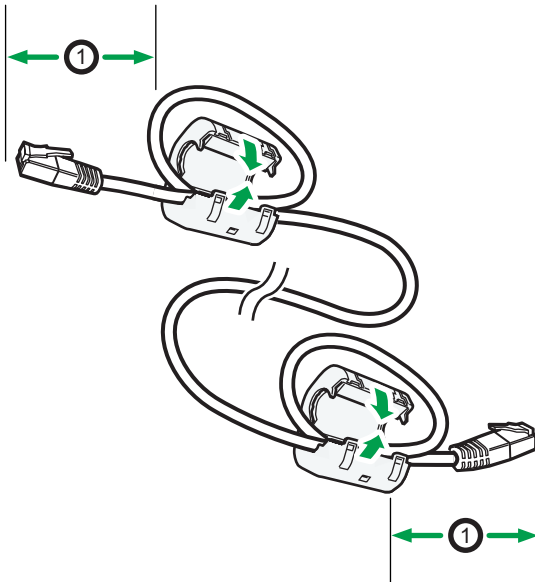
- For details about how to turn on the main power switch, see "Turning On the Power", About This Machine.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting to the Gigabit Ethernet Interface

This section describes how to connect the Ethernet interface cable to the Gigabit Ethernet port.

★ Important

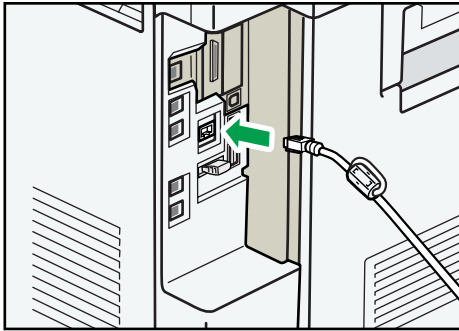
- If the main power switch is on, turn it off.
 - Use the following Ethernet cables.
 - When using 100BASE-TX/10BASE-T:
Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5 or more
 - When using 1000BASE-T:
Unshielded Twisted Pair Cable (UTP) or Shielded Twisted Pair Cable (STP) and Category type 5e or more
1. Make loops 5 cm (2.1 inch) (1) from the end of each Ethernet cable and attach included ferrite cores to each loop as shown.



BZU010

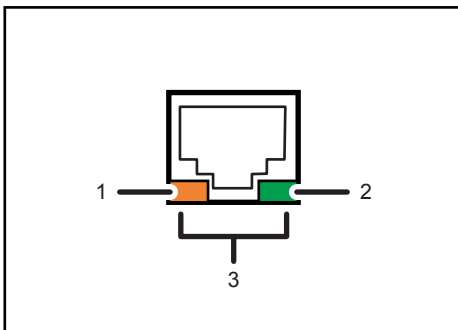
2. Make sure the main power is switched off.

3. Connect the Ethernet interface cable to the Gigabit Ethernet port.



BZU011

4. Connect the other end of the Ethernet interface cable to a network connection device such as a hub.
5. Turn on the main power switch of the machine.



BZU012

1. Indicator (orange)

When 100BASE-T is operating, the LED is lit orange. When 10BASE-TX is operating or the machine is not connected to the network, it is turned off.

2. Indicator (green)

When 10BASE-TX is operating, the LED is lit green. When 100BASE-T is operating or the machine is not connected to the network, it is turned off.

3. Indicators (both orange and green)

When 1000BASE-T is operating, both LED are lit.

↓ Note

- For details about how to turn on the main power switch, see "Turning On the Power", About This Machine.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting to the USB (Type B) Interface

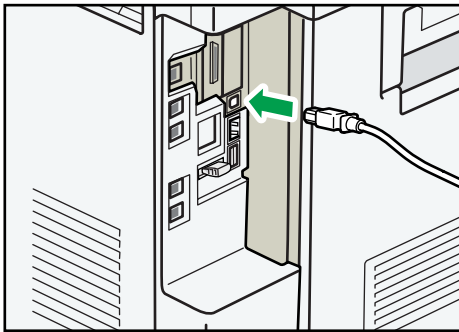
This section describes how to connect the USB2.0 (Type B) interface cable to the USB2.0 port.

⚠ CAUTION

- Properly shielded and grounded cables and connectors must be used for connections to a host computer (and/or peripheral) in order to meet emission limits.

2

1. Connect the USB2.0 (Type B) interface cable to the USB2.0 port.



2. Connect the other end to the USB2.0 port on the host computer.

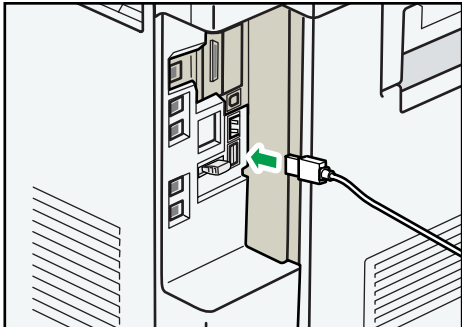
↓ Note

- This machine does not come with a USB interface cable. Make sure you purchase the appropriate cable for the machine and your computer.
- The USB2.0 interface board is supported by Windows 2000/XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2, Mac OS X 10.3.3 or higher.
 - To use Macintosh, the machine must be equipped with the optional PostScript 3 unit. When used with Mac OS X 10.3.3 or higher, a transfer speed of USB2.0 is supported.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting a Device to the Machine's USB Host Interface

This section explains how to connect a device to the machine's USB host interface.

1. Connect one end of the USB interface cable to the machine's USB host interface.



BZU021

2. Connect the other end of the USB interface cable to a card authentication device or media slot.

Note

- This machine does not come with a USB interface cable. Make sure you purchase the appropriate cable.

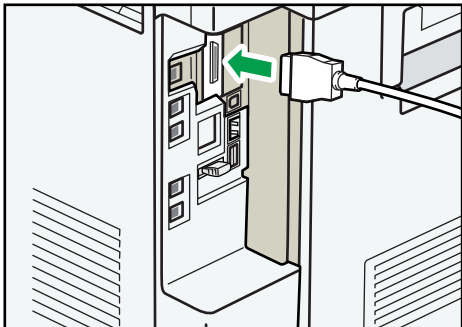
Connecting to the IEEE 1284 Interface

This section describes how to connect the IEEE 1284 interface cable to the IEEE 1284 interface board.

CAUTION

- Properly shielded and grounded cables and connectors must be used for connections to a host computer (and/or peripheral) in order to meet emission limits.

1. Make sure the main power switch on the machine is off.
2. Turn off the main power switch of the host computer.
3. Connect the IEEE 1284 interface cable to the IEEE 1284 port.



BZU014

You might have to use a conversion adapter to connect the cable to the interface. For details about acquiring a conversion adapter, consult your sales or service representative.

4. Connect the other end of the cable into the interface connector on the host computer.

Check the shape of the connector to the computer. Connect the cable firmly.

5. Turn on the main power switch of the machine.

6. Turn on the host computer.

When using Windows 2000/XP/Vista/7, and Windows Server 2003/2003 R2/2008/2008 R2, a printer driver installation screen might appear when the computer is turned on. If this happens, click [Cancel] on the screen.

Note

- For details about how to turn on the main power switch, see "Turning On the Power", About This Machine.
- For details about installing the printer driver, see "Preparing the Machine", Printer Reference.

Connecting to the Wireless LAN Interface

This section describes how to connect to the wireless LAN interface.

Note

- Check the machine's IPv4 address and subnet mask, or the IPv6 address settings.
- For details about how to set the IPv4 address and subnet mask from the control panel of the machine, see "Interface Settings".
- Before using this machine with a wireless LAN interface, you must select [Wireless LAN] in [LAN Type].

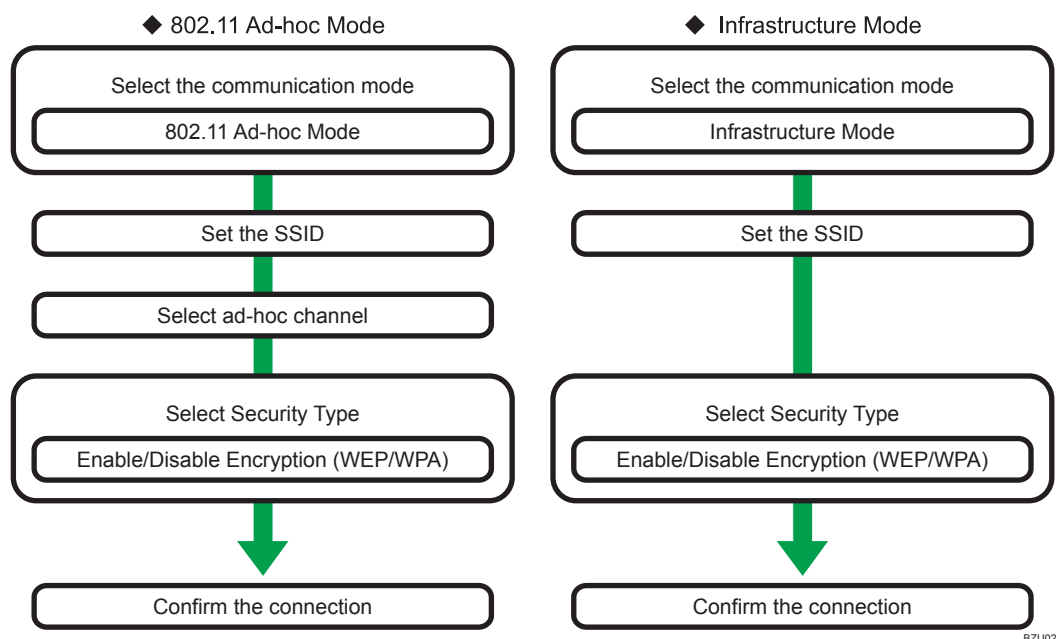
Reference

- p.39 "Interface Settings"

Setup Procedure

This section describes how to setup wireless LAN interface.

To configure the wireless LAN settings: open [System Settings], [Interface Settings], select [Wireless LAN], and then use the following procedure.



Note

- Select [802.11 Ad-hoc Mode] when connecting Windows XP as a wireless LAN client using Windows XP standard driver or utilities, or when not using the infrastructure mode.
- When [802.11 Ad-hoc Mode] is selected in Communication Mode, select the channel for [Ad-hoc Channel]. Set a channel that matches the type of wireless LAN being used. For details about setting the Ad-hoc Channel, see "Interface Settings".
- You can specify either "WEP" or "WPA" to the Security Method.
- Specify "WPA", when [Communication Mode] is set to [Infrastructure Mode].
- If you select the [WPA] option for Security Method, select one of the following: [WPA-PSK], [WPA], [WPA2-PSK], or [WPA2]. If you select [WPA-PSK] or [WPA2-PSK], enter your PSK. If you select [WPA] or [WPA2], authentication settings and certificate installation settings are required. For details about setting methods, see "Configuring IEEE 802.1X".
- For details about how to specify wireless LAN settings from the control panel on the machine, see "Interface Settings".

Reference

- p.39 "Interface Settings"
- p.319 "Configuring IEEE 802.1X"

Checking the Signal

This section describes how to check the machine's radio wave status.

When using in infrastructure mode, you can check the machine's radio wave status using the control panel.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].
3. Press [Interface Settings].
4. Press [Wireless LAN].
5. Press [Wireless LAN Signal].

The machine's radio wave status appears.

6. After checking radio wave status, press [Exit].
7. Press the [User Tools/Counter] key.

Network Settings Required to Use the Printer/ LAN-Fax

This section lists the network settings required for using the printer or LAN-Fax function.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

2

Ethernet

This section lists the settings required for using the printer or LAN-Fax function with an Ethernet connection. For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN board is installed. If Ethernet and wireless LAN are both connected, the selected interface has priority.

📖 Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using the printer or LAN-Fax function with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

📖 Reference

- p.39 "Interface Settings"

Network Settings Required to Use Internet Fax

This section lists the network settings required for using Internet Fax.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

2

Ethernet

This section lists the settings required for using Internet Fax with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	Host Name	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	Necessary
File Transfer	E-mail Reception Interval	As required
File Transfer	Max. Reception E-mail Size	As required
File Transfer	E-mail Storage in Server	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Fax E-mail Account	Necessary

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- SMTP Server and Fax E-mail Account must be specified in order to send Internet Fax.
- When POP before SMTP is set to [On], also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When SMTP Authentication is set to [On], also make setting for Administrator's E-mail Address.
- POP3 / IMAP4 Settings, E-mail Communication Port, and Fax E-mail Account must be specified in order to receive Internet Fax.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for using Internet Fax with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required

Menu	User Tool	Setting Requirements
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	Necessary
File Transfer	E-mail Reception Interval	As required
File Transfer	Max. Reception E-mail Size	As required
File Transfer	E-mail Storage in Server	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Fax E-mail Account	Necessary

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- SMTP Server and Fax E-mail Account must be specified in order to send Internet Fax.
- When POP before SMTP is set to [On], you must also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When SMTP Authentication is set to [On], you must also make settings for Administrator's E-mail Address.
- POP3 / IMAP4 Settings, E-mail Communication Port, and Fax E-mail Account must be specified in order to receive Internet Fax.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use E-mail Function

This section lists the network settings required for sending e-mail.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

Ethernet

This section lists the settings required for sending e-mail with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- When POP before SMTP is set to [On], also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for sending e-mail with a Wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	SMTP Server	Necessary
File Transfer	SMTP Authentication	As required
File Transfer	POP before SMTP	As required
File Transfer	Reception Protocol	As required

Menu	User Tool	Setting Requirements
File Transfer	POP3 / IMAP4 Settings	As required
File Transfer	Administrator's E-mail Address	As required
File Transfer	E-mail Communication Port	As required
File Transfer	Program / Change / Delete E-mail Message	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- When POP before SMTP is set to [On], you must also make settings for Reception Protocol and POP3 / IMAP4 Settings.
- When setting POP before SMTP to [On], check POP3 port number in E-mail Communication Port.

Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use Scan to Folder Function

This section lists the network settings required for sending files.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

Ethernet

This section lists the settings required for sending files with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
File Transfer	Default User Name / Password (Send)	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for sending files with a Wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	Necessary
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	Default User Name / Password (Send)	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use the Network Delivery Scanner

This section lists the network settings required for delivering data to the network.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

2

Ethernet

This section lists the settings required for delivering data to the network with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
File Transfer	Delivery Option	Necessary
File Transfer	Fax RX File Transmission	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- If Delivery Option is set to [On], check that IPv4 Address is specified.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Wireless LAN

This section lists the settings required for delivering data to the network with a wireless LAN connection.

For details about how to specify the settings, see "Interface Settings" and "File Transfer".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required
File Transfer	Delivery Option	Necessary
File Transfer	Fax RX File Transmission	As required
File Transfer	Scanner Resend Interval Time	As required
File Transfer	Number of Scanner Resends	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. When both Ethernet and wireless LAN are connected, the selected interface takes precedence.
- If Delivery Option is set to [On], check that IPv4 Address is specified.

📖 Reference

- p.39 "Interface Settings"
- p.48 "File Transfer"

Network Settings Required to Use WSD Scanner

This section lists the network settings required for using WSD Scanner function.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

2

Ethernet

This section lists the settings required for using WSD Scanner function with an Ethernet connection.

For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required
Interface Settings/Network	Ethernet Speed	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN board is installed. If Ethernet and wireless LAN are both connected, the selected interface has priority.

📖 Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using WSD Scanner function with a wireless LAN connection. For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required

Menu	User Tool	Setting Requirements
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	NCP Delivery Protocol	As required
Interface Settings/Network	NW Frame Type	As required
Interface Settings/Network	SMB Computer Name	As required
Interface Settings/Network	SMB Work Group	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Network	Machine Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. If both Ethernet and wireless LAN are connected, the selected interface takes precedence.

📖 Reference

- p.39 "Interface Settings"

Network Settings Required to Use Network TWAIN Scanner

This section lists the network settings required for using the TWAIN Scanner under the network environment.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

2

Ethernet

This section lists the settings required for using the network TWAIN Scanner with an Ethernet connection. For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed.
- When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

2**Wireless LAN**

This section lists the settings required for using the network TWAIN Scanner with a wireless LAN connection. For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

 **Note**

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed.
When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

 **Reference**

- p.39 "Interface Settings"

Network Settings Required to Use Document Server

This section lists the settings required for using the Document Server function under the network environment.

★ Important

- These settings should be made by the administrator, or with the advice of the administrator.

Ethernet

This section lists the settings required for using the Document Server function with an Ethernet connection. For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary
Interface Settings/Network	Ethernet Speed	As required
Interface Settings/Network	IEEE 802.1X Authentication for Ethernet	As required
Interface Settings/Network	LAN Type	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required

↓ Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [LAN Type] is displayed when the wireless LAN interface board is installed.
- When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

📖 Reference

- p.39 "Interface Settings"

Wireless LAN

This section lists the settings required for using the Document Server function with a wireless LAN connection. For details about how to specify the settings, see "Interface Settings".

Menu	User Tool	Setting Requirements
Interface Settings/Network	Machine IPv4 Address	Necessary
Interface Settings/Network	IPv4 Gateway Address	As required
Interface Settings/Network	Machine IPv6 Address	As required
Interface Settings/Network	IPv6 Gateway Address	As required
Interface Settings/Network	IPv6 Stateless Address Autoconfiguration	As required
Interface Settings/Network	DNS Configuration	As required
Interface Settings/Network	DDNS Configuration	As required
Interface Settings/Network	IPsec	As required
Interface Settings/Network	Domain Name	As required
Interface Settings/Network	WINS Configuration	As required
Interface Settings/Network	Effective Protocol	Necessary

Menu	User Tool	Setting Requirements
Interface Settings/Network	LAN Type	Necessary
Interface Settings/Network	Permit SNMPv3 Communication	As required
Interface Settings/Network	Permit SSL / TLS Communication	As required
Interface Settings/Network	Host Name	As required
Interface Settings/Wireless LAN	Communication Mode	Necessary
Interface Settings/Wireless LAN	SSID Setting	As required
Interface Settings/Wireless LAN	Ad-hoc Channel	As required
Interface Settings/Wireless LAN	Security Method	As required

Note

- For the Effective Protocol setting, check that the protocol you want to use is set to [Active].
- [Wireless LAN] and [LAN Type] are displayed when the wireless LAN interface board is installed. When both Ethernet and wireless LAN are connected, the selected interface takes precedence.

Reference

- p.39 "Interface Settings"

Using Utilities to Make Network Settings

This section describes how to make network settings using utilities.

You can also specify network settings using utilities such as Web Image Monitor and telnet.

Note

- These settings should be made by the administrator, or with the advice of the administrator.
- For details about using Web Image Monitor, see "Using Web Image Monitor".
- For details about using telnet, see "Remote Maintenance Using telnet".

Reference

- p.133 "Using Web Image Monitor"
- p.155 "Remote Maintenance Using telnet"

2

Interface Settings

This section describes how to make Interface settings using utilities.

Change settings by using Web Image Monitor and telnet.

[Network] → [Machine IPv4 Address] → [Auto-Obtain (DHCP)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine IPv4 Address] → [Specify] → "Machine IPv4 Address"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine IPv4 Address] → [Specify] → "Subnet Mask"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IPv4 Gateway Address]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine IPv6 Address] → "Manual Configuration Address"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IPv6 Gateway Address]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [IPv6 Stateless Address Autoconfiguration]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [DNS Configuration] → [Auto-Obtain (DHCP)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [DNS Configuration] → [Specify] → "DNS Server 1-3"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [DDNS Configuration]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IPsec]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Domain Name] → [Auto-Obtain (DHCP)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Domain Name] → [Specify] → "Domain Name"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [On] → "Primary WINS Server"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [On] → "Secondary WINS Server"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [On] → "Scope ID"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [WINS Configuration] → [Off]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "IPv4"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "IPv6"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "NetWare"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Effective Protocol] → "SMB"

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [IPX Priority]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [TCP / IP Priority]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [IPX Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NCP Delivery Protocol] → [TCP / IP Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [NW Frame Type] → [Auto Select]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet II]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet 802.2]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet 802.3]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [NW Frame Type] → [Ethernet SNAP]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [SMB Computer Name]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [SMB Work Group]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Ethernet Speed]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [IEEE 802.1X Authentication for Ethernet]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [LAN Type] → [Ethernet]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [LAN Type] → [Wireless LAN]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Ping Command]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Permit SNMPv3 Communication] → [Encryption Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Permit SNMPv3 Communication] → [Encryption / Cleartext]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Can be used for specifying the setting.

[Network] → [Permit SSL / TLS Communication] → [Ciphertext Only]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Permit SSL / TLS Communication] → [Ciphertext Priority]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Permit SSL / TLS Communication] → [Ciphertext / Cleartext]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[Network] → [Host Name]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Network] → [Machine Name]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Communication Mode] → [802.11 Ad-hoc Mode]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Communication Mode] → [Infrastructure Mode]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [SSID Setting]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Ad-hoc Channel]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

[Wireless LAN] → [Security Method]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Can be used for specifying the setting.

File Transfer

This section describes how to make File Transfer settings using utilities.

Change settings by using Web Image Monitor and telnet.

[File Transfer] → [Delivery Option]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Capture Server IPv4 Address]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Fax RX File Transmission]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [SMTP Server]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [SMTP Authentication]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [POP before SMTP]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Reception Protocol] → [POP3]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Reception Protocol] → [IMAP4]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Reception Protocol] → [SMTP]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [POP3 / IMAP4 Settings]

- Web Image Monitor: Can be used for specifying the setting.

- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Administrator's E-mail Address]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [E-mail Communication Port]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [E-mail Reception Interval]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Max. Reception E-mail Size]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [E-mail Storage in Server]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Default User Name / Password (Send)]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Program / Change / Delete E-mail Message]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Auto Specify Sender Name]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Fax E-mail Account]

- Web Image Monitor: Can be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Scanner Resend Interval Time]

- Web Image Monitor: Cannot be used for specifying the setting.
- telnet: Cannot be used for specifying the setting.

[File Transfer] → [Number of Scanner Resends]

- Web Image Monitor: Cannot be used for specifying the setting.

- telnet: Cannot be used for specifying the setting.

Connecting the Machine to a Telephone Line and Telephone

This section describes how to connect the machine to the telephone lines and select the line type.

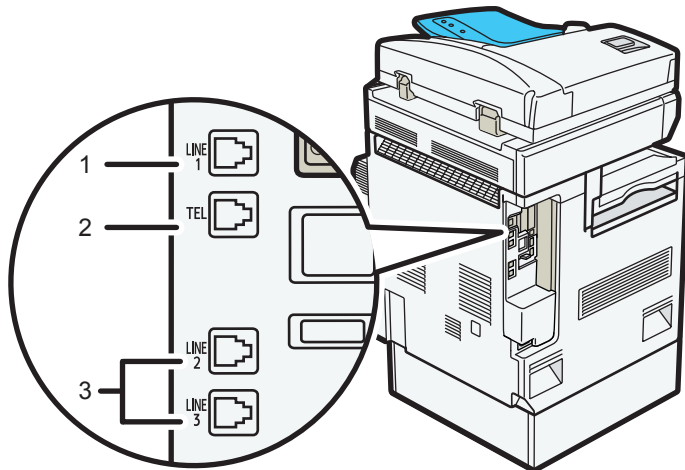
2

Connecting the Telephone Line (Type 1 and 2)

To connect the machine to a telephone line, use a snap-in modular type connector.

★ Important

- Make sure the connector is the correct type before you start.



BZU015

1. G3 interface unit connector
2. External telephone connector
3. Extra G3 interface unit connector

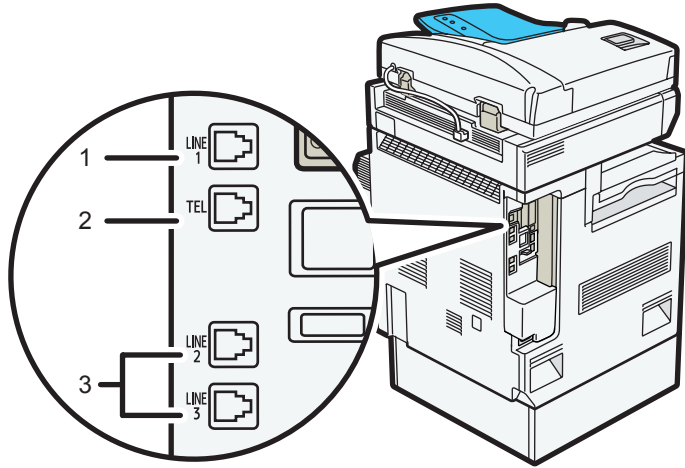
Connecting the Telephone Line (Type 3 and 4)

To connect the machine to a telephone line, use a snap-in modular type connector.

★ Important

- Make sure the connector is the correct type before you start.

2



BZU016

1. G3 interface unit connector
2. External telephone connector
3. Extra G3 interface unit connector

Selecting the Line Type

Select the line type to which the machine is connected. There are two types: tone and pulse dial.

Select the line type using Administrator Tools.

Note

- This function is not available in some regions.

3. Using a Printer Server

This chapter describes how to configure the machine as a network printer.

Preparing Printer Server

This section explains how to configure the machine as a Windows network printer. The machine is configured to enable network clients to use it.

★ Important

- Under Windows XP Professional or Windows Server 2003/2003 R2/2008/2008 R2, to change printer properties in the [Printer] or [Printers and Faxes] window, you need Printer Management access authentication; under Windows Vista/7, Full Control access authentication. Log in to the file server as an Administrator or member of the PowerUsers group.

1. Open the [Printers and Faxes] window from the [Start] menu.

The [Printers and Faxes] window appears.

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

3. On the [Sharing] tab, click [Share this printer].

4. To share the 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.

5. On the [Advanced] tab, click the [Printing Default...] button. Specify the default values for the printer driver that will be distributed to the client computers, and then click [OK].

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

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.

↓ 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

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.

1. Start Web Image Monitor.
2. Click [Login].

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

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

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

The Web browser might be configured to auto complete login dialog boxes by retaining user names and passwords. This function reduces security. To prevent the browser retaining user names and passwords, disable the browser's auto complete function.

4. In the menu area, click [Configuration].
5. Under "Network", 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 in 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 in 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.

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

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

7. 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.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

📖 Reference

- p.133 "Using Web Image Monitor"

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

Follow the procedure below to connect the 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.

1. Start Web Image Monitor.

2. Click [Login].

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

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

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

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

4. In the menu area, click [Configuration].

5. Under "Network", click [NetWare].

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

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

7. Click [Logout].

8. Quit Web Image Monitor.

↓ Note

- To check the configuration is correct, enter the following from the command prompt:
F:> USERLIST
- If the printer works as configured, the name of the print server appears as a connected user.
- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer. If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

📖 Reference

- p.133 "Using Web Image Monitor"

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

Follow the procedure below to connect the 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.

3

Setting up using NWadmin

1. From Windows, start NWadmin.
For details about NWadmin, see the NetWare manuals.
2. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
3. In the [Class of new object] box, click [Print Queue], and then click [OK].
4. In the [Print Queue Name] box, enter the name of the print queue.
5. In the [Print Queue Volume] box, click [Browse].
6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
7. Check the settings, and then click [Create].
8. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
10. In the [Printer name] box, enter the printer name.
11. Select the [Define additional properties] check box, and then click [Create].
12. Click [Assignments], and then click [Add] in the [Assignments] area.
13. In the [Available objects] box, click the queue you created, and then click [OK].
14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
15. Click [Manual load] in the [Communication type] area, and then click [OK].
16. Check the settings, and then click [OK].
17. Select a context specified, and then click [Create] on the [Object] menu.
18. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].

19. In the [Print Server Name] box, enter the print server name.

Use the same print server name specified using Web Image Monitor.

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

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

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

23. Check the settings, and then click [OK].

24. Start the print server by entering the following from the console of the NetWare server.

If the print server is in operation, quit and restart it.

To quit

```
CAREE: unload pserver
```

To start

```
CAREE: load pserver [print server name]
```

Setting up using Web Image Monitor

1. Start Web Image Monitor.

2. Click [Login].

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

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

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

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

4. In the menu area, click [Configuration].

5. Under "Network", click [NetWare].

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

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

7. Click [Logout].

8. Quit Web Image Monitor.

Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".

- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

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.

3

Setting up using PCONSOLE

1. Enter "PCONSOLE" from the command prompt.

```
F:> PCONSOLE
```

2. Create a print queue.

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

3. From the [Available Options] menu, select [Print Queue Information], and then press the [Enter] key.
4. Press [Insert] key, and then enter a print queue name.
5. Press [Esc] key to return to the [Available Options] menu.
6. Set up the network connection to a printer.
7. On the [Available Options] menu, click [Print Server Information], and then press the [Enter] key.
8. To create a new print server, press the [Insert] key, and then enter a print server name.
For a currently defined print server, select a print server in the [Print Server] list.
Use the same printer name specified using Web Image Monitor.
9. From the [Print Server Information] menu, select [Print Server Configuration].
10. From the [Print Server Configuration] menu, select [Printer Configuration].
11. Select the printer indicated as [Not Installed].
Use the same printer number specified as the remote printer number using Web Image Monitor.
12. To change the printer name, enter a new name.
A name "printer x" is assigned to the printer. The "x" stands for the number of the selected printer.
13. As type, select [Remote Parallel, LPT1].
The IRQ, Buffer size, Starting form, and Queue service mode are automatically configured.
14. Press the [Esc] key, and then click [Yes] on the confirmation message.
15. Press the [Esc] key to return to [Print Server Configuration Menu].
16. Assign print queues to the created printer.

3

17. From [Print Server Configuration Menu], select [Queues Serviced By Printer].
18. Select the printer created.
19. Press the [Insert] key to select a queue serviced by the printer.
20. Follow the instructions on the screen to make other necessary settings.
21. Press the [Esc] key until "Exit?" appears, and then select [Yes] to exit PCONSOLE.
22. Start the print server by entering the following from the console of the NetWare server.

You can select several queues.

Following these steps, check that the queues are assigned.

If the print server is in operation, quit and restart it.

To quit

CAREE: unload pserver

To start

CAREE: load pserver [print server name]

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

Setting up using Web Image Monitor

1. Start Web Image Monitor.
2. Click [Login].
3. Enter the login user name and password, and then click [Login].

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

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

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

4. In the menu area, click [Configuration].
5. Under "Network", click [NetWare].
6. Confirm the settings, and then click [OK].

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

7. Click [Logout].
8. Quit Web Image Monitor.

Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.

- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

Reference

- p.133 "Using Web Image Monitor"

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

Follow the procedure below to use the printer as a remote printer under NetWare 4.x, 5/ 5.1 and 6/6.5.

Important

- To use the printer as a remote printer under NetWare 4.x, 5/5.1, 6/6.5, set it to NDS mode.
- Do not use the printer as a remote printer when Pure IP is used.

Setting up using NWadmin

1. From Windows, start NWadmin.
For details about NWadmin, see the NetWare manuals.
2. Set up the network connection to a print queue. Select the object in which the print queue is located in the directory tree, and then click [Create] on the [Object] menu.
3. In the [Class of new object] box, click [Print Queue], and then click [OK].
4. In the [Print Queue Name] box, enter the name of the print queue.
5. In the [Print Queue Volume] box, click [Browse].
6. In the [Available objects] box, click the volume in which the print queue is created, and then click [OK].
7. Check the settings, and then click [Create].
8. Set up the network connection to a printer. Select the object in which the printer is located, and then click [Create] on the [Object] menu.
9. In the [Class of new object] box, click [Printer], and then click [OK]. For NetWare 5, click [Printer (Non NDPS)].
10. In the [Printer name] box, enter the printer name.
11. Select the [Define additional properties] check box, and then click [Create].
12. Assign print queues to the created printer. Click [Assignments], and then click [Add] in the [Assignments] area.
13. In the [Available objects] box, click the queue you created, and then click [OK].

3

14. Click [Configuration], click [Parallel] in the [Printer type] list, and then click [Communication].
15. Click [Manual load] in the [Communication type] area, and then click [OK]. Check the settings, and then click [OK].
16. Set up the network connection to a print server. Select a context specified, and then click [Create] on the [Object] menu.
17. In the [Class of new object] box, click [Print Server], and then click [OK]. For NetWare 5, click [Print Server (Non NDPS)].
18. In the [Print Server Name:] box, enter the print server name.
Use the same print server name specified using Web Image Monitor.
19. Select the [Define additional properties] check box, and then click [Create].
20. Assign the printer to the created print server. Click [Assignments], and then click [Add] in the [Assignments] area.
21. In the [Available objects] box, click the queue you created, and then click [OK].
22. In the [Printers] area, click the printer you assigned, and then click [Printer Number].
23. Enter the printer number, and then click [OK]. Check the settings, and then click [OK].
Use the same printer number specified as the remote printer number using Web Image Monitor.
24. Start the print server by entering the following from the console of the NetWare server.
If the print server is in operation, quit and restart it.
To exit
CAREE: unload pserver
To start
CAREE: load pserver [print server name]
25. Enter the printer server name as the context name, and then press the [Enter] key.
26. Select the printer name on the context menu, and then press the [Enter] key.

Setting up using Web Image Monitor

1. Start Web Image Monitor.
2. Click [Login].
A dialog box for entering the login user name and login password appears.
3. Enter the login user name and password, and then click [Login].

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

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

4. In the menu area, click [Configuration].
5. Under "Network", click [NetWare].
6. Confirm the settings, and then click [OK].

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

7. Click [Logout].
8. Quit Web Image Monitor.

↓ Note

- If you cannot identify the printer you want to configure, check the printer name against the configuration page printed from the printer.
- If no printer names appear in the list, match the frame types of IPX/SPXs for the computer and printer. Use the [Network] dialog box of Windows to change the frame type of the computer.
- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about login user names and passwords, see Security Reference, which is the administrator's manual.

📖 Reference

- p.133 "Using Web Image Monitor"

4. Monitoring and Configuring the Machine

This chapter describes how to monitor and configure the machine.

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 machine
- Managing the Address Book
- Making machine settings
- Making network protocol settings
- Making security settings

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.
- If you click your browser's back button but the previous page does not appear, click the browser's refresh button and try again.
- 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.
- If the machine is firewall-protected, it cannot be accessed from computers 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://(machine's IP address or host name)/".
- Internet Explorer must be installed on your computer. Use the most recent available version. We recommend Internet Explorer 6.0 or later.
- When you are using Firefox, fonts and colors may be different, or tables may be out of shape.
- When using a host name under Windows Server 2003/2003 R2/2008/2008 R2 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.
- If you are using Internet Explorer 8, downloading will be slower than with other browsers. To download faster with Internet Explorer 8, open the browser's [Internet Options] menu and register the machine's URL as a trusted site. Then disable SmartScreen filter for trusted sites. For details about these settings, see the Internet Explorer 8 Help files.
- You can access Web Image Monitor more quickly by registering the machine's URL as a bookmark. Note that the URL you register must be the URL of the top page, which is the page that appears before login. If you register the URL of a page that appears after login, Web Image Monitor will not open properly from the bookmark.

Displaying Top Page

This section explains the Top Page and how to display Web Image Monitor.

★ Important

- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".

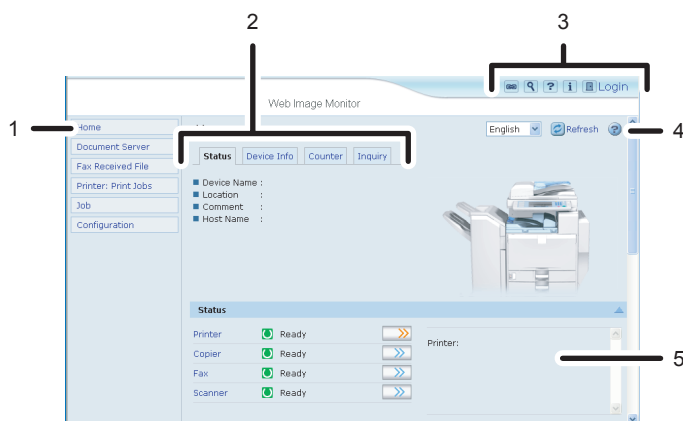
1. Start your Web browser.
2. Enter "http://(machine's IP address or host name)/" in your Web browser's URL bar.

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 IP address or host name)/".

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



BZU017

1. Menu area

If you select menu, it's content will be shown on the work area.

2. Tab area

Details about each menu appear.

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. Work area

Displays the contents of the item selected in the menu area.

Machine information in the work area is not automatically updated. Click [Refresh] at the upper right in the work 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 2003/2003 R2/2008/2008 R2 with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

When User Authentication is Set

4

Login (using Web Image Monitor)

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

1. Click [Login].
2. Enter a login user name and password, and then click [Login].

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

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

Note

- For user code authentication, enter a user code in [Login User Name], and then click [Login].
- The procedure may differ depending on the Web browser used.

Log out (using Web Image Monitor)

Click [Logout] to log out.

Note

- When you log in and make the setting, always click [Logout].

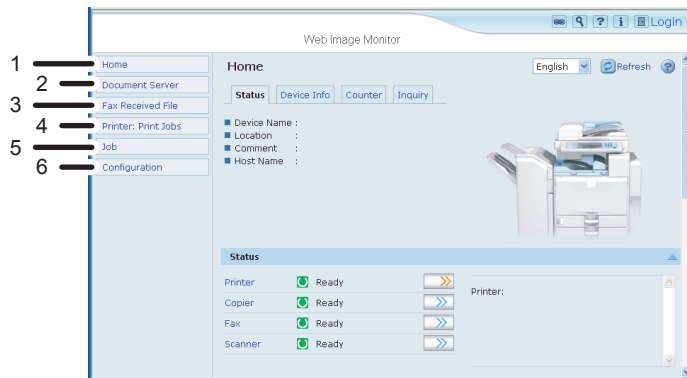
About Menu and Mode

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

Displayed Items may differ depending on the machine type.

Guest Mode

In the guest mode, machine status, settings, and print job status can be viewed, but the machine settings cannot be changed.



BZU018

4

1. Home

The [Status], [Device Info], [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. Fax Received File

Display received fax files.

4. Printer: Print Jobs

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

5. Job

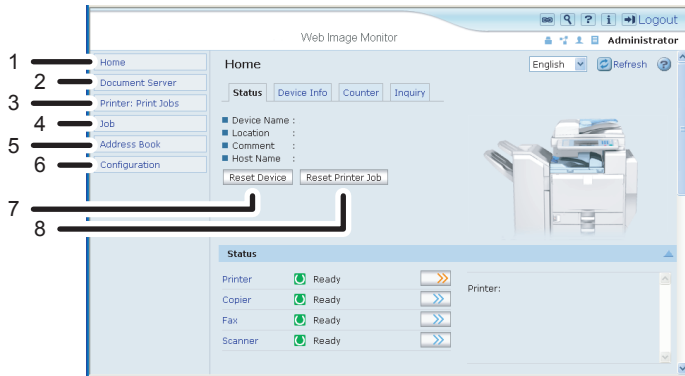
Display all print files.

6. Configuration

Display current machine and network settings.

Administrator Mode

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



BZU019

4

1. Home

The [Status], [Device Info], [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.

1. On Top Page, click [Login].

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

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

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

Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.

List of 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 in Web Image Monitor:

- Guest mode: logged in as a user
- Administrator mode: logged in as an administrator

4

Home

Status

Menu	Guest mode	Administrator mode
Reset Device	None	Modify
Reset Printer Job	None	Modify
Status	Read	Read
Toner	Read	Read
Input Tray	Read	Read
Output Tray	Read	Read

Device Info

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

Counter

Menu	Guest mode	Administrator mode
Total	Read	Read
Copier	Read	Read
Printer	Read	Read
Fax	Read	Read
Send/TX Total	Read	Read
Fax Transmission	Read	Read
Scanner Send	Read	Read
Coverage	Read	Read
Other Function(s)	Read	Read

Inquiry

Menu	Guest mode	Administrator mode
Machine Maintenance/Repair	Read	Read
Sales Representative	Read	Read
Consumables	Read	Read

Document Server

Document Server

Guest mode	Administrator mode
Read/Modify	Read/Modify

Fax Received File

Fax Received File

Guest mode	Administrator mode
Read/Modify	None

Printer: Print Jobs

Print Job List

Guest mode	Administrator mode
Read/Modify	Read/Modify

Job

Job List

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

Printer

Menu	Guest mode	Administrator mode
Spool Printing* 1	Read	Read/Modify
Job History	Read	Read
Error Log	Read	Read

*1 "Spool Printing" appears only if the Spool function is enabled. You can enable and disable the Spool setting using the "spoolsw" telnet command.

Fax History

Menu	Guest mode	Administrator mode
Transmission	Read	Read
Reception	Read	Read
LAN-Fax	Read	Read

Document Server

Menu	Guest mode	Administrator mode
Print Job History	Read/Modify	Read/Modify
Fax Remote Send History	Read/Modify	Read/Modify
Scanner Remote Send History	Read/Modify	Read/Modify

Address Book

Menu	Guest mode	Administrator mode
Address Book	None	Read/Modify

Configuration

Device Settings

Menu	Guest mode	Administrator mode
System	Read	Read/Modify
Paper	Read	Read/Modify
Date/Time	Read	Read/Modify
Timer	Read	Read/Modify
Logs	None	Read/Modify
Download 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
Print Volume Use Limitation	None	Read/Modify
Program/Change Administrator	None	Read/Modify
LDAP Server	None	Read/Modify
Firmware Update	None	Read/Modify
Program/Change Realm	None	Read/Modify

Printer

Menu	Guest mode	Administrator mode
Basic Settings	Read	Read/Modify
Tray Parameters (PCL)	None	Read/Modify
Tray Parameters (PS)	None	Read/Modify
Virtual Printer Settings	Read	Read/Modify
PDF Temporary Password	Modify	None
PDF Group Password * 1	None	Modify
PDF Fixed Password	None	Modify

* 1 This setting is not available on this machine.

Fax

Menu	Guest mode	Administrator mode
Initial Settings	None	Read/Modify
Send / Reception Settings	None	Read/Modify
IP-Fax Settings	None	Read/Modify
IP-Fax Gateway Settings	None	Read/Modify
Parameter Settings	None	Read/Modify

Scanner

Menu	Guest mode	Administrator mode
General Settings	Read	Read/Modify
Scan Settings	Read	Read/Modify
Send Settings	Read	Read/Modify
Initial Settings	Read	Read/Modify
Default Settings for Normal Screens on Device	Read	Read/Modify

Menu	Guest mode	Administrator mode
Default Settings for Simplified Screens on Device	Read	Read/Modify

Interface

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

Network

Menu	Guest mode	Administrator mode
IPv4	Read	Read/Modify
IPv6	Read	Read/Modify
NetWare	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	Guest 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

Menu	Guest mode	Administrator mode
Site Certificate	None	Read/Modify
Device Certificate	None	Read/Modify
IPsec	None	Read/Modify
User Lockout Policy	None	Read/Modify
IEEE 802.1X	None	Read/Modify
S/MIME	None	Read/Modify

RC Gate

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

Webpage

Menu	Guest mode	Administrator mode
Webpage	Read	Read/Modify

Extended Feature Settings

Menu	Guest mode	Administrator mode
Startup Setting	None	Read/Modify
Extended Feature Info	None	Read
Install	None	Read/Modify
Uninstall	None	Read/Modify
Change Allocation	None	Read/Modify
Administrator Tools	None	Read/Modify
Additional Program Startup Setting	None	Read/Modify



Menu	Guest mode	Administrator mode
Install Additional Program	None	Read/Modify
Uninstall Additional Program	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.

4

Displaying Web Image Monitor Help

When using Help for the first time, clicking the Help button ( ) makes the following screen appear, in which you can view Help in two different ways, as shown below:



Viewing Help on our Web site

You can view the latest Help information.

Downloading and Checking Help

You can download Help to your computer. As the Help URL, you can specify the path to the local file to view the Help without connecting to the Internet.

↓ Note

- By clicking the Help button () in the header area, the contents of Help appear.
- By clicking the Help button () in the work area, Help for the setting items in the work area appears.

Downloading Help

1. In the [OS] list, select the operating system.
2. In the [Language] list, select the language.
3. Click [Download].
4. Download Help by following the instructions on the screen.
5. Store the downloaded compressed file in a given location, and then decompress the file.

To create a link for the Help button ( ) , save the downloaded Help files on a Web server.

Linking the URL of the downloaded Help

You can link the URL of the Help file on a computer or Web server to the Help button ( ) .

1. Log in to Web Image Monitor in the administrator mode.

2. In the menu area, click [Configuration].

3. Under "Webpage", click [Webpage].

4. In the [Set Help URL Target] box, enter the URL of the help file.

If you saved the help file to "\\Server_A\HELP\EN", enter "file://Server_A/HELP/". 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/".

5. Click [OK].

6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

↓ Note

- If you save the Help files on your hard disk, you must access them directly - you cannot link to them using the Help button (??).

When Using IPP with SmartDeviceMonitor for Client

When using IPP with SmartDeviceMonitor for Client, note the following:

To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.

4

- 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 the environment where the device certificate is installed, enter "https://(machine's IP address or host name)/ ". Internet Explorer must be installed on your computer. Use the highest version. Internet Explorer 6.0 or higher is recommended.
- If the [Security Alert] dialog box appears when accessing the 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.

Machine 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 machine status.

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

Notification timing and e-mail content can be set.

★ Important

- **Depending on your e-mail application, a phishing warning might appear after you receive an e-mail message. To prevent phishing warnings appearing after you receive e-mail from a specified sender, you must add the sender to your e-mail application's exclusion list. For details about how to do this, see your e-mail application's Help.**

The e-mail notification functions you can set are as follows:

- Auto e-mail notification

Information including the machine status is automatically sent by e-mail. Before you use this function, register the e-mail address to be used.

- On-demand e-mail notification

Information including the machine status is sent by e-mail when a request e-mail from the administrator is received.

The information that can be notified by auto e-mail notification is as follows:

- Call Service
- Out of Toner
- Toner Almost Empty
- Paper Misfeed
- Cover Open
- Out of Paper
- Almost Out of Paper
- Paper Tray Error
- Output Tray Full
- Unit Connection Error
- Duplex Unit Error
- Waste Toner Bottle is Full
- Waste Toner Bottle is Almost Full
- Add Staples
- Hole Punch Receptacle is Full

- File Storage Memory Full Soon
- Device Access Violation
- Replacement Required: Unit
- Replacement Required Soon: Unit

1. Log in to Web Image Monitor in administrator mode.

2. In the menu area, click [Configuration].

3. Under "Device Settings", click [E-mail].

4. Make the following settings:

- Administrator E-mail Address: Specify the administrator's e-mail address. On e-mailed scanned documents, if the sender is not specified this appears as the sender's address.
- Create Email Signature: Specify the signature appended to e-mails sent from the machine.
- 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 Fax E-mail Account column: Specify these items if you want to use on-demand e-mail notification.
- Items in the E-mail Notification Account column: Specify these items If you want to use e-mail notification.

5. Click [OK].

6. Click [Logout].

7. Quit Web Image Monitor.

↓ Note

- For details about login user name and password, see Security Reference, which is the administrator's manual.
- Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.
- For details about the settings, see Web Image Monitor Help.

- For details about Web Image Monitor, see "Using Web Image Monitor".

Reference

- p.133 "Using Web Image Monitor"

Setting the Account for E-mail Notification

Before you use Auto E-mail Notification or On-demand E-mail notification, setup an e-mail account to be used for the function. Perform the following configuration task in Web Image Monitor.

1. **Log in to Web Image Monitor in administrator mode.**
2. **In the menu area, click [Configuration].**
3. **Under "Device Settings", click [E-mail].**
4. **Make the following settings in E-mail Notification Account:**
 - E-mail Notification E-mail Address: Enter the address using alphanumeric characters. This will appear as the sender (From:) of the e-mail notification. Send requests for e-mail notification to this address.
 - Receive E-mail Notification: Specify whether to use on-demand e-mail notification.
 - E-mail Notification User Name: Enter the specified user name for the e-mail account in "E-mail Notification E-mail Address".
 - E-mail Notification Password: Enter the specified password for the e-mail account in "E-mail Notification E-mail Address".
5. **Click [OK].**
6. **Click [Logout].**
7. **Quit Web Image Monitor.**

Note

- The user name and e-mail address that is already registered as e-mail destination cannot be specified as the recipient of e-mail notification.

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. Log in to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration].
3. Under "Device Settings", click [E-mail].
4. Make the following settings in SMTP column:
 - SMTP Server Name: Enter the IP address or host name of the SMTP server.
 - SMTP Port No.: Enter the port number used when sending e-mail to the SMTP server.
 - SMTP Authentication: Enable or disable SMTP authentication.
 - SMTP Auth. E-mail Address: Enter the e-mail address.
 - SMTP Auth. User Name: Enter the SMTP account name.
 - SMTP Auth. Password: To set or change the password for SMTP AUTH.
 - SMTP Auth. Encryption: Select whether to encrypt the password or not.
[Auto Select]: If the authentication method is PLAIN, LOGIN, CRAM-MD5, or DIGEST-MD5.
[Active]: If the authentication method is CRAM-MD5 or DIGEST-MD5.
[Inactive]: If the authentication method is PLAIN or LOGIN.
5. Click [OK].
6. Click [Logout].
7. Quit Web Image Monitor.

POP before SMTP Authentication

Select whether to log in to the POP3 server before sending e-mail.

1. Log in to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration].
3. Under "Device Settings", click [E-mail].
4. Make the following settings in POP before SMTP column:
 - 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 in to the POP server.
5. Click [OK].
6. Click [Logout].
7. Quit Web Image Monitor.

Auto E-mail Notification

1. Log in to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration].
3. Under "Device Settings", click [Auto E-mail Notification].

The dialog box for making notification settings appears.

4. Make the following settings:

- Notification Message: 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".

5. Click [OK].
6. Click [Logout].
7. Quit Web Image Monitor.

↓ Note

- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the settings, see Web Image Monitor Help.

📖 Reference

- p.133 "Using Web Image Monitor"

On-demand E-mail Notification

1. Log in to Web Image Monitor in administrator mode.
2. In the menu area, click [Configuration].
3. Under "Device Settings", click [On-demand E-mail Notification].

The dialog box for making notification settings appears.

4. 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.
- Restriction to Device Status Info.: Select whether or not to allow access to the information such as the machine settings and status.

- 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.

5. Click [OK].

6. Click [Logout].

7. Quit Web Image Monitor.

Note

- For details about Web Image Monitor, see "Using Web Image Monitor".
- For details about the settings, see Web Image Monitor Help.

Reference

- p.133 "Using Web Image Monitor"

4

Format of On-demand E-mail Messages

To use "on-demand e-mail notification", you need to send a request e-mail with a particular format to the machine.

Using your mail software, enter the following:

Format of the request e-mail

Item	Description
To	Enter the specified e-mail address in "E-mail Notification E-mail Address".
Subject	Enter "requeststatus".
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.
- The subject is not case sensitive.
- The body of a request e-mail has no meaning. Any text written in the e-mail body is ignored.

Remote Maintenance Using telnet

★ Important

- Remote Maintenance should be 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 "telnet", other's change also.

Using telnet

Follow the procedure below to use telnet.

★ Important

- Only one user at a time can log in to perform remote maintenance.
- If you are using Windows Vista/7, you must enable the telnet server and telnet client beforehand.

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

```
% telnet "IP address"
```

For example, if the machine's IP address is "192.168.15.16", enter the address as follows:

```
% telnet 192.168.15.16
```

2. Enter your user name and password.

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

3. Enter a command.

4. Quit telnet.

```
msh> logout
```

A message asking you to confirm saving the changes appears.

5. 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 display

```
msh> access "ID" range
```

IPv6 configuration display

```
msh> access "ID" range6
```

IPv6 access mask configuration display

```
msh> access "ID" mask6
```

IPv4 configuration

```
msh> access "ID" range "start-address end-address"
```

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 "ID" range6 "start-address end-address"
```

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 "ID" mask6 "base-address prefixlen"
```

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

- You can specify each IPv6 entry by either range or mask. For the range parameter, you can select "start-address end-address". For the mask parameter, you can select "baseaddress prefixlen".
- 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).

- For IPv4 and IPv6, you can select an ID number between 1 and 5.
- 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 view and configure authfree parameters.

View settings

The following command displays the current authfree settings:

```
msh> authfree
```

IPv4/IPv6 configuration display

```
msh> authfree "ID"
```

IPv4 address configuration display

```
msh> authfree "ID" range
```

IPv6 address configuration display

```
msh> authfree "ID" range6
```

IPv6 address mask configuration display

```
msh> authfree "ID" mask6
```

IPv4 address configuration

```
msh> authfree "ID" range_addr1 range_addr2
```

IPv6 address configuration

```
msh> authfree "ID" range6_addr1 range6_addr2
```

IPv6 address mask configuration

```
msh> authfree "ID" mask6_addr1 masklen
```

Parallel/USB configuration

```
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

- If print job authentication exclusion is not set, authentication exclusion control cannot be displayed.

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 802.11 interface is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

↓ Note

- If an interface is not selected, the current interface connection settings remain in effect.

bonjour

Use the "bonjour" command to display bonjour-related settings.

View settings

Bonjour settings are displayed.

```
msh> bonjour
```

Bonjour service name setting

You can specify the bonjour service name.

```
msh> bonjour cname "computer name"
```


- The computer name can be entered using up to 63 alphanumeric characters.
- If you do not specify a character string, the current setting is displayed.

Bonjour Installation location information setting

You can enter information about the location where the printer is installed.

```
msh> bonjour location "location"
```

- Information about the location can be entered using up to 32 alphanumeric characters.
- If you do not specify a character string, current setting is displayed.

Setting order of priority for each protocol

- msh> bonjour dprint [0-99]
- msh> bonjour lpr [0-99]
- msh> bonjour ipp [0-99]

You can specify the order of priority for "dprint", "lpr", and "ipp". Smaller numbers indicate higher priority.

IP TTL setting

```
msh> bonjour ipttl [1-255]
```

You can specify the IP TTL (the number of routers a packet can pass through).

- The default is 255.

Resetting the computer name and location information

You can reset the computer name and location information.

```
msh> bonjour clear {cname|location}
```

- cname: Reset the computer name. The default computer name will be displayed when the computer is restarted.
- location: Reset the location information. The previous location information will be deleted.

Interface configuration

```
msh> bonjour linklocal "interface_name"
```

- If you do not specify an interface, the Ethernet interface is selected automatically.
- 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 802.11 interface is installed.

Interface	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 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}
```

- Specify "on" to enable dhcp. Specify "off" to disable DHCP.
- If the DNS server address and domain name are obtained from DHCP, be sure to specify {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 "interface_name" 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".

Reference

- p.309 "Using DHCP"

dhcp6

Use the "dhcp6" command to display or configure DHCPv6 settings.

View settings

The following command displays the current DHCPv6 settings.

```
msh> dhcp6
```

DHCPv6-lite configuration and display

```
msh> dhcp6 "interface_name" lite {on|off}
```

Viewing and specifying DNS server address selection (obtained from the dhcpv6 server/user specified value)

```
msh> dhcp6 dnsaddr {dhcp|static}
```

DUID(DHCP unique ID) deletion and display

```
msh> dhcp6 duid clear
```

Viewing and specifying the time required to re-obtain the parameter obtained from dhcpv6

```
msh> dhcp6 option lifetime [0-65535]
```

- It can be entered between 0 and 65535 minutes.
- The default is 60 minutes.
- If you specify "0", you cannot re-obtain the value.

4

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
conn 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.

Bidirectional communication settings

```
msh> diprint bidirect {on|off}
```

- The default is "on".

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.
- This command functions in conjunction with the "lpr" command.

Specifying the number of concurrent connections

```
msh> diprint conn {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 the current DNS settings:

```
msh> dns
```

IPv4 DNS server configuration

The following command enables or disables the IPv4 DNS server address:

```
msh> dns "ID" 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 select an ID number between 1 and 3. You can select up to three ID 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 "ID" server6 "server address"
```

- You can register IPv6 DNS Server address.
- The selectable ID number is between 1 and 3. You can select up to 3 ID.

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 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface

Interface name	Interface configured
wlan	IEEE 802.11 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 the settings.

4

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 [1-255]
```

- 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.

resolv.conf display

```
msh> dns resolv
```

Specifying the protocol when asking names during dual stacking

```
msh> dns resolv protocol {ipv4|ipv6}
```

- Appears during dual stacking only.

domainname

Use the "domainname" command to display or configure the domain name settings.

You can configure the Ethernet interface or IEEE 802.11 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 802.11 interface will have the same domain name.
- wlan can be specified only when the IEEE 802.11 interface is installed.

Interface	Interface set
ether	Ethernet interface
wlan	IEEE 802.11 interface

Deleting the Domain Name

```
msh> domainname "interface_name" clear name
```

etherauth

Use the "etherauth" command to display or modify the authentication related parameters for Ethernet.

View settings

```
msh> etherauth
```

802.1x configuration

```
msh> etherauth 8021x {on|off}
```

- {on} means "active" and {off} means "inactive".

etherconfig

Use the "etherconfig" command to view and configure the Ethernet parameters.

View settings

```
msh> etherconfig
```

Specify Ethernet Speed

```
msh> etherconfig speed {auto|10f|10h|100f|100h}
```

- auto=Auto Select
- 10f=10 Mbps Full Duplex
- 10h=10 Mbps Half Duplex
- 100f=100 Mbps Full Duplex
- 100h=100 Mbps Half Duplex

The default is "auto".

4

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 802.11 interface will have the same printer name.
- wlan can be specified only when the IEEE 802.11 interface is installed.
- If you do not specify an interface, the Ethernet interface is selected automatically.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

Initializing the printer name for each interface

```
msh>hostname "interface_name" clear name
```

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" "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 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet Interface
wlan	IEEE 802.11 Interface

The following explains how to configure an IPv4 address 192.168.15.16 on the Ethernet interface.

```
msh> ifconfig ether 192.168.15.16
```

IPv6 configuration

```
msh> ifconfig "interface_name" inet6 "address" "prefixlen[1-128]"
```

The following explains how to configure an 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 the 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
```

- When using the optional IEEE 802.11 interface unit, you can specify either Ethernet or IEEE 802.11 interface.

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 802.11 interface.
- TCP/IP configuration is the same for both the 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.

4

info

Use the "info" command to display the printer information such as paper tray, output tray, and printer language.

Printer information display

```
msh> info
```

Reference

- p.198 "Getting Machine Information over the Network"

ipp

Use the "ipp" command to view and configure the IPP settings.

View 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 {off|digest|basic}
```

- 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 name configuration

Configure IPP users according to the following messages:

```
msh> ipp user
```

The following message appears:

Input user number (1 to 10):

Enter the number, user name, and password.

```
IPP user name:user1
```

```
IPP password :*****
```

After configuring the settings, the following message appears:

```
IPP configuration changed.
```

ipsec

Use the "ipsec" command to view and configure the IPsec settings.

View settings

The following command displays the current IPsec settings:

```
msh> ipsec
```

⬇ Note

- For details about displayed contents, consult your administrator.

ipv6

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

logout

Use "logout" command to quit telnet.

Quit telnet

```
msh> logout
```

A confirmation message appears.

```
{yes|no|return}
```

Enter [yes], [no] or [return] by typing the word, and then press the [Enter] key.

To save the changes and quit telnet, enter [yes].

To discard the changes and quit telnet, enter [no].

To continue making changes, enter [return]

4

lpr

Use the "lpr" command to view and configure the LPR settings.

View Setting

```
msh> lpr
```

Checking host name when deleting the job

```
msh> lpr chkhost {on|off}
```

- The default is "on".

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

```
msh> lpr pnerrchk {on|off}
```

- The default is "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. The following commands are available only when the NetWare is installed.

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]
```

- The default is 0.

Timeout

```
msh> netware timeout [3-255]
```

- The default is 15.

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 [0-3600]
```

It can be entered between 0 and 3600 seconds.

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 tree 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.
- Reenter the new password to confirm it.

Changing the password of the administrators using the Supervisor

```
msh> passwd {Administrator ID}
```

- Enter the new password.
- Reenter 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, setting "pathmtu" to "on" 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, set "pathmtu" to "off".

4

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

- p.209 "Understanding the Displayed Information"

rhpp

Use the "rhpp" command to view and configure RHPP settings.

View settings

```
msh> rhpp
```

Changing rhpp port number

```
msh> rhpp port [1024-65535]
```

- The default is 59100.

Setting timeout

```
msh> rhpp timeout [30-65535]
```

- The default is 300 seconds.

Note

- "RHPP" is an abbreviation of "Reliable Host Printing Protocol", which is a manufacturer-original printing protocol.

route

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

Specified route information display

```
msh> route get "destination"
```

- Specify the IPv4 address to destination.
"0.0.0.0" cannot be specified as the destination address.

Enabling/disabling specified IPv4 destination

```
msh> route active {host|net} "destination" {on|off}
```

- If you do not specify {host|net}, the host setting is automatically selected.

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.
- If you do not specify {host|net}, the host setting is selected automatically.
- You cannot specify "0.0.0.0" as the destination address.

Setting the Default IPv4 gateway

```
msh> route add default {gateway}
```

Deleting specified IPv4 destination from routing table

```
msh> route delete {host|net} "destination"
```

- If you do not specify {host|net}, the host setting is automatically selected.
- 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[1-128]" "gateway"
```

- Specify the IPv6 address to destination and gateway.
- If the prefix of the address is between 1 and 127, the network is selected. If the prefix of the address is 128, the host is selected.
- You cannot register a record that has the same destination and prefix as a registered record.

- You cannot register a record that uses "0000:0000:0000:0000:0000:0000:0000:0000" as its destination.

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[1-128]" {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 "up" or "down".

View settings

The following command displays the protocol information (up/down).

```
msh> set ipv4
```

```
msh> set ipv6
```

```
msh> set ipsec
```

```
msh> set netware
```

- This command is available only when the NetWare is installed.

```
msh> set smb
```

```
msh> set protocol
```

- When protocol is specified, information about TCP/IP, 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 bonjour6
msh> set nbt
msh> set ssdp
msh> set ssh
msh> set sftp
msh> set sftp6
msh> set wsdev
msh> set wsdev6
msh> set wsprn
msh> set wsscn
msh> set rhpp
msh> set rhpp6
msh> set lltd
msh> set pictbridge
```

Configuration

- Enter "up" to enable the protocol, and enter "down" to disable the 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 out. 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, wsdev, and sftp.

```
msh> set ipv6 {up|down}
```

- If you disable IPv6, you cannot use remote access after logging out. 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, Bonjour6, wsdev6, and sftp6.

```
msh> set ipsec {up|down}
```

```
msh> set netware {up|down}
```

- This command is available only when the NetWare is installed.

```
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 bonjour6 {up|down}
msh> set ssh {up|down}
msh> set sstp {up|down}
msh> set nbt {up|down}
msh> set sftp {up|down}
msh> set sftp6 {up|down}
msh> set wsdev {up|down}
msh> set wsdev6 {up|down}
```

- If "wsdev" and "wsdev6" are enabled simultaneously, both appear as "up" on the protocol information display, but both use IPv4 for WSD (Device), WSD (Printer) and WSD (Scanner).

```
msh> set wsprn {up|down}
msh> set wssc {up|down}
msh> set rhpp {up|down}
msh> set rhpp6 {up|down}
msh> set lltd {up|down}
msh> set pictbridge {up|down}
```

show

Use the "show" command to display the network interface board configuration settings.

View settings

```
msh> show
```

- If "-p" is added, you can view settings one by one.

Reference

- p.209 "Understanding the Displayed Information"

slp

Use "slp" command to view and configure the SLP settings.

```
msh> slp ttl "ttl_val[1-255]"
```

- 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.
- This command is available only when the NetWare is installed.

smb

Use the "smb" command to configure or delete a computer or workgroup name for SMB.

4

View settings

```
msh> 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 the SNMP configuration settings such as the community name.

View settings

"IPX" is shown only when the NetWare is installed.

```
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

Use the following command to set protocols "active" or "inactive". If you set a protocol "inactive", all access settings for that protocol are disabled.

"IPX" is shown only when the NetWare is installed.

```
msh> snmp {ipv4|ipv6|ipx} {on|off}
```

- 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

"IPX" is shown only when the NetWare is installed.

```
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

"IPX" is shown only when the NetWare is installed.

```
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 the 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 "character string"
```

Deleting sysLocation

```
msh> snmp clear location
```

sysContact setting

```
msh> snmp contact "character string"
```

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 to 5 is entered, settings are displayed for that number only.

Configuring a sending address for SNMP v3 TRAP

"IPX" is shown only when the NetWare is installed.

```
msh> snmp v3trap [1-5] {ipv4|ipv6|ipx} "address"
```

Configuring a sending protocol for SNMP v3 TRAP

"IPX" is shown only when the NetWare is installed.

```
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.
- If you select "on", plain-text communication becomes impossible - only encrypted communication is possible.

Note

- "Encrypted communication" means an encrypted password is set on the machine.
- To use SNMP Setup Tool, you must first download SmartDeviceMonitor for Admin from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Admin.

sntp

The printer clock can be synchronized with a NTP server clock using Simple Network Time Protocol (SNTP). Use the "sntp" command to change the SNTP settings.

View settings

```
msh> sntp
```

NTP IPv4 server address configuration

You can specify the IPv4 address of the NTP server.

```
msh> sntp server "IPv4_address"
```

NTP hostname configuration

You can specify the hostname of the NTP server.

```
msh> sntp server "hostname"
```

Deleting NTP server configuration

```
msh> sntp server clear
```

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 15 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.

↓ Note

- You can only select either the address or host name for the ntp server.

4

spoolsw

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

You can only specify diprint, trap, lpr, ipp, ftp, sftp, wsprn, 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}
```

- 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}
```

```
msh> spoolsw wsprn {on|off}
```

ssdp

Use the "ssdp" command to view and configure the 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.

4

ssh

Use the "ssh" command to view and configure the 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.

If you do not specify this parameter, an open key with the default value will be created.

Deleting open key for ssh/sftp communication

```
msh> ssh delkey
```

↓ Note

- If you do not specify a character string, current setting is displayed.
- ssh can be used only with sftp.

status

Use the "status" command to display the printer status.

View messages

```
msh> status
```

📖 Reference

- p.198 "Getting Machine Information over the Network"

syslog

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

View message

```
msh> syslog
```

📖 Reference

- p.216 "Message List"

upnp

Use the "upnp" command to display and configure the universal plug and play.

Public URL display

```
msh> upnp url
```

Public URL configuration

```
msh> upnp url "string"
```

- Enter the URL string in the character string.

web

Use the "web" command to display and configure parameters on Web Image Monitor.

View settings

```
msh> web
```

URL configuration

You can set URLs linked by clicking [URL] on Web Image Monitor.

```
msh> web "ID" url http://"The URL or IP address you want to register"/
```

Specify "1" or "2" for ID as the number corresponding to the URL. Up to two URLs can be registered and specified.

Resetting URLs registered as link destinations

```
msh> web "ID" clear url
```

Specify "1" or "2" for ID as the corresponding number to the URL.

Link name configuration

You can enter the name for URL that appears on Web Image Monitor.

```
msh> web "ID" name "Name you want to display"
```

Specify "1" or "2" for ID the corresponding number to the link name.

Resetting URL names registered as link destinations

```
msh> web "ID" clear name
```

Specify "1" or "2" for ID as the number corresponding to the link name.

Help URL configuration

You can set URLs linked by clicking "?" 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 802.11.

View settings

```
msh> wiconfig
```

View IEEE 802.11 information

```
msh> wiconfig cardinfo
```

If IEEE 802.11 is disabled or unavailable, information about it will not appear.

Configuration

```
msh> wiconfig "parameter"
```

Parameter	Value configured
mode {ap 802.11adhoc}	<p>You can set the infrastructure mode (ap) or the 802.11 Ad hoc mode (802.11adhoc).</p> <p>The default is the infrastructure mode.</p>
ssid "ID value"	<p>You can specify an SSID in infrastructure mode. The characters you can enter in the SSID string are ASCII 0x20-0x7e (32 bytes). If you do not specify a character string, the machine will connect to the nearest access point.</p> <p>The default SSID is blank.</p>
channel "channel no."	<p>In 802.11 ad hoc mode, you can select a channel between 1 and 13, or 36, 40, 44, or 48.</p> <p>Be sure to set the same channel for all ports that will transmit and receive data.</p> <p>The default is "11".</p> <p>The channel in use might differ depending on the country. For details, see "Wireless LAN".</p>
key "key value" val [1 2 3 4]	<p>You can specify the WEP key by entering in hexadecimal.</p> <p>With a 64-bit WEP, you can use 10 digit hexadecimals. With a 128-bit WEP, you can use 26 digit hexadecimals.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with "val".</p> <p>When a WEP is specified by key, the WEP specified by key phrase is overwritten.</p> <p>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.</p> <p>You can omit the numbers with "val". The key number is set to 1 when making these omissions. The default is blank.</p>

Parameter	Value configured
keyphrase "phrase" val [1 2 3 4]	<p>You can specify the WEP key by entering in ASCII.</p> <p>With a 64-bit WEP, you can use 5 digit hexadecimals. With a 128-bit WEP, you can use 13 digit hexadecimals.</p> <p>Up to four WEP keys can be registered. Specify the number to be registered with "val".</p> <p>When a WEP is specified by key phrase, the WEP specified by key is overwritten.</p> <p>To use this function, set the same key number and WEP key for all ports that transmit data to each other.</p> <p>You can omit the numbers with "val". The key number is set to 1 when making these omissions. The default is blank.</p>
encval [1 2 3 4]	<p>You can specify which of the four WEP keys is used for packet encoding. "1" is set if a number is not specified.</p>
wepauth {open shared}	<p>You can set an authorization mode when using WEP. The specified value and authorized mode are as follows:</p> <p>open: open system authorization (default)</p> <p>shared: shared key authorization</p>
security {none wep wpa}	<p>You can specify the Security Mode.</p> <p>none: No encryption (default)</p> <p>wep: WEP encryption</p> <p>wpa: WPA encryption</p>
wpaenc {tkip ccmp}	<p>You can specify WPA encryption key when using WPA encryption.</p> <p>tkip: TKIP</p> <p>ccmp: CCMP (AES) (default)</p>

Parameter	Value configured
wpaauth {wpapsk wpa wpa2psk wpa2}	<p>You can specify the WPA authentication mode when using WPA encryption.</p> <p>wpapsk: WPA-PSK authentication (default)</p> <p>wpa: WPA authentication</p> <p>wpa2psk: WPA2-PSK authentication</p> <p>wpa2: WPA2 authentication</p>
psk "character string"	<p>You can specify the Pre-Shared key.</p> <p>Usable characters: ASCII 0x20-0x7e (8 to 63 bytes).</p> <p>The default is blank.</p>
eap {tls ttls leap peap} {chap mschap mschapv2 pap md5 tls}	<p>You can specify the EAP authentication type.</p> <p>tls: EAP-TLS (default)</p> <p>ttls: EAP-TTLS</p> <p>leap: LEAP</p> <p>peap: PEAP</p> <p>chap, mschap, mschapv2, pap, md5, and tls are settings for the phase 2 method, and one of these must be specified if EAP-TTLS or PEAP is selected.</p> <p>Do not make these settings when using other EAP authentication types.</p> <p>If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5.</p> <p>If you select PEAP, you can select mschapv2 or tls.</p>
username "character string"	<p>You can specify the login user name for the Radius server.</p> <p>Usable characters: ASCII 0x20-0x7e (31 bytes).</p> <p>The default is blank.</p>

Parameter	Value configured
username2 "character string"	You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication. Usable characters: ASCII 0x20-0x7e (31 bytes). The default is blank.
domain "character string"	You can specify the login domain name for the Radius server. The characters you can enter are ASCII 0x20-0x7e (31 bytes), but not "@" or "\". The default is blank.
password "character string"	You can specify the login for the Radius server. Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
svrcert {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".
srvld "character string"	You can set the server ID and sub domain of the certificate server. Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.
subdomain {on off}	You can specify whether or not to permit access to the machine by users in subdomains. The default is "off".
connectinfo	Obtains connection information.
clear {a each command all}	Returns the selected setting to its default value. If you specify "all", all settings will be restored to their default values.

Parameter	Value configured
miccheck {on off}	<p>You can enable or disable the MIC check function.</p> <p>The default setting is "On" (enabled).</p> <p>If you specify "Off", you cannot perform MIC checks. We recommend you specify "On" for the MIC check function when using this machine.</p>

Reference

- p.44 "Wireless LAN"

4

wins

Use the "wins" command to configure the 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 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 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 the primary WINS server IP address.
- Use the "secondary" command to configure the 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 "ScopeID"
```

- 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 802.11 interface is installed.

Interface name	Interface configured
ether	Ethernet interface
wlan	IEEE 802.11 interface

4

wsmfp

Use the "wsmfp" command to view and configure the WSD (Device), WSD (Printer) and WSD (Scanner) settings.

View settings

```
msh> wsmfp
```

Comment settings

```
msh> wsmfp comments "comment"
```

- If you do not specify a comment, current setting is displayed.

Location configuration

```
msh> wsmfp location "location"
```

- If you do not specify a comment, current setting is displayed.

Presentation URL configuration

```
msh> wsmfp url "URL"
```

- Enter the URL string in the "URL".

WSD (Device) TCP port configuration

```
msh> wsmfp devport "port_number"
```

- The Default is 53000.

WSD (Printer) TCP port configuration

```
msh> wsmfp prnport "port_number"
```

- The Default is 53001.

WSD (Printer) timeout configuration

```
msh> wsmfp prntimeout [30-65535]
```

- The default is 900 seconds.

WSD (Scanner) TCP port configuration

```
msh> wsmfp scnport "port_number"
```

- The Default is 53002.

Comment initialization

```
msh> wsmfp clear comments
```

Location initialization

```
msh> wsmfp clear location
```

Presentation URL initialization

```
msh> wsmfp clear url
```

4

8021x

Use "8021x" command to display IEEE 802.1x related information.

View settings

```
msh> 8021x
```

Configuration

```
msh> 8021x "parameter"
```

Parameter	Value configured
<p>eap {tls ttls leap peap} {chap mschap mschapv2 pap md5 tls}</p>	<p>You can specify the EAP authentication type.</p> <p>tls: EAP-TLS (default)</p> <p>ttls: EAP-TTLS</p> <p>leap: LEAP</p> <p>peap: PEAP</p> <p>chap, mschap, mschapv2, pap, md5, and tls are settings for the phase 2 method, and one of these must be specified if EAP-TTLS or PEAP is selected.</p> <p>Do not make these settings when using other EAP authentication types.</p> <p>If you select EAP-TTLS, you can select chap, mschap, mschapv2, pap, or md5.</p> <p>If you select PEAP, you can select mschapv2 or tls.</p>
<p>username "character string"</p>	<p>You can specify the login user name for the Radius server.</p> <p>Usable characters: ASCII 0x20-0x7e (31 bytes).</p> <p>The default is blank.</p>
<p>username2 "character string"</p>	<p>You can specify the phase 2 username for EAP-TTLS/PEAP phase 2 authentication.</p> <p>Usable characters: ASCII 0x20-0x7e (31 bytes).</p> <p>The default is blank.</p>
<p>domain "character string"</p>	<p>You can specify the login domain name for the Radius server.</p> <p>The characters you can enter are ASCII 0x20-0x7e (64 bytes), but not "@" or "\".</p> <p>The default is blank.</p>
<p>password "character string"</p>	<p>You can specify the login password for the Radius server.</p> <p>Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.</p>

Parameter	Value configured
svrcert {on off}	<p>You can set the server certificate.</p> <p>The default is "off".</p>
imca {on off}	<p>You can enable or disable the certificate when the intermediate certificate authority is present.</p> <p>The default is "off".</p>
srvid "character string"	<p>You can set the server ID and sub domain of the certificate server.</p> <p>Usable characters: ASCII 0x20-0x7e (128 bytes). The default is blank.</p>
subdomain {on off}	<p>You can specify whether or not to permit access to the machine by users in subdomains use.</p> <p>The default is "off".</p>
clac {a each command all}	<p>Returns the selected setting to its default value.</p> <p>If you specify "all", all settings will be restored to their default values. However, IEEE 802.1x Auth. status (enable or disable) for Ethernet and wireless LAN will not be initialized.</p>

SNMP

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

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

This machine also supports SNMPv3, which increases user authentication, data encryption, and access control security.

To encrypt communication by SNMPv3, you must specify the machine's encrypted password.

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.**
- **To use SNMP Setup Tool, you must first download SmartDeviceMonitor for Admin from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Admin.**

The default community names are [public] and [admin]. You can get MIB information using these community names.

Start SNMP Setup Tool

- Windows 2000:
 - Click the [Start] button.
 - Point to [SmartDeviceMonitor for Admin] on the [Programs] menu.
 - Click [SNMP Setup Tool].
- Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2
 - Click the [Start] button.
 - Point to [SmartDeviceMonitor for Admin] on the [All Programs] menu.
 - Click [SNMP Setup Tool].

Getting Machine Information over the Network

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

Current Machine Status

This section explains how you can check the machine's status and the items displayed. Depending on the options installed on the machine, some items might not be displayed.

- UNIX: Use the "stat" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "status" command.

4

Messages	Description
Access Restricted	The job was canceled because user have no authority.
Add staples (Booklet: Back)	The staple of booklet finisher (back) is exhausted.
Add staples (Booklet: Both)	The staple of booklet finisher is exhausted.
Add staples (Booklet: Front)	The staple of booklet finisher (front) is exhausted.
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	The original cannot be ejected.
Cannot multi-install: SD Card	The SD card has been configured using another device.
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.

Messages	Description
Cover Open: ADF	The document feeder is open.
Cover Open: Bridge Unit Left	The cover of the bridge unit left is open.
Cover Open: Bridge Unit Right	The cover of the bridge unit right is open.
Cover Open: Duplex Unit	The cover of the duplex unit is open.
Cover Open: Finisher	The cover of Finisher is open.
Cover Open: Finisher Front	The front cover of Finisher is open.
Cover Open: Finisher Upper	The upper cover of Finisher is open.
Cover Open: Front Cover	The front cover is open.
Cover Open: LCT	The cover of the Large Capacity tray is open.
Cover Open: Lower Right Cover	The lower right cover is open.
Cover Open: Upper Right Cover	The upper right cover is open.
Current Job Suspended	The current job is suspended.
Data Size Error	The data size error occurred.
Empty: Black Toner	The black toner cartridge is almost empty.
Empty: Cyan Toner	The cyan toner cartridge is almost empty.
Empty: Magenta Toner	The magenta toner cartridge is almost empty.
Empty: Yellow Toner	The yellow toner cartridge is almost empty.
Energy Saver Mode	The machine is in Energy Saver Mode.
Envelope Setting Error: None	Printing paper type other than envelope is instructed when B2 lever is down.
Envelope Setting Error: Others	Printing envelope is instructed when B2 lever is down.
Error	An error has occurred.
Error: Address Book	An error has occurred in the data of the address book.
Error: Command Transmission	An error has occurred in the machine.

Messages	Description
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: Media Link Board	An error has occurred on the File Format Converter.
Error: Memory Switch	A memory switch error has occurred.
Error: Optional Font	An error has occurred in the font file of the machine.
Error: Optional RAM	An error has occurred in the optional memory unit.
Error: Parallel I/F Board	An error has occurred in the parallel interface.
Error: PDL	An error has occurred in the page description language.
Error: Rem. Certificate Renewal	An error has occurred in the remote server renewal.
Error: USB Board	An error has occurred in the USB interface board.
Error: USB Interface	An error has occurred in the USB interface.
Error: Wireless Board	An error has occurred in the wireless interface board or IEEE 802.11 interface unit.
Error: Wireless Card	Wireless card is not inserted during start up, or the IEEE 802.11 interface unit or the wireless card is taken out after start up.
Exceed Booklet Stapling Limit	The printing has exceeded the stapling limit of the booklet finisher.
Exceed Stapling Limit	The printing has exceeded the stapling limit.
Full: Finisher	Finisher tray is full.
Full: Finisher Booklet Tray	Booklet tray of Finisher is full.
Full: Finisher Shift Tray	Shift tray of Finisher is full.
Full: Finisher Shift Tray 1, 2	The shift tray 1 and 2 of Finisher are full.
Full: Finisher Upper Tray	Finisher's upper tray is full.
Full: Hole Punch Receptacle	Punch Chip receptacle for hole punch is full.

Messages	Description
Full: Internal Tray 1	The internal tray 1 is full.
Full: Log Data Capacity	The log data capacity is full.
Full: Waste Toner	The waste toner is full.
Hex Dump Mode	It is a hex dump mode.
Immed. Trans. not connected	It did not connect directly with the other party of the transmission.
Immediate Transmission Failed	An error has occurred while transmitting directly.
In Use: Copier	The copier is being used.
In Use: Fax	The fax is being used.
In Use: Finisher	Other functions is using Finisher.
In Use: Input Tray	Other functions is using the input tray.
In Use: Staple Unit	Other functions is using the staple unit.
Independent-supplier Toner	Toner that is not recommended is set.
Jobs Suspended	All jobs are suspended.
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.
Log Data Transfer failed	Log transfer has failed.
Low: Black Toner	The black toner cartridge is not set correctly, or toner is almost running out.
Low: Cyan Toner	The cyan toner cartridge is not set correctly, or toner is almost running out.
Low: Magenta Toner	The magenta toner cartridge is not set correctly, or toner is almost running out.

Messages	Description
Low: Toner	The toner cartridge is not set correctly, or toner is almost running out.
Low: Yellow Toner	The yellow toner cartridge is not set correctly, or toner is almost running out.
Malfunction: Booklet Processor	There is a problem with booklet finisher.
Malfunction: Duplex Unit	There is a problem with the duplex unit.
Malfunction: Ext. Charge Unit	There is a problem with the external charge unit.
Malfunction: Finisher	There is a problem with the finisher.
Malfunction: Interposer	There is a problem with the interposer.
Malfunction: LCT	There is a problem with the large capacity tray.
Malfunction: Lower Paper Tray(s)	There is a problem with the bank motor.
Malfunction: Output Tray	There is a problem with the output tray.
Malfunction: Punch Unit	There is a problem with the punch unit.
Malfunction: Staple Unit	There is a problem with the staple unit.
Malfunction: Tray 1	There is a problem with tray 1.
Malfunction: Tray 2	There is a problem with tray 2.
Malfunction: Tray 3	There is a problem with tray 3.
Malfunction: Tray 4	There is a problem with tray 4.
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: Fax Scanning	Memory shortage has occurred while transmitting the fax.
Memory Low: Scanning	Memory shortage has occurred while the scanner was working.
Miscellaneous Error	Other error has occurred.

Messages	Description
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: Color Dev. Unit	Prepare the new color development unit.
Near Replacing: Color PCU	Prepare the new color photoconductor unit.
Near Replacing: Develop. Unit C	Prepare the new development unit (cyan).
Near Replacing: Develop. Unit K	Prepare the new development unit (black).
Near Replacing: Develop. Unit M	Prepare the new development unit (magenta).
Near Replacing: Develop. Unit Y	Prepare the new development unit (yellow).
Near Replacing: Fusing Roller	Prepare the new fusing roller.
Near Replacing: Fusing Unit	Prepare the new fusing unit.
Nearly Full: Log Data Capacity	The log is nearing data capacity
Nearly Full: Waste Toner	Waste toner bottle is nearly full.
Need more Staples	Stapler has almost run out of staples.
No Paper: Interposer Tray	There is no paper in interposer unit.
No Paper: LCT	There is no paper in Large Capacity Tray.
No Paper: Selected Tray	There is no paper in specified tray.
No Paper: Tray 1	There is no paper in tray 1.
No Paper: Tray 2	There is no paper in tray 2.
No Paper: Tray 3	There is no paper in tray 3.
No Paper: Tray 4	There is no paper in tray 4.
Not Detected: B2 Lever	B2 lever is not correctly set.

Messages	Description
Not Detected: Black Toner	Black toner is not correctly set.
Not Detected: Cyan Toner	Cyan toner is not correctly set.
Not Detected: Develop. Unit (C)	The development unit (cyan) is not correctly set.
Not Detected: Develop. Unit (K)	The development unit (black) is not correctly set.
Not Detected: Develop. Unit (M)	The development unit (magenta) is not correctly set.
Not Detected: Develop. Unit (Y)	The development unit (yellow) is not correctly set.
Not Detected: Duplex Feed Unit	The duplex unit is not correctly set.
Not Detected: Duplex Unit	The duplex feed unit is not correctly set.
Not Detected: Finisher	The 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: Interposer	Interposer unit is not correctly set.
Not Detected: LCT	Large Capacity Tray is not correctly set.
Not Detected: Magenta Toner	Magenta toner is not correctly set.
Not Detected: PCU (C)	The photoconductor unit (cyan) is not correctly set.
Not Detected: PCU (K)	The photoconductor unit (black) is not correctly set.
Not Detected: PCU (M)	The photoconductor unit (magenta) is not correctly set.
Not Detected: PCU (Y)	The photoconductor unit (yellow) is not correctly set.
Not Detected: Transfer Unit	The transfer unit is not correctly set.
Not Detected: Tray 1	Tray 1 is not correctly set.
Not Detected: Tray 2	Tray 2 is not correctly set.
Not Detected: Tray 3	Tray 3 is not correctly set.
Not Detected: Tray 4	Tray 4 is not correctly set.

Messages	Description
Not Detected: Waste Toner Bottle	Waste toner bottle is not correctly set.
Not Detected: Yellow Toner	Yellow toner is not correctly set.
Not Detected: Int. Transfer Unit	Int.transfer unit is not correctly set.
Not Reached, Data Deleted	Unreached job is deleted.
Not Reached, Data Stored	Unreached documents are saved.
Offline	Machine is offline.
Operating Thermo-range Error	The machine is operating outside the permissible temperature range.
Original on Exposure Glass	The original remains on the exposure glass.
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 Duplex Unit	The paper remains in the duplex unit.
Paper in Finisher	The paper remains in Finisher.
Paper Misfeed: ADF	The paper has jammed in Document Feeder.
Paper Misfeed: Duplex Unit	The paper has jammed in Duplex Unit.
Paper Misfeed: Finisher	The paper has jammed in Finisher.
Paper Misfeed: Input Tray	The paper has jammed in the input tray.
Paper Misfeed: Internal Path	The paper has jammed inside the machine.
Paper on FinisherShiftTray1, 2	The paper remains in Finisher Shift Tray 1 and 2.
Paper on Finisher Shift Tray 2	The paper remains in Finisher Shift Tray 2.
Prepaid Card not inserted	The prepaid card is not inserted, or has insufficient credit.
Print Complete	The print was completed.
Printing...	Printing is in progress.
Processing	Data is being processed.

Messages	Description
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.
Readjusting...	The machine is readjusting itself.
Ready	The machine is ready to print.
Renewing Remote Certificate	The remote certificate is being renewed.
Replace Charger Kit	It is time to replace the charger kit.
Replace Cleaning Web	It is time to replace the Cleaning Web.
Replace Develop. Unit	It is time to replace the development unit.
Replace Develop. Unit (Black)	It is time to replace the development unit (black).
Replace Develop. Unit (Color)	It is time to replace the development unit (color).
Replace Develop. Unit (Cyan)	It is time to replace the development unit (cyan).
Replace Develop. Unit (Magenta)	It is time to replace the development unit (magenta).
Replace Develop. Unit (Yellow)	It is exchange time of the development unit (yellow).
Replace Fusing Roller	It is time to replace the fusing roller.
Replace Fusing Unit	It is time to replace the fusing unit.
Replace Int. Transfer Unit	It is time to replace the int. transfer unit.
Replace Transfer Cleaning Unit	It is time to replace the transfer cleaning unit.
Replace Transfer Roller	It is time to replace the transfer roller.
Reset IPDS fonts	An IPDS font error occurred.
Retarding...	Printing has stopped momentarily to allow printed sheets to dry.
SD Card Authentication failed	SD card authentication failed.
SD Card not inserted	The machine is waiting for SD card.
Setting Remotely	The RDS setting is being processed.

Messages	Description
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.
Suspend / Resume Key Error	Finisher stop button was pressed.
Transmission Aborted	The transmission was interrupted.
Transmission Complete	The transmission completion was completed.
Transmission Failed	The transmission has failed.
Tray Error: Chaptering	The paper feed tray specification error has occurred because chaptering as well as the normal paper use the same tray for printing.
Tray Error: Duplex Printing	Selected paper tray cannot be used for duplex printing.
Unit Left Open: ADF	Document feeder is opened.
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.

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" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "info" command.

Input Tray

Item	Description
No.	ID number of the paper tray
Name	Name of the paper tray
Paper Size	Size of paper loaded in the paper tray
Status	Current status of the paper tray <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 machine
Name	Name of the printer language used in the machine
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 "stat" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "status" command.

Item	Description
Rank	Print job status. <ul style="list-style-type: none"> • Active Printing or preparing for printing. • 1st, 2nd, 3rd, 4th... Waiting to be transferred to the printer.
Owner	Print request user name.
Job	Print request number.
Files	The name of the document.
Total Size	The size of the data (spooled). The default is 0 bytes.

Note

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

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" parameter and the "rsh", "rcp", "ftp", and "sftp" commands.
- 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 <ul style="list-style-type: none"> Finished Print was completed normally. However, the print result may not be as required due to printer problems. Failed 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 (when designating Job ID on telnet)	Printer driver-configured User ID. Appears when the print request ID is specified.
JobName (when designating Job ID on telnet)	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.

Protocol Up/Down

The following protocols are displayed ("Up" indicates enabled; "Down" indicates disabled):.

IPv4, IPv6, IPsec, NetWare, SMB

Device Up/Down

The following devices are displayed ("Up" indicates enabled; "Down", indicates disabled):.

Parallel, USB

Ethernet interface

Displays the Ethernet speed.

Syslog priority

"LOG_INFO" is displayed.

NVRAM version

Displays the NVRAM version.

Device name

Displays the device name.

Comment

Displays the comment(s).

Location

Displays the location of the device.

Contact

Displays the contact details.

Soft switch

Displays the soft switch.

TCP/IP

The following items are displayed: ("Up" indicates enabled; "Down", indicates disabled):.

- Mode (IPv4)
- Mode (IPv6)
 - ftp, lpr, rsh, diprint, web, http, ftpc, snmp, ipp, autonet, Bonjour, ssl, nrs, rfu, nbt, sssdp, ssh, sftp, WSD (Device), WSD (Printer), WSD (Scanner), rhpp
- IPv4
 - DHCP, Address, Netmask, Broadcast, Gateway
- IPv6
 - Stateless, Manual, Gateway, DHCPv6-lite, DUID, DHCPv6 option lifetime
- IPsec
 - Manual Mode, Excluded Protocol (https, dns, dhcp, wins)
- EncapType

- Host name
- DNS Domain
- Access Control
 - IPv4: Access Entry [1]-[5]
 - IPv6: Access Entry [1]-[5]
- SNTP Server
- Time Zone
- SNTP Server polling time
- SYSLOG server
- Home page URL1
- Home page link name 1
- Home page URL2
- Home page link name2
- Help page URL
- RHPP Port
- RHPP timeout

NetWare

The following items are displayed:

- 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

SMB

The following items are displayed:

- Switch

Mode, Direct print, Notification

- Workgroup name
- Computer name
- Comment
- Share name [1]
- Protocol

Wireless LAN

The following items are displayed:

Host name, Communication Mode, SSID, Channel, Security, WEP Authentication, WEP Encryption key number, WEP Encryption keys [1]-[4], WPA Encryption, WPA Authentication, Pre-Shared Key, User name, Domain name, EAP Type, Password, Phase 2 user name, Phase 2 Method TTLS, Phase 2 Method PEAP, Server cert., Intermediate CA, Server ID, Sub domain, Mic check

4

Ethernet

The following item is displayed:

802.1X Authentication

DNS

The following items are displayed:

- IPv4
Server [1]-[3], Selected IPv4 DNS Server
- IPv6
Server [1]-[3], Selected IPv6 Dns Server, Resolver Protocol

Domain name

The following items are displayed:

ether, wlan

DDNS

The following items are displayed:

ether, wlan

WINS

The following items are displayed:

- ether
Primary WINS, Secondary WINS
- wlan
Primary WINS, Secondary WINS

SSDP

The following items are displayed:

UUID, Profile, TTL

UPnP

The following item is displayed:

URL

Bonjour

The following items are displayed:

Computer Name (cname), Local Hostname (ether), Local Hostname (wlan), Location, Priority (diprint), Priority (lpr), Priority (ipp), IP TTL, LinkLocal Route for Multi I/F, IPP Port

SNMP

The following items are displayed:

SNMPv1v2, SNMPv3, protocol, v1Trap, v2Trap, v3Trap, SNMPv1v2 Remote Setting, SNMPv3 Privacy

ssh

The following items are displayed:

Compression, Port, TimeOut, LoginTimeOut

AuthFree

The following items are displayed:

- IPv4
AuthFree Entry [1]-[5]
- IPv6
AuthFree Entry [1]-[5]
- Parallel
- USB

LPR

The following items are displayed:

lprm check host, lpr prnerrchk

Certificate

The following item is displayed:

Verification

WS-MFP

The following items are displayed:

Network Device Name, Comments, Location, Presentation URL, WSD (Device) TCP Port, WSD (Printer) TCP Port, WSD (Printer) Job Timeout, WSD (Scanner) TCP Port, MetadataVersion, UUID

IEEE 802.1X

The following items are displayed:

User name, Domain name, EAP Type, Password, Phase 2 user name, Phase 2 Method TTLS, Phase 2 Method PEAP, Server cert, Intermediate CA, Server ID, Sub domain

Shell mode

"User mode" is displayed.

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" parameter and the "rsh", "rcp", "ftp", and "sftp" commands. "rsh" and "rcp" cannot be used in a Windows environment.
- telnet: Use the "syslog" command.

4

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 password was incorrect.	Login to the file server failed when the print server was online. Make sure the print server is registered in <file server name>. If a password is specified for the print server, delete the password.
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: <ul style="list-style-type: none"> • Security option is not installed. • Encryption password has not been specified.
add_sess_IPv4: bad trap addr: <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 addr: <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.

Message	Problem and solutions
add_sess_IPv6: community <community name> already defined.	The same community name already exists. Use another community name.
add_sess_IPX: bad trap addr: <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 <communityname> already defined.	The same community name already exists. Use another community name.
adjust time server <NTP server name> offset: xx sec.	ncsd tells you the timing of the NTP server and whether or not the time system clock is set. NTP Server: NTP server name offset: number of seconds of delay (minus number if a time in advance is specified)
Attach FileServer=<file server>	Connection to the file server as the nearest server has been established.
Attach to print queue <print queue name>	The system connects to the print queue when the print server goes online.
authenticated	The supplicant has been authenticated. Authentication was successful. When authentication is successful, this message always appears at the end of the process.
authenticating	The supplicant is authenticating with the access point (EAP or WPA).
authentication mode mismatch	The authentication mode of the access point is different from the authentication mode of the supplicant. Use the same authentication mode between the access point and the supplicant.
centrod is disabled.	Parallel communication could not be established. Enable centrod in the Security Mode setting.
child process exec error ! (process name)	The network service failed to start. Turn the machine off and then on. If this does not work, contact your service or sales representative.

Message	Problem and solutions
cipher suite mismatch	The uni-cast / multi-cast suite (TKIP/AES/WEP) of the access point is different from the suite used by the supplicant.
client EAP method rejected	The authentication mode of the access point is different with the authentication mode of the supplicant. Use the same authentication mode between the access point and the supplicant.
client password rejected	The client's password was rejected. Check the client password.
client TLS certificate rejected	The client's TLS certificate was rejected. Check the certificate.
Connected DHCP server <DHCP server address>	The IP address was successfully received from the DHCP server.
Connected DHCPv6 server <IPv6 address>	The IP address was successfully received from the DHCPv6 server.
connecting	The supplicant is establishing the Wireless LAN connection with the access point.
connection from <IP address>	A user logged in from the host <IP address>.
Could not attach to FileServer <error number>	Connection to the file server could not be established when the remote printer went online. The file server refused the connection for unknown reason. Check the file server's configuration.
Could not attach to PServer <print server>	Connection to the print server has not been established when the remote printer is turned on. The print server has refused the connection. Check the print server configuration.
Current Interface Speed: xxx Mbps	Speed of the network (10Mbps, 100 Mbps, or 1Gbps).
Current IP address (<current IP address>)	The IP address <current IP address> was acquired from the DHCP server.
Current IPX address <IPX address>	The current IP address is <IPX address>.

Message	Problem and solutions
dpsd is disabled.	Communication via PictBridge is unavailable because PictBridge is disabled in the security mode. Enable PictBridge in the security mode.
DHCP lease time expired.	The DHCP lease time has expired. Perform the DHCP discover again. The IP address you have been using is no longer available.
DHCP server not found.	The DHCP server was not found. Make sure that the DHCP is on the network.
DHCPv6 server not found.	The DHCPv6 server was not found. Make sure that the DHCPv6 is on the network.
disconnected	The supplicant has no connection.
Duplicate IP=<IP address>(from <MAC address>).	A conflicting IPv4 or IPv6 address was used. Each IPv4 or IPv6 address must be unique. Check the device address in [MAC address].
Established SPX Connection with PServer, (RPSocket=<socket number>, connID=<connection ID>)	Connection to the print server was established when the remote printer went online.
exiting	The LPD service has completed and the process is exiting.
Exit pserver	(In the print server mode) The print server function is disabled because the necessary print server settings have not been made.
Frametype=<frametype name>	The specified frame type name <frame type name> is for NetWare use.
httpd start.	The httpd has started.
IEEE 802.11 Card does NOT support WPA.	A wireless card that does not support WPA is installed. Install a wireless card that supports WPA.
IEEE 802.11 Card Firmware REV.<version>	Displays the version number of the 802.11 card's firmware.
IEEE 802.11 current channel <channel number>	Displays the current channel number of the active wireless card (in ad hoc and infrastructure mode).

Message	Problem and solutions
IEEE 802.11 MAC Address = <MAC address>	Displays the MAC address of the wireless interface.
IEEE 802.11 SSID <ssid> (AP MAC Address <MAC address>)	The MAC address and SSID of the access point are connected in infrastructure mode.
IEEE 802.11 <communication mode> mode	Displays the IEEE 802.11 communication mode.
(IKE phase-1) mismatched authentication type: local=<authentication type 1> remote=<authentication type 2>	This machine's <authentication type 1> in IKE phase 1 does not match the communicating host's <authentication type 2>, Make sure this machine's ISAKMP SA authentication type matches that of the communicating host.
(IKE phase-1) mismatched encryption type: local=<encryption algorithm 1> remote=<encryption algorithm 2>	This machine's ISAKMP SA Oakley group <encryption algorithm 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group < encryption algorithm 2>, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.
(IKE phase-1) mismatched DH group: local=<DH group number 1> remote=<DH group number 2>	This machine's ISAKMP SA Oakley group <DH group number 1> in IKE phase 1 does not match the communicating host's ISAKMP SA Oakley group <DH group number 2>, Make sure this machine's ISAKMP SA Oakley group matches that of the communicating host.
(IKE phase-1) mismatched hash type: local=<Hash Algorithm 1> remote=<Hash Algorithm 2>	This machine's ISAKMP SA <Hash Algorithm 1> in IKE phase 1 does not match the communicating host's ISAKMP SA <Hash Algorithm 2>, Make sure this machine's ISAKMP SA Hash Algorithm matches that of the communicating host.
IKE [% s] is disable, set PSK text.	The specified IKE entry invalid. Enter the PSK text.
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 name> card removed	The interface managed by the supplicant has been removed.

Message	Problem and solutions
<Interface name> interface down	The interface managed by the supplicant is disabled, or cannot connect to the access point.
<Interface name> interface up	The interface managed by the supplicant is enabled, or is connected to the access point.
< 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 spooled job was canceled due to error or user request.
IPP job canceled. jobid=%d.	The spooled job was canceled due to error or user request.
job canceled. jobid=< job ID >	The spooled job was canceled due to error or user request.
LEAP challenge to access point failed	The LEAP challenge to the access point has failed.
LeaseTime=<lease time>(sec), RenewTime=<renew time>(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 IP>), <NDS BINDERY>	When the print server was online, the system logged in to <file server> in NDS or BINDERY mode. The transfer protocol in use is also displayed.
Manual [%s] is disable, set authentication key.	The specified manual SA entry is invalid. Set the authentication key.
Manual [%s] is disable, set encryption key.	The specified manual SA entry is invalid. Set the authentication key.
Memory allocate error.	Date cannot be obtained. Disconnect the USB cable, and then connect it.
MIC failure TKIP counter measures started	The supplicant using TKIP has detected two instances of tampering within 60 seconds and has started counter measures.

Message	Problem and solutions
MIC failure TKIP counter measures stopped	Counter measures have stopped after 60 seconds (since the supplicant using TKIP started counter measures against tampering).
Name registration failed. name=<NetBIOS name>	Name registration of <NetBIOS Name> failed. Change to a different NetBIOS name.
Name registration success in Broadcast name=<NetBIOS name>	Name registration by <NetBIOS Name> broadcast was successful.
Name registration success. WINS server=<WINS server address> NetBIOS Name=<NetBIOS name>	Name registration of <NetBIOS Name> to <WINS server address> was successful.
nbttd start.	The nbttd (NetBIOS over TCP/IP Daemon) has started.
npriter start. (NetWare)	(In the remote printer mode) The NetWare service has started.
no RADIUS/authentication server	The supplicant has received a message reporting that a usable RADIUS server cannot be found.
no smart card detected on device	PEAP/GTC (Generic Token Card) is selected, but a smart card using GTC authentication cannot be found.
no SSID in scan result	A network with the SSID you specified was not found. The specified SSID might not be available, or the signal from the access point/multi-channel might be weak.
no WPA information element in probe response, rescanning	There is no WPA information on the response from the SSID probe of the access point you want to use. The supplicant is rescanning.
nwstart start. (NetWare)	The NetWare protocol stack setup server has started.
Open log file <file name>	The specified log file was opened when the print server was online.

Message	Problem and solutions
permission denied.	When canceling a job, it was determined after checking the user name and host address that the user's privileges were insufficient. (Does not apply to root privileges.)
Printer <printer name> has no queue	The print queue is not assigned to the printer when the print server was online. Assign the print queue to the printer using NetWare administrator account, and then restart the printer.
Print queue <print queue name> cannot be serviced by printer 0, <print server name>	The print queue cannot be established when the print server is online. Make sure that the print queue exists on the specified file server.
Print server <print server name> has no printer	The printer was not assigned to the print server when the print server was online. Use the NetWare administrator account to assign the printer, and then restart the printer.
print sessions full	No more print jobs can be accepted. Wait a while before sending any more print jobs.
pserver start. (NetWare)	NetWare service has started in print server mode at the print server operation.
Required file server (<file server name>) not found	The required file server <file server name> could not be found.
restarted.	The LPD has started.
sap enable. sapttype=<SAP type>, sapname=<SAP name>	The SAP function was started. The SAP packet is issued to advertise the service in the SAP table on the NetWare server.
server certificate invalid	The server ID is disabled. Check the server authentication.
server identity invalid	The server ID is disabled. Check the server authentication.
server not trusted	The RADIUS server cannot be trusted.
session_IPv4 <community name> not defined.	The requested community name is not defined.
session_IPv6 <community name> not defined.	The requested community name is not defined.

Message	Problem and solutions
session_IPX <community name> not defined.	The requested community name is not defined.
Set context to <NDS context name>	The NDS context name <NDS context name> has been set.
shutdown signal received. network service rebooting...	The smbd service has started.
smbd start. (NetBIOS)	SMBD (Server Message Block Daemon) has been started.
SMTPC: failed to get smtp server ip-address.	<p>The SMTP server IP address could not be obtained. This could be because:</p> <ul style="list-style-type: none"> • 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.	<p>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.</p>
SMTPC: refused connect by smtp server.	<p>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.</p>

Message	Problem and solutions
SMTPC: no smtp server. connection close.	Connection to the SMTP server failed due to no response from SMTP. This could be because a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the SMTP server name, port number, or the SMTP server port number.
SMTPC: failed to connect smtp server.	Connection to the SMTP server failed. This could be because no connection to the network has been established, or the network configuration is incorrect, so there is no response from the SMTP server, or the specified SMTP server name is incorrect, or the specified SMTP server IP address could not be found in the DNS server, or a server other than the SMTP server has been specified, or the specified SMTP server port number is incorrect. Check the DNS Server's IP address and SMTP server's IP address, or the SMTP server name and SMTP port number, or the SMTP server's SMTP port number, or the network connection and configuration.
SMTPC: username or password wasn't correct. [response code] (information)	Connection to the SMTP server failed, because the specified SMTP user name is incorrect, or the specified SMTP password is incorrect. Check the SMTP user name and password.
Snmp over IPv4 is ready.	Communication over IPv4 with snmp is available.
Snmp over IPv6 is ready.	Communication over IPv6 with snmp is available.
Snmp over IPX is ready.	Communication over IPX with snmp is available.
Snmpd Start.	The snmpd has started. This message is displayed only when the power is turned on.
started.	The direct printing service has started.
started.	The IKE service has started.
Started.	The bonjour (rendezvous) function has started.
stopped	The supplicant has just stopped.

Message	Problem and solutions
success key received	The supplicant received the EAP-Success key.
success but invalid key	The supplicant received a message reporting that EAP authentication was successful, but the EAPOL key was invalid.
supplicant started	The supplicant has just started.
supplicant unbound	The supplicant is not connected to the unbound access point.
terminated.	The IKE service has stopped because no configurations for manual SA or IKE exist.
Terminated.	The Bonjour (rendezvous) function is disabled.
There is problem in dhcp server operation.	There is a problem with the DHCP server. If multiple DHCP servers are active on the network, check that they are assigning unique IP addresses to each machine.
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 when the print server was online. The print server is not registered or a password is specified. Register the print server without specifying a password.
too many pictures.	PictBridge printing failed because too many images are sent during one print transaction. Reduce the number of images at one print transaction.
trap account is unavailable.	v3Trap cannot be sent. This could be because the Trap destination account is different from the account specified by the machine.
unauthenticated	The authentication failed. The supplicant was denied access to the access point, or was not authenticated.
Updated (option name)(value) via DHCPv6 Server	The parameter obtained from the DHCP server has been updated.
usbd is disabled.	Plug and Play is unavailable because the machine is in Security Mode. Enable USB D in Security Mode.

Message	Problem and solutions
waiting for keys	The supplicant is waiting for the session key.
WINS name registration: No response to server (WINS server address)	There was no response from the WINS server. Check that the correct WINS server address is entered. Also, check that the WINS server is functioning properly.
WINS wrong scopeID=<scope ID>	The scope ID is invalid. Use a valid scope ID.
write error occurred. (diskfull)	A "diskfull" error occurred while the machine was writing to the spool file. Wait for the current print job to finish. When it finishes, more HDD space will be available. Only pages that were spooled when the error occurred will be printed.
write error occurred. (fatal)	A "fatal" error occurred while the machine was writing to the spool file. Wait for the current print job to finish. When it finishes, more HDD space will be available. Only pages that were spooled when the error occurred will be printed.
WSD (Device) started.	WSD (Device) has started.
WSD (Printer) started.	WSD (Printer) has started.
WSD (Scanner) started.	WSD (Scanner) has started.

↓ Note

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

5. Registering Addresses and Users for Facsimile/Scanner Functions

This chapter describes how to register destinations and users in the Address Book. For details on how to access System Settings, see "Accessing User Tools".

Address Book

This section describes Address Book settings.

Registering information such as the names of users and their e-mail addresses in the Address Book allows you to manage them easily.

We recommend you back up the Address Book regularly.

For details about backing up/restoring the Address Book, see "Administrator Tools".

★ Important

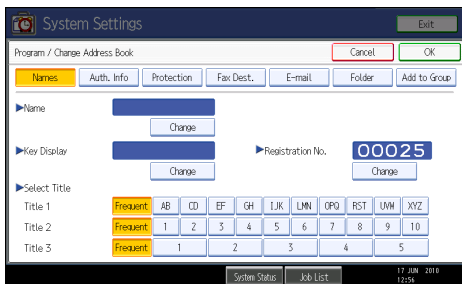
- Address Book data is stored on the hard disk. It can be lost if there is some kind of hard disk failure.
- The manufacturer shall not be held responsible for any damages resulting in data loss.

You can register and manage the following items in the Address Book:

Names

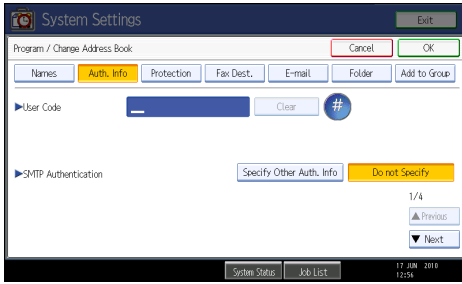
You can register the name of the user and the key display. This is the basic information required for managing users of the machine.

To register a fax number or e-mail address in the Address Book, you must register information such as the user name and destination name in advance.



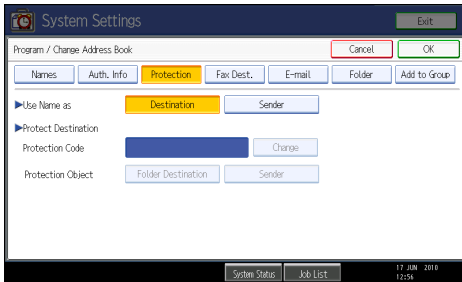
Auth. Info

You can register user codes in order to restrict particular functions to certain users, and to check their use of each function. You can also register login user names and login passwords to be used when sending e-mail, sending to folders, or accessing an LDAP server.



Protection

You can set protection codes to stop sender's name from being used or folders from being accessed without authorization.

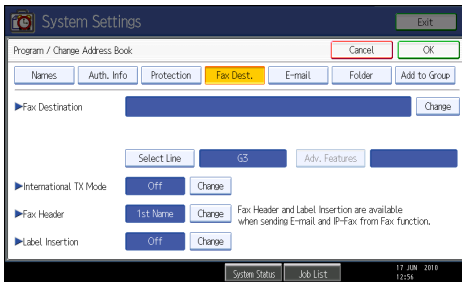


5

Fax Dest.

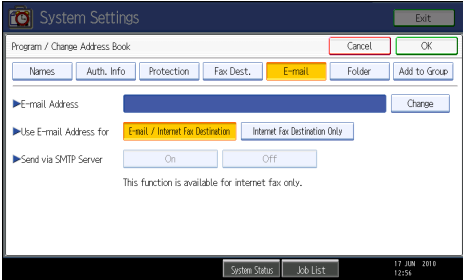
You can register fax numbers, line, fax header and select label insertion.

When using IP-Fax, you can register the IP-Fax destination and select the protocol.



E-mail

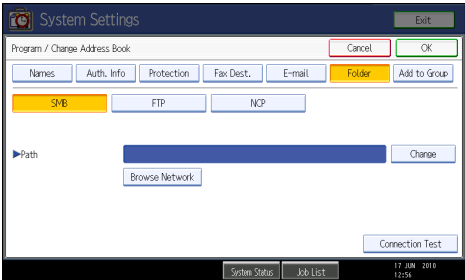
You can register e-mail destinations in the Address Book.



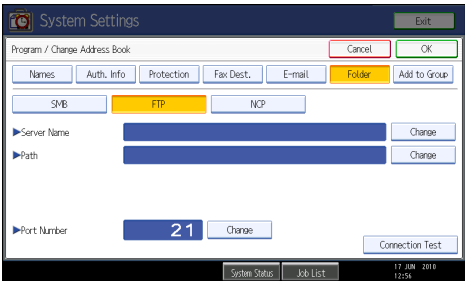
Folder

You can register the protocol, path name and server name.

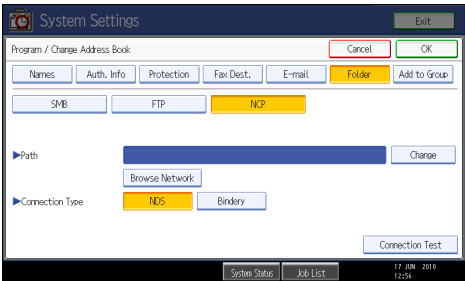
- SMB



- FTP



- NCP



Add to Group

You can put registered e-mail and folder destinations into a group for easier management.

Sending e-mail by Quick Dial

By registering e-mail addresses in the Address Book, you can specify e-mail destinations simply by selecting them from the fax initial display when sending a document by Internet fax or e-mail.

You can also specify an e-mail address by selecting the destination shown on the initial scanner display when sending a document using the scanner function. A registered e-mail address can be used as the sender's address, and the sender's addresses are automatically entered in the "From" field of an e-mail header.

Reference

- p.263 "E-mail Destination"

Sending received fax documents or scanned files to a shared folder directly

After registering the path name, user name and password, you can connect to a shared folder simply by selecting the destination shown on the initial facsimile display whenever sending files using the facsimile function to a shared folder. You can also connect to a shared folder by selecting the destination shown on the initial scanner display whenever sending files using the scanner function.

To share the folder using Windows, select the SMB protocol.

To register the folder to the FTP server, select the FTP protocol.

To register the folder to the NetWare server, select the NCP protocol.

Reference

- p.268 "Registering Folders"

Preventing unauthorized user access to shared folders from the machine

After registering a protection code, you can specify the object of protection to prevent an e-mail destination from being used without permission.

You can prevent unauthorized access to registered folders.

Reference

- p.296 "Registering a Protection Code"

Managing users and machine usage

Register user codes to limit users to the following functions and check their use of each function:

- Copier
- Document Server

- Facsimile
- Printer
- Scanner

Reference

- p.240 "Authentication Information"

Registering Names

Register user information including their names.

The user name is useful for selecting a destination when sending faxes or e-mail.

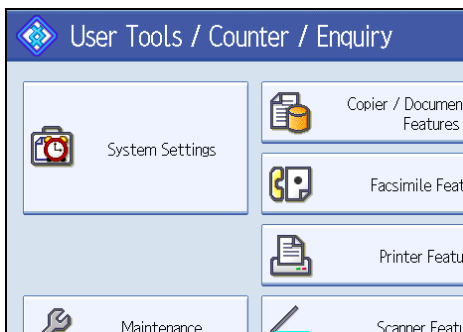
You can also use it as a folder destination.

You can register up to 2000 names.

Registering Names

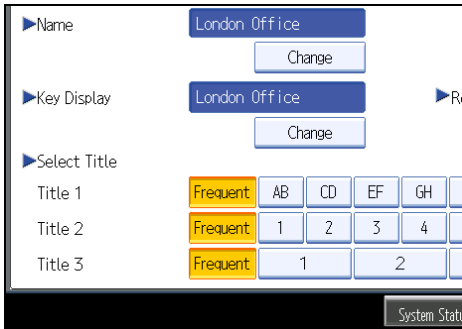
This section describes how to register names.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Press [New Program].
7. Press [Change] under "Name".
The name entry display appears.
8. Enter the name, and then press [OK].

9. Press the key for the classification you want to use under "Select Title".



The keys you can select are as follows:

- [Frequent]: Added to the page that is displayed first.
- [AB], [CD], [EF], [GH], [IJK], [LMN], [OPQ], [RST], [UVW], [XYZ], [1] to [10]: Added to the list of items in the selected title.

You can select [Frequent] and one more page for each title.

10. Press [OK].

11. Press [Exit].

12. Press the [User Tools/Counter] key.

Note

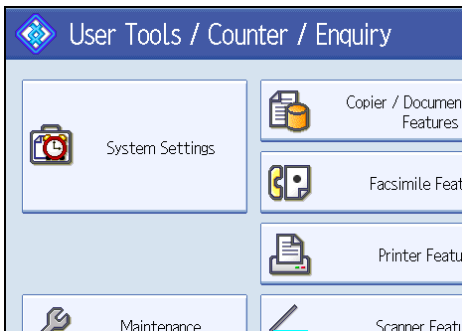
- The name can be used for documents in the Document Server. For details about the Document Server, see "Using the Document Server", Copy and Document Server Reference.

Changing a Registered Name

This section describes how to change a name.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the registered name you want to change.

Press the name key, or enter the registered number using the number keys.

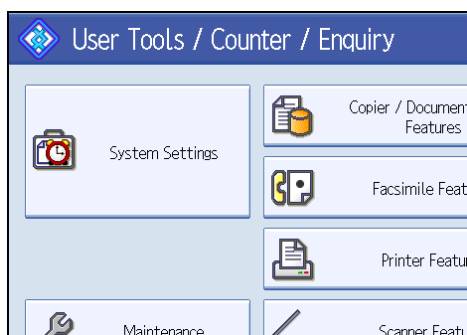
You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. To change the name or key display, press [Change] under "Name" or "Key Display".
8. Enter the name or key display, and then press [OK].
9. To change the title, press the key for the classification you want to use from "Select Title".
10. To change the registration number, press [Change] under "Registration No.".
11. Enter a new registration number using the number keys, and then press the [#] key.
12. Press [OK].
13. Press [Exit].
14. Press the [User Tools/Counter] key.

Deleting a Registered Name

This section describes how to delete a name.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Press [Delete].
6. Select the name you want to delete.

Press the name key, or enter the registered number using the number keys.

7. Press [Yes].
8. Press [Exit].
9. Press the [User Tools/Counter] key.

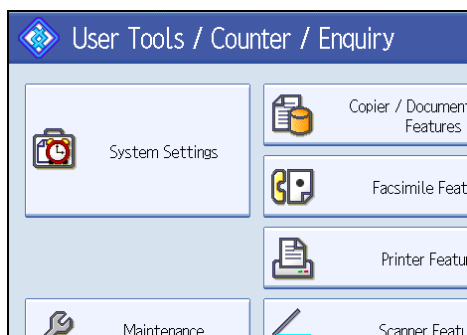
Carrying Over Registered Data for Use by Address Book Auto Register

By using Data Carry-over Settings for Address Book Auto Program, you can carry over user authentication information that has already been registered to the Address Book of the Windows authentication, LDAP authentication, or integration server authentication.

★ Important

- For details about the Windows authentication, LDAP authentication, or Integration server authentication, consult your administrator.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Data Carry-over Setting for Address Book Auto-program].
5. Press [Carry-over Data].
6. Press the [Clear] key, enter the registration number using the number keys, and then press the [#] key.
7. Press [OK].
8. Press the [User Tools/Counter] key.

Authentication Information

Following describes the procedure for authenticating a user code.

★ Important

- **The functions associated with each user code are the same. If you change or delete user codes, management data and limits associated with that code become invalid.**

Register user codes to limit users to the following functions and check their use of each function:

- Copier
- Document Server
- Facsimile
- Printer
- Scanner

↓ Note

- You can register up to 500 user codes.
- The number of copies made of documents stored in the Document Server using the facsimile function is counted for each user code. This allows you to check each user's usage.
- The number of copies scanned using the scanner function is counted for each user code. This allows you to check each user's usage.
- To automatically register the printer driver user code, select [PC Control] under "Printer" for the printer in User Code Authentication. To use the user code set in User Tools, set the user codes registered in User Tools for the printer driver.
- For details about setting user codes for the printer driver, see the printer driver Help.

📖 Reference

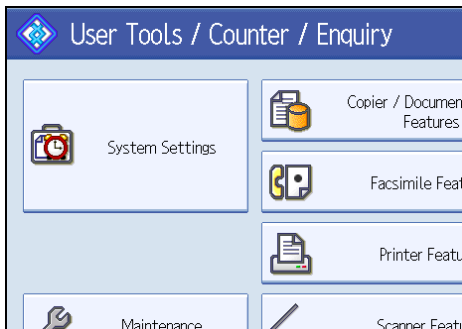
- p.55 "Administrator Tools"

Registering a User Code

This section describes how to register a user code.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

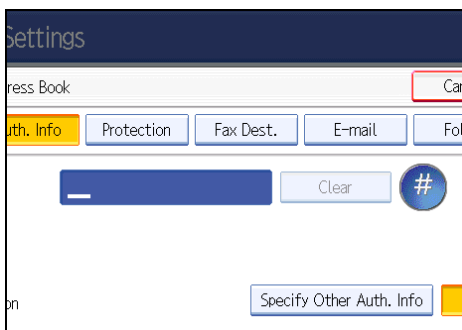
5. Check that [Program / Change] is selected.

6. Press the name whose code is to be registered, or enter the registered number using the number key.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Auth. Info].

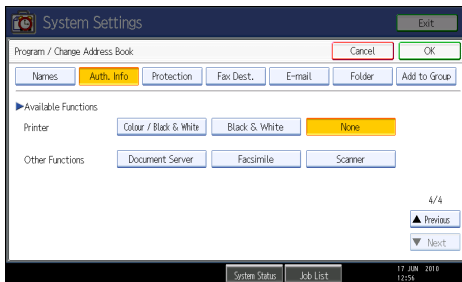
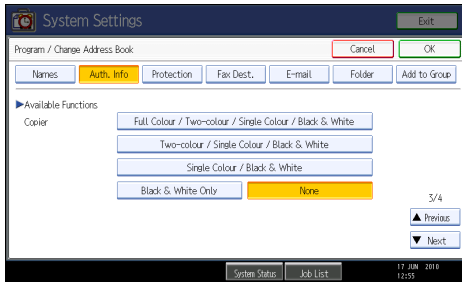
8. Enter the user code using the number keys, and then press the [#] key.



If you make a mistake, press [Clear] or the [Clear/Stop] key.

9. Press [▼Next] twice.

10. Select the functions to be used with the user code from "Available Functions".



5

11. Press [OK].

12. Press [Exit].

13. Press the [User Tools/Counter] key.

Note

- You can enter a one-to eight-digit user code.
- To register the name, see "Registering Names".

Reference

- p.235 "Registering Names"

Changing a User Code

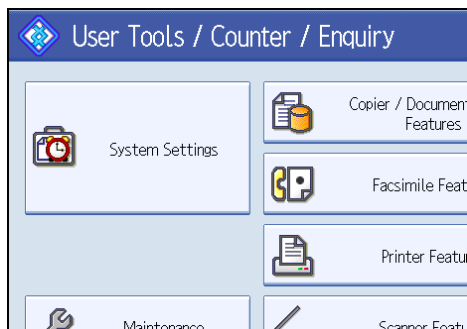
This section describes how to change a user code.

Important

- Even if you change a user code, the counter value will not be cleared.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

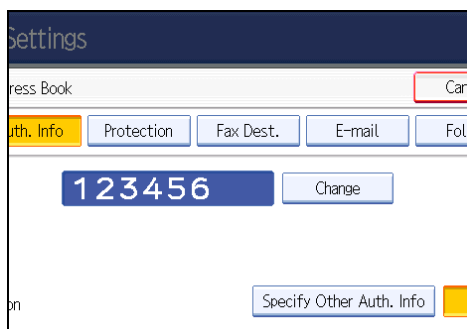
5. Check that [Program / Change] is selected.

6. Select the user whose user code you want to change.

Press the name key, or enter the registered number using the number keys. You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Auth. Info].

8. Press [Change], and then enter the new user code using the number keys.



9. Press the [#] key.

10. To change the available functions, press [▼Next] twice.

11. Press the key to select the functions to enable them.

Press the key to highlight it, and then the function is enabled. To cancel a selection, press the highlighted key.

12. Press [OK].

13. Press [Exit].

14. Press the [User Tools/Counter] key.

Note

- To change the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

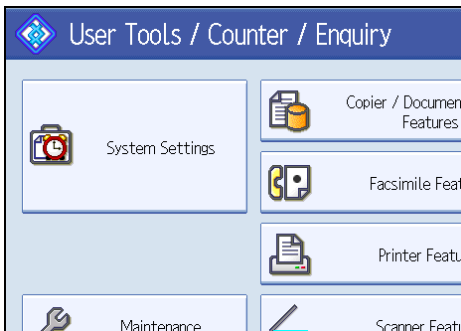
Deleting a User Code

This section describes how to delete a user code.

Important

- After clearing the user code, the counter is automatically cleared.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



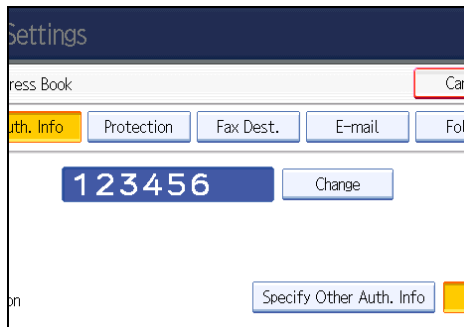
3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Press [Program / Change].
6. Select the name whose code is to be deleted.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Auth. Info].

- Press [Change] to delete the user code, and then press the [#] key.



- Press [OK].
- Press [Exit].
- Press the [User Tools/Counter] key.

↓ Note

- To delete a name from the Address Book entirely, see "Registering Names".

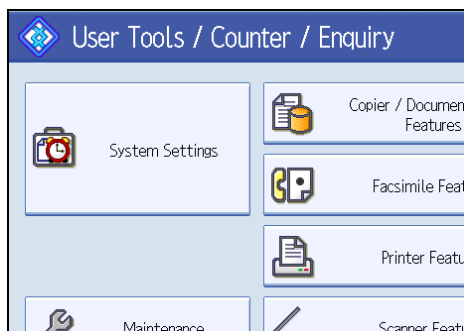
📖 Reference

- p.235 "Registering Names"

Displaying the Counter for Each User

This section describes how to display the counter for each user.

- Press the [User Tools/Counter] key.
- Press [System Settings].



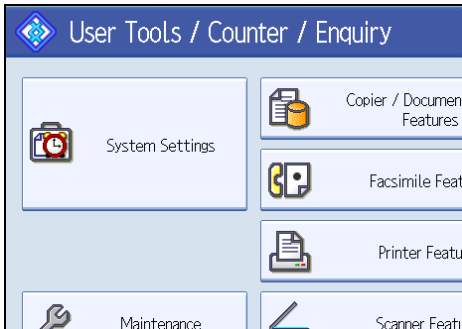
- Press [Administrator Tools].
- Press [Display / Clear / Print Counter per User].
- Select the function usage you want to print from [Copier] [Printer], [Facsimile] or [Scanner].

Counters for individual function usage under each user code appear.

Printing the Counter for Each User

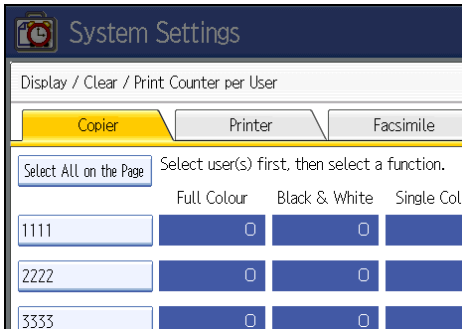
This section describes how to print the counter for each user.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



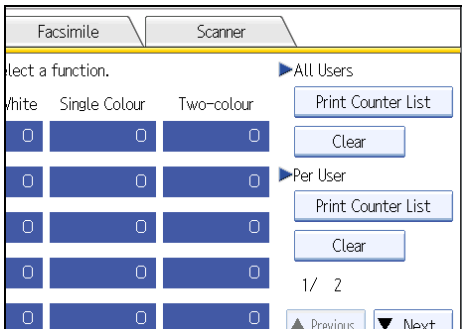
5

3. Press [Administrator Tools].
4. Press [Display / Clear / Print Counter per User].
5. Select a user code from the left side of the display.



Press [Select All on the Page] to select all user codes on the page.

6. Press [Print Counter List] under "Per User".



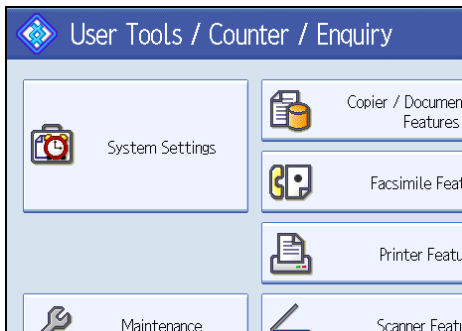
Enter the user code, and then press the [#] key if the user code is registered.

7. Select the function usage you want to print from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [Total Prints].
8. Press [Print].
9. Press [Exit].
10. Press the [User Tools/Counter] key.

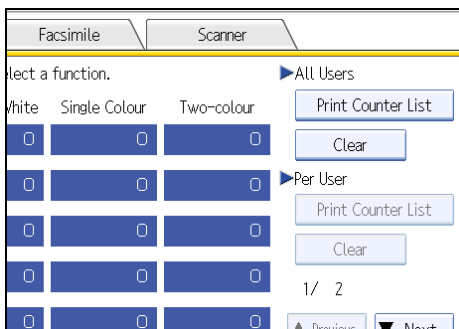
Printing the Counter for All Users

This section describes how to print the counter for all users.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Display / Clear / Print Counter per User].
5. Press [Print Counter List] under "All Users".



Enter the user code, and then press the [#] key if the user code is registered.

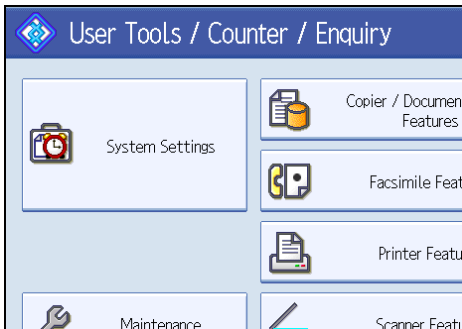
6. Select the function usage you want to print from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [Total Prints].
7. Press [Print].

8. Press [Exit].
9. Press the [User Tools/Counter] key.

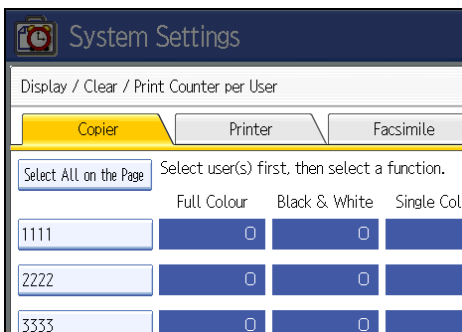
Clearing the Number of Prints

This section describes how to clear the counter.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Display / Clear / Print Counter per User].
5. Select the user code to clear.
6. To clear the number of prints made under a user code, select the user code from the left side of the display.



Press [Select All on the Page] to select all user codes on the page.

7. Press [Clear] under "Per User".
8. Select the function usage you want to clear from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [All Counters].
9. Press [OK].
10. To clear the number of prints for all user codes, press [Clear] under "All Users".

11. Select the function usage you want to clear from [Copier], [Printer], [Fax Prints], [Fax Transmission], [Scanner], and [All Counters].
12. Press [OK].
13. Press [Exit].
14. Press the [User Tools/Counter] key.

Fax Destination

This section describes the procedure for registering, changing, and deleting Fax Destinations.

Register a fax destination so you do not need to enter fax numbers each time, and can send documents that have been scanned in using the facsimile function.

- It is easy to select the fax destination if you register "Name" and "Key Display" for the fax destination.
- You can register fax destinations as a group. For details about registering a group, see "Registering Names to a Group".
- You can register fax destinations by selecting them from redial function.
- Registered Fax numbers can be used as sender's Fax numbers. You can stop sender's names or folders being accessed by setting a protection code. For details, see "Registering a Protection Code".

There are two types of fax destination, as shown below:

5

- **Fax Destination**
Select this to send the fax over the telephone network.
- **IP-Fax**
Select this to send the fax to a machine on a TCP/IP network.
You cannot send the fax to a machine on another network if that network is behind a firewall.

You can program the following items in a fax destination:

Fax number

Registers the destination's fax number. You can enter a fax number using up to 128 digits. You must include every digit in the number.

SUB Code

Registering a SUB Code allows you to use Confidential Transmission to send messages to the other fax machines which support a similar function called "SUB Code". See "Setting SUB Codes for Transmission", Facsimile Reference.

SEP Code

Registering a SEP Code allows you to use Polling Reception to receive faxes from the other fax machines which support Polling Reception. See "Setting SEP Codes for Reception", Facsimile Reference.

Select Line

If the extra G3 interface unit is installed, you can select the line type per destination.

International TX mode

When setting the International TX mode to [On], the machine transmits more carefully by lowering transmission speed. However, communication times increase.

Fax header

You can select to print a fax header on fax messages the other party receives.

The default is "1st Name".

Label insertion

Use label insertion to print information such as the destination name on the sheet printed out at the destination.

Data is printed as follows:

- Destination Name

The destination name specified in [Fax Destination] is printed with "To" before it at the top of the sheet.

- Standard Message

A registered two-line sentence is printed under "Destination Name".

To use this function, set Label Insertion to [On] when programming fax destinations and also press [Label Insertion] when sending fax documents.

Fax header and label insertion are also printed when sending by e-mail using the fax function.

You can program a standard message other than those registered in the machine.

See " Send Settings ", Facsimile Reference.

You can program the following items in an IP-Fax Destination:

IP-Fax

Register the IP-Fax destination. You can register the name using up to 128 characters. You must make this setting when using IP-Fax.

This setting only works if the IP-Fax function has been selected.

SUB Code

Registering a SUB Code allows you to use Confidential Transmission to send messages to the other fax machines which support a similar function called "SUB Code". See "Setting SUB Codes for Transmission", Facsimile Reference.

SEP Code

Registering a SEP Code allows you to use Polling Reception to receive faxes from the other fax machines which support Polling Reception. See "Setting SEP Codes for Reception", Facsimile Reference.

Select Protocol

Select the protocol for the IP-Fax transmission.

This setting only works if the IP-Fax function has been selected.

Reference

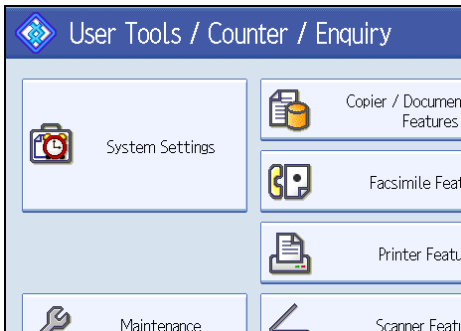
- p.286 "Registering Names to a Group"

- p.296 "Registering a Protection Code"

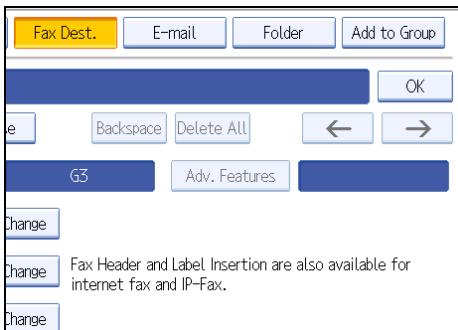
Registering a Fax Destination

This section describes how to register a fax destination.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose fax destination you want to register.
Press the name key, or enter the registered number using the number keys.
7. Press [Fax Dest.].
8. Press [Change] under "Fax Destination".
9. Enter the fax number using the number keys, and then press [OK].



10. Specify optional settings such as "SUB Code", "SEP Code", and "International TX Mode".
11. Press [OK].
12. Press [Exit].

13. Press the [User Tools/Counter] key.

↓ Note

- To register the name, see "Registering Names".
- When a group is registered, you can also add this fax destination to the group. For details about registering groups, see "Registering Names to a Group".

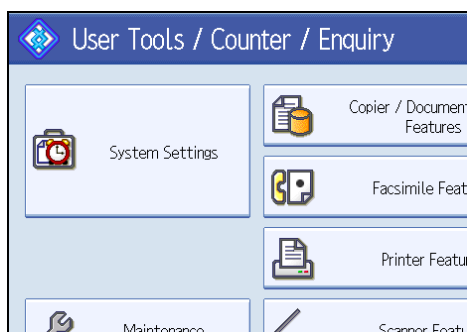
📖 Reference

- p.235 "Registering Names"
- p.286 "Registering Names to a Group"

Changing a Fax Destination

This section describes how to change a registered fax destination.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose fax destination you want to change.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Fax Dest.].
8. Change the settings.
9. Press [OK].
10. Press [Exit].
11. Press the [User Tools/Counter] key.

Note

- To change the name, key display and title, see "Registering Names".

Reference

- p.235 "Registering Names"

To change the fax number

This section describes how to change the fax number.

1. Press [Change] under "Fax Destination".
2. Enter the new fax number using the number keys, and then press [OK].

To select line

This section describes how to select the line.

1. Press [Select Line] under "Fax Destination".
2. Select the using line.
3. Press [OK].

To program the SUB Code

This section describes how to program the SUB Code.

1. Press [Adv. Features], and then press [SUB Code].
2. Press [Change] under "TX SUB Code".
3. Enter the new SUB Code, and then press [OK].
4. To change the password, press [Change] under "Password (SID)".
5. Enter the new password, and then press [OK].
6. Press [OK].

To program the SEP Code

This section describes how to program the SEP Code.

1. Press [Adv. Features], and then press [SEP Code].
2. Press [Change] under "RX SEP Code".
3. Enter the new SEP Code, and then press [OK].
4. To change the password, press [Change] under "Password (PWD)".

5. Enter the new password, and then press [OK].
6. Press [OK].

To set the International TX Mode

This section describes how to set the International TX Mode.

1. Press [Change] under "International TX Mode".
2. Select [Off] or [On], and then press [OK].

To select the fax header

This section describes how to select the fax header.

You can register the fax header in Program Fax Information in the system settings for Facsimile Features.

1. Press [Change] under "Fax Header".
2. Select [1st Name] or [2nd Name], and then press [OK].

5

To set label insertion

This section describes how to set label insertion.

When Label Insertion is set to ON, the receiver's name and standard messages are printed on the fax message when it is received at the other end.

1. Press [Change] under "Label Insertion".
2. Press [On].
3. Press [Change] under "Line 2".
4. Select the new standard message or press [Manual Entry] to enter the new message.
5. Enter the new message, and then press [OK].
6. Press [OK].
7. Press [Change] under "Line 3".
8. Select the new standard message, and then press [OK].
9. Press [OK].

↓ Note

- To change the name, key display and title, see "Registering Names".

📖 Reference

- p.235 "Registering Names"

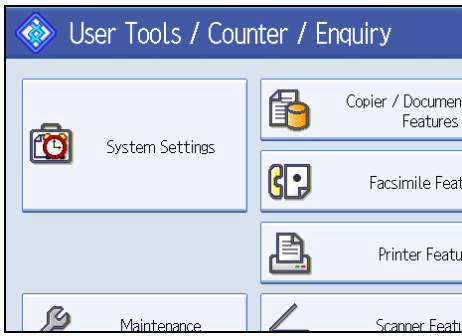
Deleting a Fax Destination

This section describes how to delete a registered fax destination.

★ Important

- If you delete a destination that is a specified delivery destination, messages to its registered Personal Box, for example, cannot be delivered. Be sure to check the settings in the fax function before deleting any destinations.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose fax destination you want to delete.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Fax Dest.].
8. Press [Change] under "Fax Destination".
9. Press [Delete All], and then press [OK].



10. Press [OK].
11. Press [Exit].
12. Press the [User Tools/Counter] key.

↓ Note

- To delete the name, key display, and title, see "Registering Names".

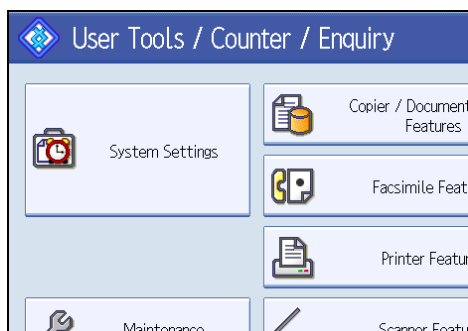
📖 Reference

- p.235 "Registering Names"

Registering an IP-Fax Destination

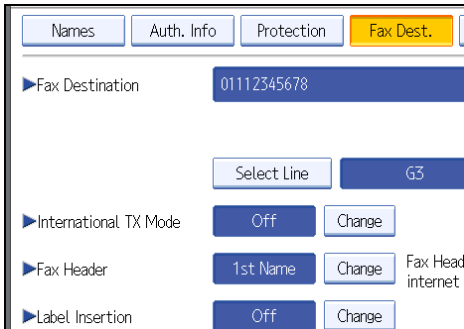
This section describes how to register an IP-Fax Destination.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose IP-Fax destination you want to register.
Press the name key, or enter the registered number using the number keys.
7. Press [Fax Dest.].

8. Press [Select Line], and then select [H.323] or [SIP].



9. Press [OK].

10. Press [Change] under "Fax Destination".

11. Enter the IP-Fax destination.

12. Press [OK].

13. Press [OK].

14. Press [Exit].

15. Press the [User Tools/Counter] key.

Note

- To register the name, see "Registering Names".

Reference

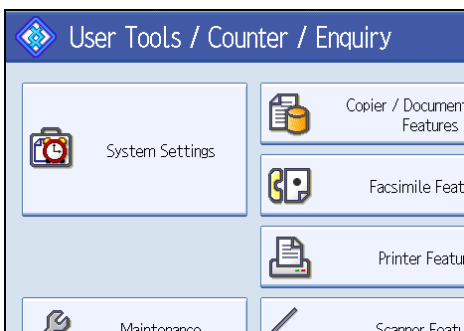
- p.235 "Registering Names"

Changing a Registered IP-Fax Destination

This section describes how to change an IP-Fax Destination.

1. Press the [User Tools/Counter] key.

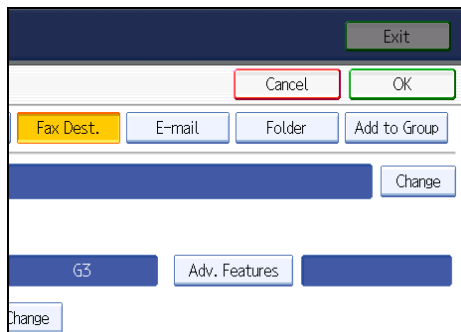
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose IP-Fax destination you want to change.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Fax Dest.].
8. Press [Change] under "Fax Destination".



Enter the new destination, and then press [OK].

9. Press [OK].
10. Press [Exit].
11. Press the [User Tools/Counter] key.

↓ Note

- To change the name, key display and title, see "Registering Names".

📖 Reference

- p.235 "Registering Names"

To change the IP-Fax Destination

This section describes how to change a registered IP-Fax destination.

1. Press [Change] under "Fax Destination".
2. Enter the new destination, and then press [OK].

To change the protocol

This section describes how to select the protocol.

1. Press [Select Line].
2. Select [H.323] or [SIP].
3. Press [OK].

To program the SUB Code

This section describes how to program the SUB Code.

1. Press [Adv. Features], and then press [SUB Code].
2. Press [Change] under "TX SUB Code".
3. Enter the SUB Code, and then press [OK].
4. To enter a password, press [Change] under "Password (SID)".
5. Enter a password using the number keys, and then press [OK].
6. Press [OK].

5

To program the SEP Code

This section describes how to program the SEP Code.

1. Press [Adv. Features], and then press [SEP Code].
2. Press [Change] under "RX SEP Code".
3. Enter a SEP Code using the number keys, and then press [OK].
4. To enter a password, press [Change] under "Password (PWD)".
5. Enter a password using the number keys, and then press [OK].
6. Press [OK].

To set the International TX Mode

This section describes how to set the International TX Mode.

1. Press [Change] under "International TX Mode".
2. Select [Off] or [On], and then press [OK].

To select the fax header

This section describes how to select the fax header.

1. Press [Change] under "Fax Header".
2. Select [1st Name] or [2nd Name], and then press [OK].

To set label insertion

This section describes how to set label insertion.

When Label Insertion is set to ON, the receiver's name and standard messages are printed on the fax message when it is received at the other end.

1. Press [Change] under "Label Insertion".
2. Press [On].
3. Press [Change] under "Line 2".
4. Select the new standard message or press [Manual Entry] to enter the new message.
5. Enter the new message, and then press [OK].
6. Press [OK].
7. Press [Change] under "Line 3".
8. Select the new standard message, and then press [OK].
9. Press [OK].

Note

- To change the name, key display and title, see "Registering Names".

Reference

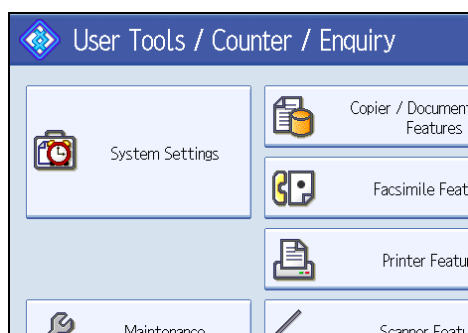
- p.235 "Registering Names"

Deleting a Registered IP-Fax Destination

This section describes how to delete a registered IP-Fax destination.

If you delete a destination that is a specified delivery destination, messages to its registered Personal Box, for example, cannot be delivered. Be sure to check the settings in the fax function before deleting any destinations.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Press [Program / Change].
6. Select the name whose IP-Fax destination you want to delete.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Fax Dest.].
8. Press [Change] under "Fax Destination".
9. Press [Delete All], and then press [OK].
10. Press [OK].
11. Press [Exit].
12. Press the [User Tools/Counter] key.

 **Note**

- To delete the name, key display and title, see "Registering Names".

 **Reference**

- p.235 "Registering Names"

E-mail Destination

This section describes the procedure for registering, changing, and deleting E-mail Destination.

Register e-mail destinations so you do not need to enter an e-mail address every time, and can send scan files from scanner or fax function by e-mail.

- It is easy to select the e-mail destination if you register "Name" and "Key Display" as the e-mail destination.
- You can register e-mail destinations as a group.
- You can use the e-mail address as the sender's address when sending scan files in scanner mode. If you want to do this, set a protection code on the sender address to prevent unauthorized access.

Note

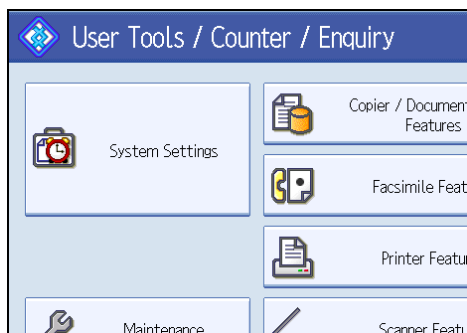
- You can select an e-mail address from an LDAP server, and then register it in the Address Book. See "Sending Scan Files by E-mail", Scanner Reference.
- You can set the machine to send a Transmission Result Report by e-mail whenever a transmission is sent. See Facsimile Reference.

5

Registering an E-mail Destination

This section describes how to register an e-mail destination.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].

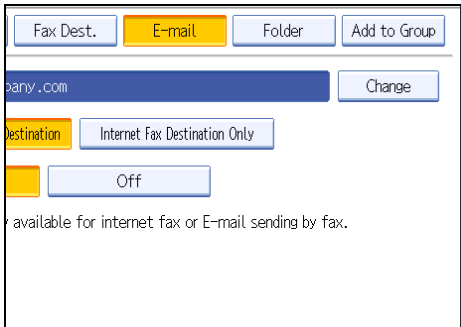


3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose e-mail address you want to register.

Press the name key, or enter the registered number using the number keys.

7. Press [E-mail].

8. Press [Change].



9. Enter the e-mail address.



10. Press [OK].

11. Select [E-mail / Internet Fax Destination] or [Internet Fax Destination Only].

If [E-mail / Internet Fax Destination] is specified, registered e-mail addresses appear in both the internet fax address display and E-mail address display on the fax function screen, and in the address display on the scanner function screen.

If [Internet Fax Destination Only] is specified, registered e-mail addresses only appear in the internet fax display on the fax function screen.

12. If you want to use Internet fax, specify whether or not to use "Send via SMTP Server".

13. Press [OK].

14. Press [Exit].

15. Press the [User Tools/Counter] key.

Note

- You can enter up to 128 characters for the e-mail address.
- To register the name, see "Registering Names".

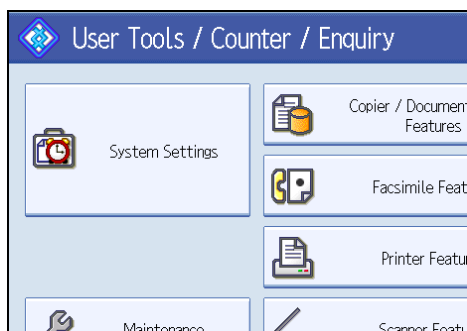
Reference

- p.235 "Registering Names"

Changing an E-mail Destination

This section describes how to change an e-mail destination.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].

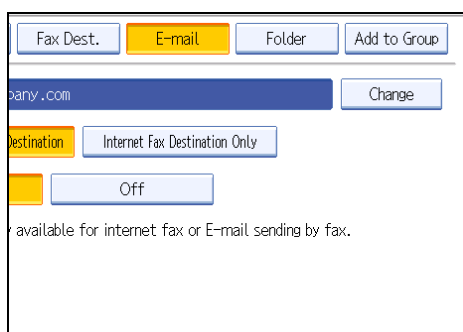


3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose e-mail address you want to change.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [E-mail].
8. Press [Change] under "E-mail Address".



9. Enter the e-mail address, and then press [OK].
10. Press [OK].
11. Press [Exit].
12. Press the [User Tools/Counter] key.

Note

- To change the name, key display and title, see "Registering Names".

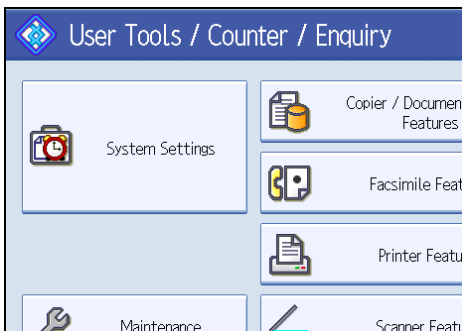
Reference

- p.235 "Registering Names"

Deleting an E-mail Destination

This section describes how to delete an e-mail destination.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose e-mail address you want to delete.

Press the name key, or enter the registered number using the number keys. You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [E-mail].
8. Press [Change] under "E-mail Address".
9. Press [Delete All], and then press [OK].
10. Press [OK].
11. Press [Exit].
12. Press the [User Tools/Counter] key.

Note

- To delete the name, key display and title, see "Registering Names".

 **Reference**

- p.235 "Registering Names"

Registering Folders

This section describes the procedure for registering, changing, and deleting folders.

By registering a shared folder, you can send scan files or received fax documents to it directly.

There are three types of protocol you can use:

- SMB
For sending files to shared folders on Windows and Mac OS X.
- FTP
Use when sending files to an FTP server.
- NCP
Use when sending files to a NetWare server.

↓ Note

- For details about protocols, server names, and folder levels, consult your network administrator.
- You can prevent unauthorized users from accessing folders from the machine. See "Registering a Protection Code".
- You can only select either SMB, FTP, or NCP. If you change protocol after finishing your settings, all previous entries are cleared.

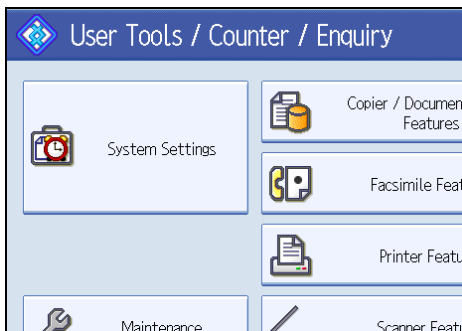
📖 Reference

- p.296 "Registering a Protection Code"

Registering an SMB Folder

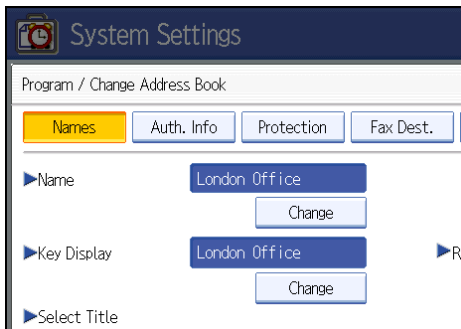
This section describes how to register an SMB folder.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose folder you want to register.
Press the name key, or enter the registered number using the number keys.
7. Press [Auth. Info], and then press [▼Next].

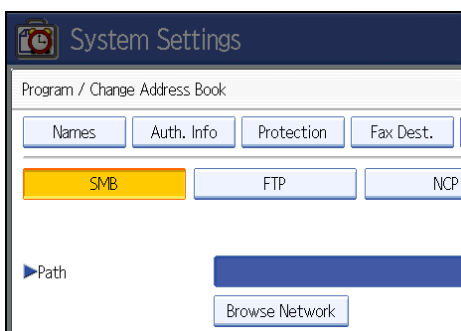


8. Press [Specify Other Auth. Info] on the right side of "Folder Authentication".

When [Do not Specify] is selected, the SMB User Name and SMB Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings applies.

9. Press [Change] under "Login User Name".
10. Enter the login user name of the destination computer, and then press [OK].
11. Press [Change] under "Login Password".
12. Enter the password of the destination computer, and then press [OK].
13. Enter the password again to confirm, and then press [OK].
14. Press [Folder].
15. Check that [SMB] is selected.

To specify a folder, you can either enter the path manually or locate the folder by browsing the network.



16. Press [Change] or [Browse Network], and then specify the folder.

To specify a folder, you can enter the path to it manually, or select it by browsing the network.

For details about how to specify the path manually, see "Locating the SMB folder manually".

For details about how to specify the path using Browse Network, see "Locating the SMB folder using Browse Network".

17. Press [Connection Test] to check the path is set correctly.

18. Press [Exit].

If the connection test fails, check the settings, and then try again.

19. Press [OK].

20. Press [Exit].

21. Press the [User Tools/Counter] key.

Note

- To register the name, see "Registering Names".
- You can enter up to 64 characters for the user name.
- You can enter up to 64 characters for the password.
- You can enter a path using up to 128 characters.
- If User Authentication is specified, contact your administrator.

Reference

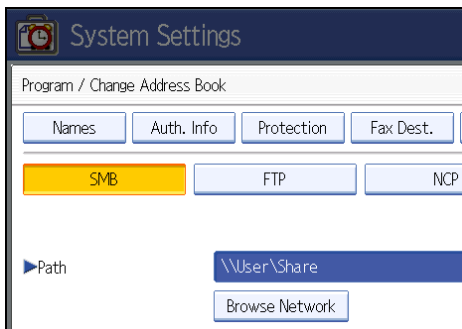
- p.235 "Registering Names"

Locating the SMB folder manually

This section describes how to locate the SMB folder manually.

- 1. Press [Change] under "Path".**
- 2. Enter the path where the folder is located.**

For example: if the name of the destination computer is "User", and the folder name is "Share", the path will be \\User\Share.



If the network does not allow automatic obtaining of IP addresses, include the destination computer's IP address in the path. For example: if the IP address of the destination computer is "192.168.0.191", and the folder name is "Share", the path will be "\\192.168.0.191\Share".

3. Press [OK].

If the format of the entered path is not correct, a message appears. Press [Exit], and then enter the path again.

↓ Note

- Enter the path using this format: "\\ServerName\Share-Name\PathName".
- You can also enter an IPv4 address.
- You can enter a path using up to 128 characters.

Locating the SMB folder using Browse Network

This section describes how to locate the SMB folder using Browse Network.

5

1. Press [Browse Network].

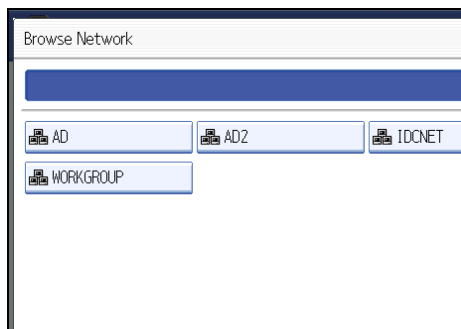
The client computers sharing the same network as the machine appear.

Network display only lists client computers you are authorized to access.

2. Select the group that contains the destination computer.

3. Select the computer name of the destination computer.

Shared folders under it appear.



You can press [Up One Level] to switch between levels.

4. Select the folder you want to register.

5. Press [OK].

If a Login Screen Appears

This section describes how to log in to the machine if the login screen appears when you try to access a folder by browsing the network.

If you have not specified folder authentication, or if an incorrect user name or password has been entered for folder authentication, the login screen appears.

1. Enter the login user name, and then press [OK].

Enter the login user name specified for folder authentication.

2. Enter the password, and then press [OK].

The path to the selected folder appears.

If a message appears, press [Exit], and then enter the login user name and password again.

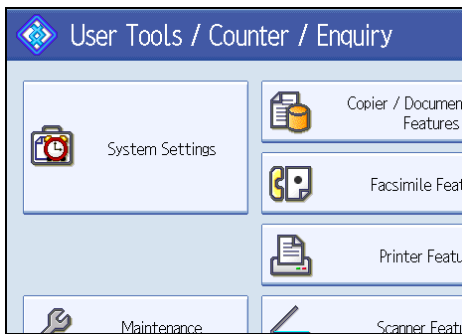
Changing an SMB Folder

This section describes how to change settings of the registered SMB folder.

5

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

5. Check that [Program / Change] is selected.

6. Select the name whose folder you want to change.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].

8. Select the items you want to change.

When specifying a folder, enter the path directly or select it by referencing the network. For more information, see "Locating the SMB folder manually" and "Locating the SMB folder using Browse Network".

9. Press [Connection Test] to check the path is set correctly.

10. Press [Exit].
11. Press [OK].
12. Press [Exit].
13. Press the [User Tools/Counter] key.

↓ Note

- To change the name, key display and title, see "Registering Names".

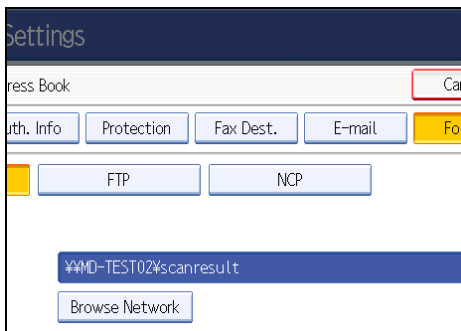
📖 Reference

- p.235 "Registering Names"

Changing the protocol

This section describes how to change the protocol.

1. Press [FTP] or [NCP].



A confirmation message appears.

2. Press [Yes].

Changing the protocol will clear all settings made under the previous protocol.

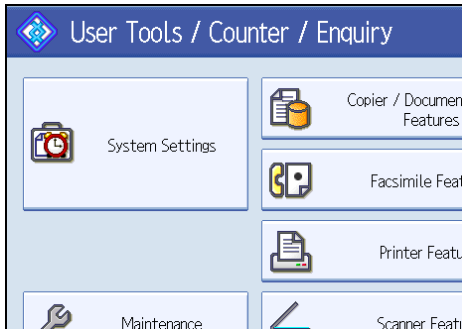
3. Enter each item again.

Deleting an SMB Registered Folder

This section describes how to delete the registered SMB folder.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

5. Check that [Program / Change] is selected.

6. Select the name whose folder you want to delete.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].

8. Press the protocol which is not currently selected.

A confirmation message appears.

9. Press [Yes].

10. Press [OK].

11. Press [Exit].

12. Press the [User Tools/Counter] key.

Note

- To delete the name, key display and title, see "Registering Names".

Reference

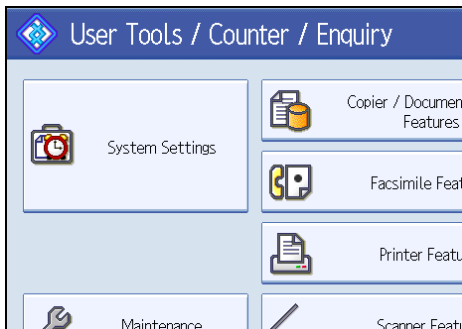
- p.235 "Registering Names"

Registering an FTP Folder

This section describes how to register an FTP folder.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

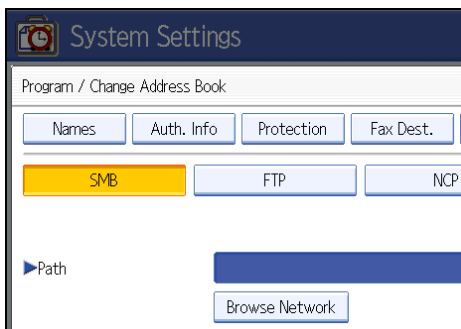
5. Check that [Program / Change] is selected.

6. Select the name whose folder you want to register.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].

8. Press [FTP].



9. Press [Change] under "Server Name".

10. Enter the server name, and then press [OK].

11. Press [Change] under "Path".

12. Enter the path, and then press [OK].

You can enter an absolute path, using this format: "\\user\home\username"; or a relative path, using this format: "directory\sub-directory".

If you leave the path blank, the login directory is assumed to be the current working directory.

You can also enter an IPv4 address.

You can enter a path using up to 128 characters.

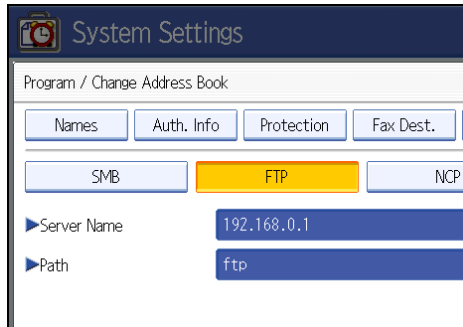
13. To change the port number, press [Change] under "Port Number".

14. Enter the port number using the number keys, and then press the [#] key.

You can enter 1 to 65535.

15. Press [Connection Test] to check the path is set correctly.**16. Press [Exit].**

If the connection test fails, check the settings, and then try again.

17. Press [Auth. Info], and then press [▼Next].**18. Press [Specify Other Auth. Info] on the right side of "Folder Authentication".**

When [Do not Specify] is selected, the FTP User Name and FTP Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings applies. For details, see "File Transfer".

19. Press [Change] under "Login User Name".**20. Enter the login user name, and then press [OK].****21. Press [Change] under "Login Password".****22. Enter the password, and then press [OK].****23. Enter the password again to confirm, and then press [OK].****24. Press [OK].****25. Press [Exit].****26. Press the [User Tools/Counter] key.****Note**

- To register the name, see "Registering Names".
- You can enter up to 64 characters for the user name.
- You can enter up to 64 characters for the password.
- You can enter a server name using up to 64 characters.
- If User Authentication is specified, contact your administrator.

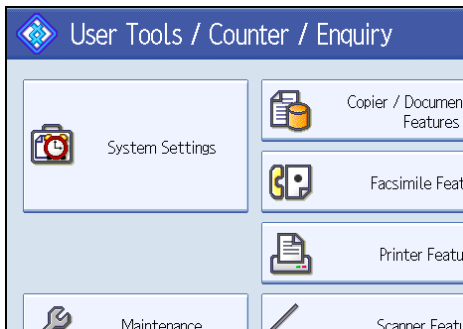
Reference

- p.48 "File Transfer"
- p.235 "Registering Names"

Changing an FTP Folder

This section describes how to change the registered FTP folder.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose folder you want to change.
Press the name key, or enter the registered number using the number keys.
You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. Press [Folder].
8. Select the items you want to change.
9. Press [Connection Test] to check the path is set correctly.
10. Press [Exit].
11. Press [OK].
12. Press [Exit].
13. Press the [User Tools/Counter] key.

↓ Note

- To change the name, key display and title, see "Registering Names".

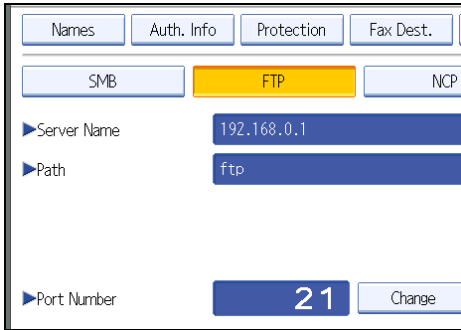
📖 Reference

- p.235 "Registering Names"

Changing the protocol

This section describes how to change the protocol.

1. Press **[SMB]** or **[NCP]**.



5

A confirmation message appears.

2. Press **[Yes]**.

Changing the protocol will clear all settings made under the previous protocol.

3. Enter each item again.

Changing the registered FTP folder

This section describes how to change the registered FTP folder.

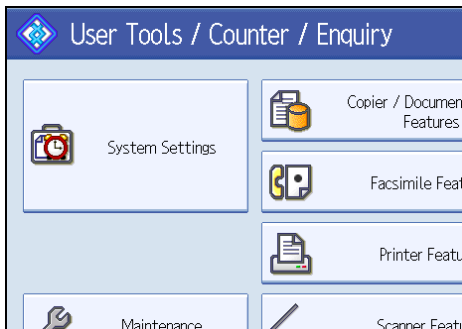
1. Press **[Change]** under "Port Number".
2. Enter the new port number, and then press the **[#]** key.
3. Press **[Change]** under "Server Name".
4. Enter the new server name, and then press **[OK]**.
5. Press **[Change]** under "Path".
6. Enter the new path, and then press **[OK]**.

Deleting an FTP Folder

This section describes how to delete the registered FTP folder.

1. Press the **[User Tools/Counter]** key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

5. Check that [Program / Change] is selected.

6. Select the name whose folder you want to delete.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].

8. Press the protocol which is not currently selected.

A confirmation message appears.

9. Press [Yes].

10. Press [OK].

11. Press [Exit].

12. Press the [User Tools/Counter] key.

↓ Note

- To delete a name entirely, see "Registering Names".

📖 Reference

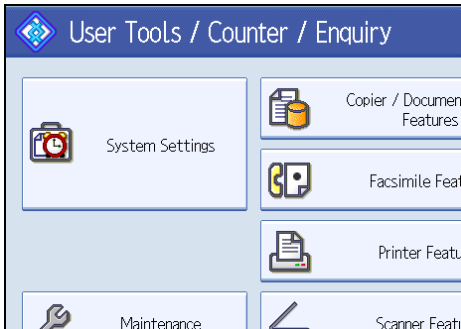
- p.235 "Registering Names"

Registering an NCP Folder

This section describes how to register an NCP folder.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

5. Check that [Program / Change] is selected.

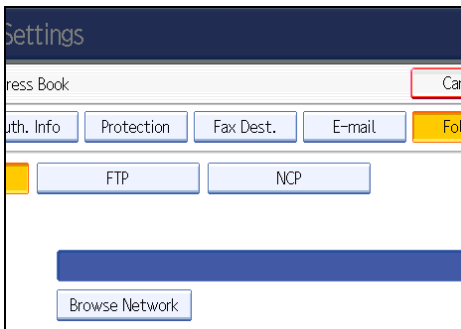
5

6. Press the name you want to register or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].

8. Press [NCP].



9. Select "Connection Type".

If you want to specify a folder in an NDS tree, press [NDS]. If you want to specify a folder on a NetWare server, press [Bindery].

If you have set "Connection Type" to [NDS], enter the user name followed by the name of the context where the user object is located. If the user name is "user" and the context name is "context", enter "user.context".

10. Specify the path.

For details about how to specify the path manually, see "Locating the NCP folder manually".

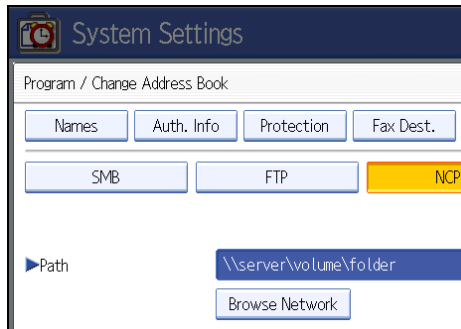
For details about how to specify the path using Browse Network, see "Locating the NCP folder using Browse Network".

11. Press [Connection Test] to check the path is set correctly.

12. Press [Exit].

If the connection test fails, check the settings, and then try again.

13. Press [Auth. Info], and then press [▼Next].



14. Press [Specify Other Auth. Info] on the right side of "Folder Authentication".

When [Do not Specify] is selected, the NCP User Name and NCP Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings applies. For details, see "File Transfer".

15. Press [Change] under "Login User Name".

16. Enter the login user name, and then press [OK].

17. Press [Change] under "Login Password".

18. Enter the password, and then press [OK].

19. Enter the password again to confirm, and then press [OK].

20. Press [OK].

21. Press [Exit].

22. Press the [User Tools/Counter] key.

↓ Note

- To register the name, see "Registering Names".
- You can enter up to 64 characters for the user name.
- You can enter up to 64 characters for the password.
- To specify a folder, you can either enter the path manually or locate the folder by browsing the network.
- If User Authentication is specified, contact your administrator.

📖 Reference

- p.48 "File Transfer"
- p.235 "Registering Names"

Locating the NCP folder manually

This section describes how to locate the NCP folder manually.

1. Press [Change] under "Path".
2. Enter the path where the folder is located.
3. Press [OK].
4. Press [Connection Test] to check the path is set correctly.
5. Press [Exit].

↓ Note

- If you set "Connection Type" to [NDS], and if the NDS tree name is "tree", the name of the context including the volume is "context", the volume name is "volume" and the folder name is "folder", then the path will be "\\tree\volume\context\folder".
- If you set "Connection Type" to [Bindery], and if the NetWare server name is "server", the volume name is "volume" and the folder name is "folder", then the path will be "\\server\volume\folder".
- You can enter a path using up to 128 characters.
- If the connection test fails, check the settings, and then try again.

5

Locating the NCP folder using Browse Network

This section describes how to locate the NCP folder using Browse Network.

1. Press [Browse Network].
2. If you have set "Connection Type" to [NDS], a list of items in the NDS tree appears. If you have set "Connection Type" to [Bindery], a list of items on the NetWare server appears.
3. Search for the destination folder in the NDS tree or NetWare server.
You can press [Up One Level] to switch between levels.
4. Select the folder you want to register.
5. Press [OK].

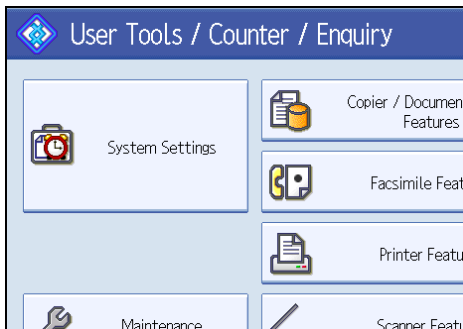
↓ Note

- Only the folders you are allowed to access appear in [Browse Network].
- If the languages used on the machine and the destination you want to view differ, the items in the list may not appear correctly.
- Up to 100 items can be displayed in the list.

Changing an NCP Registered Folder

This section describes how to change the registered NCP folder.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the user of the registered folder you want to change.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].
8. Select "Connection Type".

If you want to specify a folder in an NDS tree, press [NDS]. If you want to specify a folder on a NetWare server, press [Bindery].

9. Specify the folder.

To specify a folder, you can either enter the path manually or locate the folder by browsing the network.

10. Press [Connection Test] to check the path is set correctly.
11. Press [Exit].
12. Press [OK].
13. Press [Exit].
14. Press the [User Tools/Counter] key.

↓ Note

- To change the name, key display and title, see "Registering Names".

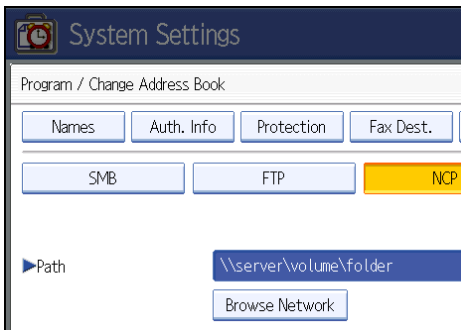
Reference

- p.235 "Registering Names"

Changing the protocol

This section describes how to change the protocol.

1. Press [SMB] or [FTP].



2. A confirmation message appears. Press [Yes].

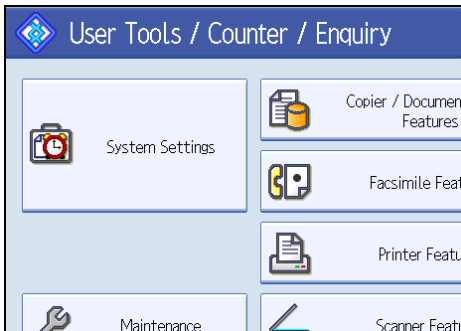
Changing the protocol will clear all settings made under the previous protocol.

3. Enter each item again.

Deleting an NCP Folder

This section describes how to delete the registered NCP folder.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.

6. Select a user of the folder you want to delete.

Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Folder].**8. Press the protocol which is not currently selected.**

A confirmation message appears.

9. Press [Yes].**10. Press [OK].****11. Press [Exit].****12. Press the [User Tools/Counter] key.****↓ Note**

- To delete a name entirely, see "Registering Names".

📖 Reference

- p.235 "Registering Names"

Registering Names to a Group

This section describes how to register names to a group.

You can register names to a group to enable easy management of e-mail addresses and folders for each group.

To add names to a group, the groups must be registered beforehand.

★ Important

- When using Scan to Folder function, you cannot send scan files to a group with over 50 folders registered.
- The maximum number of destinations registerable to a group is 100.

↓ Note

- You can set a protection code to prevent unauthorized access to the folders registered in a group. For details, see "Registering a Protection Code".

📖 Reference

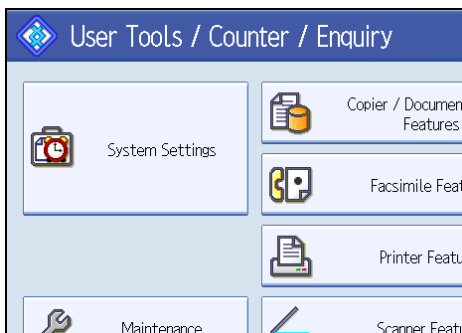
- p.296 "Registering a Protection Code"

5

Registering a Group

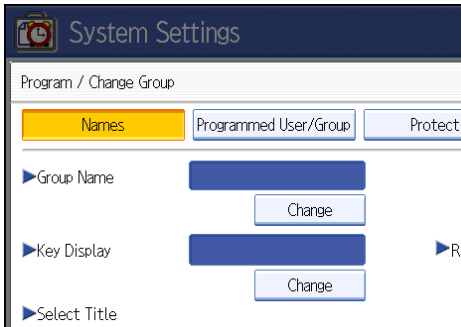
This section describes how to register a group.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book: Program / Change / Delete Group].
5. Check that [Program / Change] is selected.
6. Press [New Program].

7. Press [Change] under "Group Name".



8. Enter the group name, and then press [OK].

The Key Display name is set automatically.

9. Press the title key under "Select Title", if necessary.

The keys you can select are as follows:

- [Frequent]: Added to the page that is displayed first.
- [AB], [CD], [EF], [GH], [IJK], [LMN], [OPQ], [RST], [UVW], [XYZ], [1] to [10].
Added to the list of items in the selected title.

You can select [Frequent] and one more page for each title.

10. When you want to change the key display, press [Change] under "Key Display".

11. Enter the key display, and then press [OK].

12. Press [OK].

13. Press [Exit].

14. Press the [User Tools/Counter] key.

Registering Names to a Group

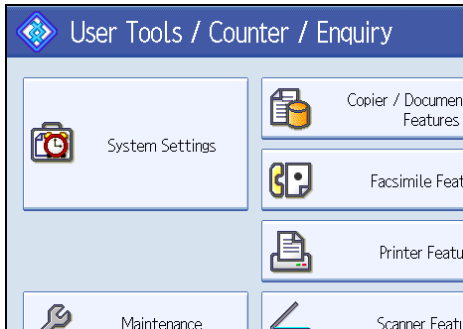
This section describes how to register names to a registered group.

You can put names that have been registered in the Address Book into a group.

When registering new names, you can also register groups at the same time.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book Management].

5. Check that [Program / Change] is selected.

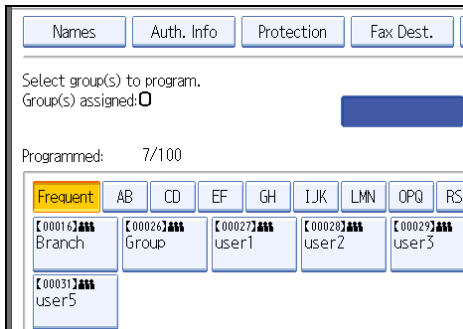
6. Select the name to register in a group.

Press the name key, or enter the registered number using the number keys.

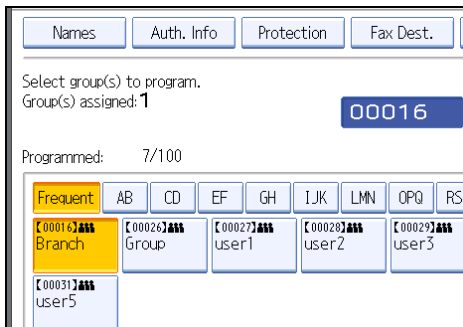
You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Add to Group].

8. Select a group to which you want to add the name.



The group key that you have selected becomes highlighted, and the name is added to it.

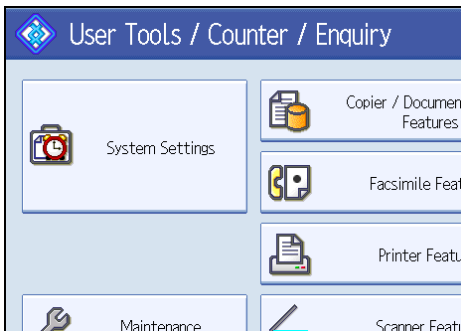


9. Press [OK].
10. Press [Exit].
11. Press the [User Tools/Counter] key.

Adding a Group to Another Group

This section describes how to add a group to another group.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].

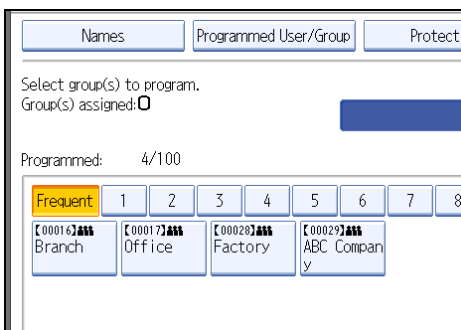


3. Press [Administrator Tools].
4. Press [Address Book: Program / Change / Delete Group].
5. Check that [Program / Change] is selected.
6. Select the group that you want to put into another group.

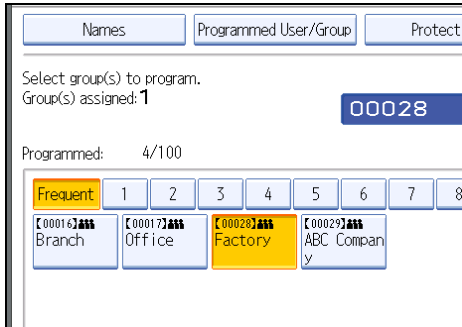
Press the group key, or enter the registered number using the number keys.

You can search by the registered name.

7. Press [Add to Group].
8. Select the group to which you want to add.



The group key that you have selected becomes highlighted, and the group is added to it.

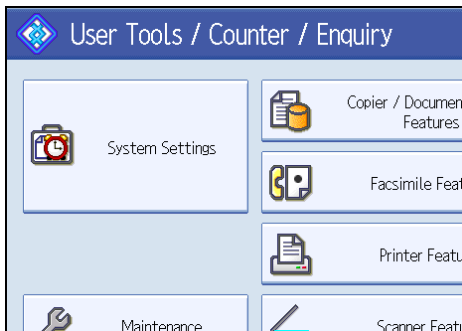


9. Press [OK].
10. Press [Exit].
11. Press the [User Tools/Counter] key.

5 Displaying Names Registered in a Group

This section describes how to display names registered in a group. You can check the names or groups registered in each group.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



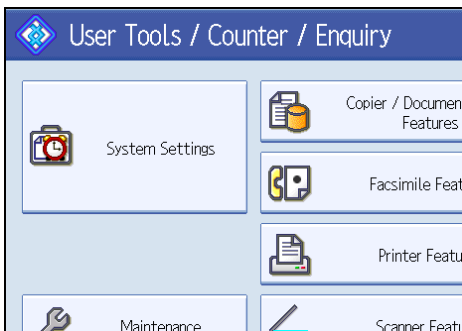
3. Press [Administrator Tools].
4. Press [Address Book: Program / Change / Delete Group].
5. Check that [Program / Change] is selected.
6. Select the group where the members you want to check is registered.
You can search by the registered name.
7. Press [Programmed User/Group].
All the names registered will be displayed.
8. Press [OK].

9. Press [Exit].
10. Press the [User Tools/Counter] key.

Removing a Name from a Group

This section describes how to remove a name from a group.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].

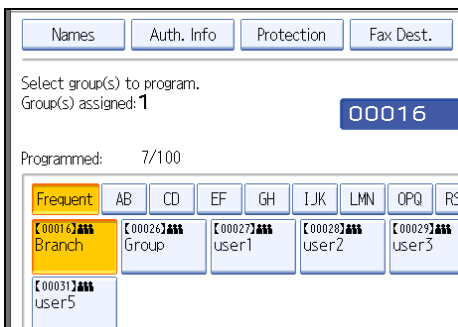


3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name to remove from a group.

Press the name key, or enter the registered number using the number keys.

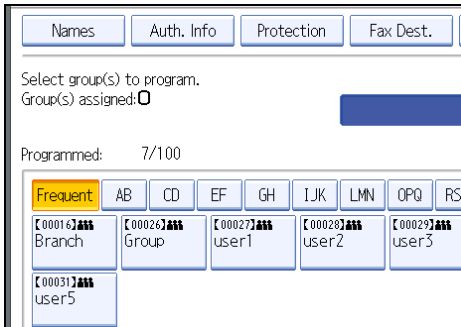
You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Add to Group].
8. Select the group from which you want to remove the name.



The group key is deselected and the name is removed from it.

9. Press [OK].



10. Press [Exit].

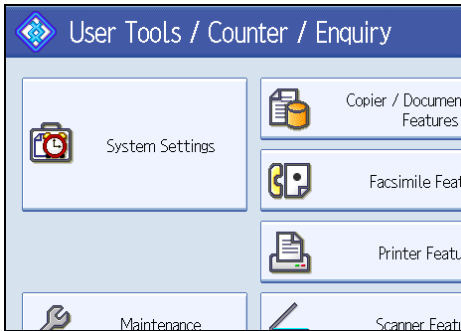
11. Press the [User Tools/Counter] key.

5

Deleting a Group Within Another Group

This section describes how to delete a group within another group.

- 1. Press the [User Tools/Counter] key.**
- 2. Press [System Settings].**



- 3. Press [Administrator Tools].**
- 4. Press [Address Book: Program / Change / Delete Group].**
- 5. Check that [Program / Change] is selected.**
- 6. Select the group that you want to delete from.**

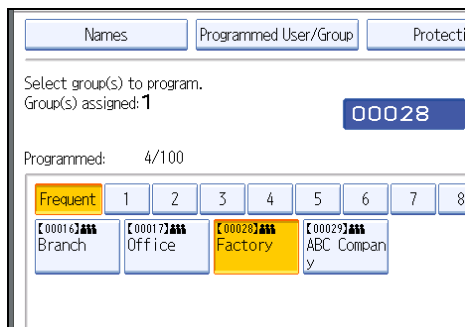
Press the group key, or enter the registered number during the number keys.

You can search by the registered name.

- 7. Press [Add to Group].**

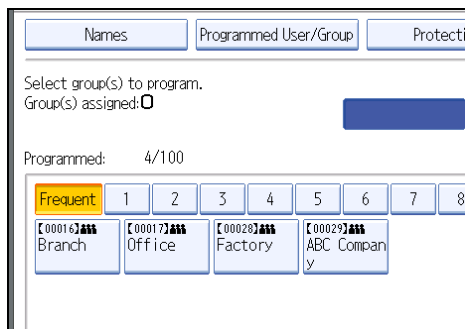
The keys of groups in which the group is registered appear highlighted.

8. Select the group that you want to delete from.



The group key is deselected and the group is deleted from it.

9. Press [OK].



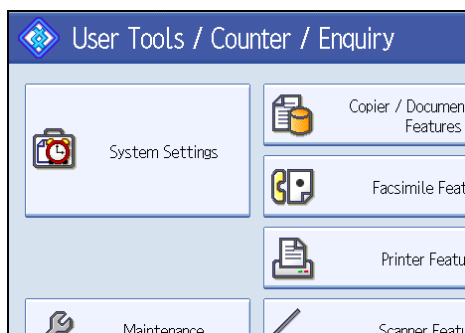
10. Press [Exit].

11. Press the [User Tools/Counter] key.

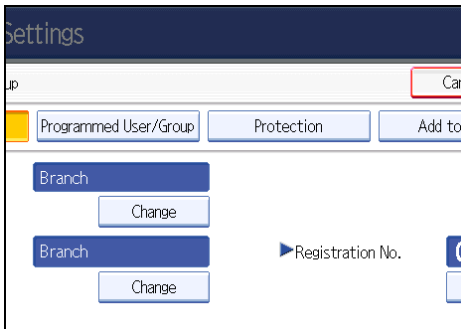
Changing a Group Name

This section describes how to change a group name.

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book: Program / Change / Delete Group].
5. Check that [Program / Change] is selected.
6. Press the group key you want to change.
You can search by the registered name.
7. To change the group name and key display, press [Change] under "Group Name" or "Key Display".



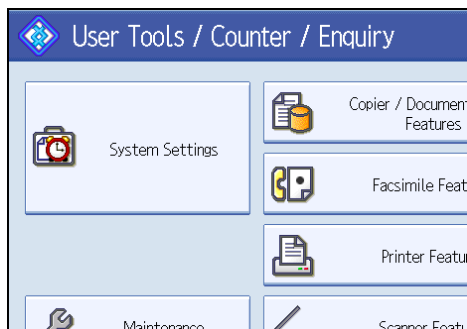
5

8. Enter the new group name or key display, and then press [OK].
9. To change the title, press the title key under "Select Title".
10. To change the registration number, press [Change] under "Registration No.".
11. Enter the new registration number using the number keys.
12. Press the [#] key.
13. Press [OK].
14. Press [Exit].
15. Press the [User Tools/Counter] key.

Deleting a Group

This section describes how to delete a group.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].**3. Press [Administrator Tools].****4. Press [Address Book: Program / Change / Delete Group].****5. Press [Delete].****6. Press a group key you want to delete.**

You can search by the registered name.

7. Press [Yes].**8. Press [Exit].****9. Press the [User Tools/Counter] key.**

Registering a Protection Code

This section describes how to register a Protection Code.

You can stop sender's names or folders being accessed by setting a protection code.

You can use this function to protect the following:

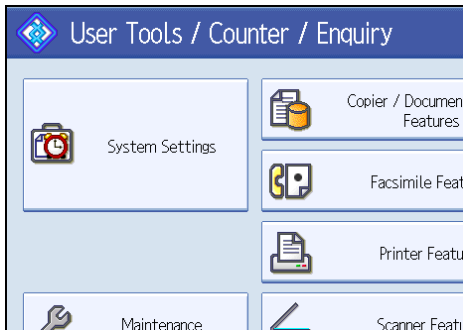
- Folders
You can prevent unauthorized access to folders.
- Sender's names
You can prevent misuse of sender's names.

Registering a Protection Code to a Single User

5

This section describes how to register a Protection code to a single user.

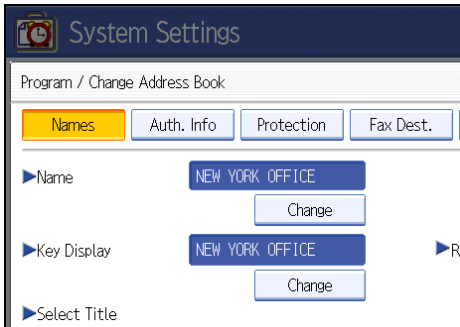
1. Press the [User Tools/Counter] key.
2. Press [System Settings].



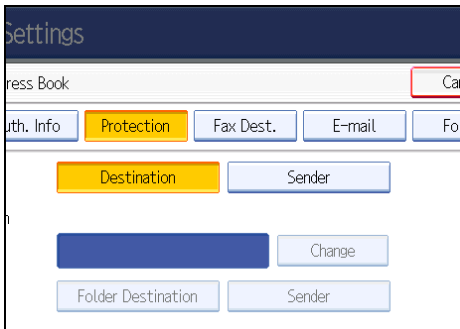
3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Select the name whose protection code you want to register.

You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.

7. Press [Protection].



8. Press [Destination] or [Sender] under "Use Name as".



Both [Destination] and [Sender] can be selected at the same time.

9. Press [Folder Destination] or [Sender] under "Protection Object".

10. Press [Change] under "Protection Code".

11. Enter a protection code using the number keys, and then press the [#] key.

12. Press [OK].

13. Press [Exit].

14. Press the [User Tools/Counter] key.

↓ Note

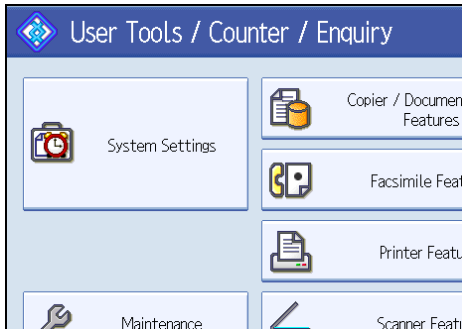
- Specify a protection code of up to eight digits. You can also specify "Protection" without specifying a protection code.

Registering a Protection Code to a Group User

This section describes how to register a Protection Code to a Group User.

1. Press the [User Tools/Counter] key.

2. Press [System Settings].



3. Press [Administrator Tools].

4. Press [Address Book: Program / Change / Delete Group].

5. Check that [Program / Change] is selected.

6. Press the group key you want to register or enter the registered number using the number keys.

You can search by the registered name.

7. Press [Protection].

8. Press [Folder Destination] under "Protection Object".

9. Press [Change] under "Protection Code".

10. Enter a protection code using the number keys, and then press the [#] key.

11. Press [OK].

12. Press [Exit].

13. Press the [User Tools/Counter] key.

↓ Note

- Specify a protection code of up to eight digits. You can also specify "Protection" without specifying a protection code.

Registering SMTP and LDAP Authentication

This section describes how to register SMTP and LDAP Authentication.

SMTP Authentication

This section describes how to register SMTP Authentication.

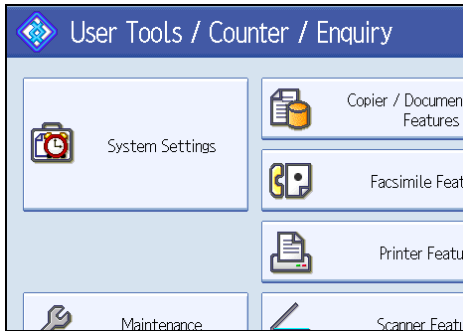
For each user registered in the Address Book, you can register a login user name and login password to be used when accessing an SMTP server.

To use an SMTP server, you need to program it beforehand.

★ Important

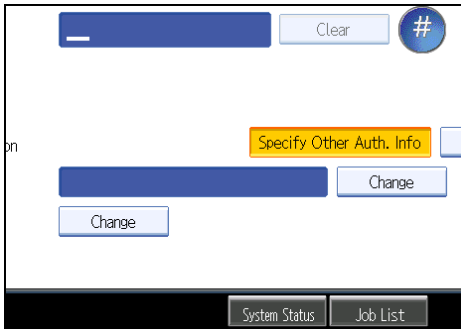
- When [Do not Specify] is selected for SMTP Authentication the User Name and Password that you have specified in SMTP Authentication of File Transfer settings applies. For details, see "File Transfer".

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Press the name you want to register or enter the registered number using the number keys.
You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. Press [Auth. Info].
8. Press [Specify Other Auth. Info] under "SMTP Authentication".

9. Press [Change] under "Login User Name".



10. Enter the login user name, and then press [OK].

11. Press [Change] under "Login Password".

12. Enter the password, and then press [OK].

13. Enter the password again to confirm, and then press [OK].

14. Press [OK].

15. Press [Exit].

16. Press the [User Tools/Counter] key.

Note

- To register the name, see "Registering Names".
- You can enter up to 191 characters for the user name.
- You can enter up to 128 characters for the password.

Reference

- p.48 "File Transfer"
- p.235 "Registering Names"

LDAP Authentication

This section describes how to register LDAP Authentication.

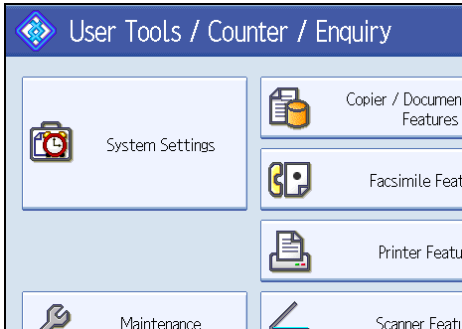
For each user registered in the Address Book, you can register a login user name and login password to be used when accessing an LDAP server.

To use an LDAP server, you need to program it beforehand. For details, see "Programming the LDAP server".

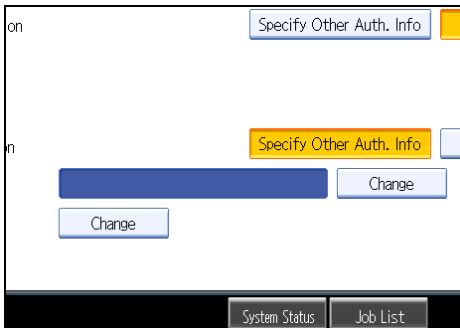
Important

- When [Do not Specify] is selected for LDAP Authentication, the User Name and Password that you have specified in Program / Change LDAP Server of Administrator Tools settings applies. For details, see "Programming the LDAP server".

1. Press the [User Tools/Counter] key.
2. Press [System Settings].



3. Press [Administrator Tools].
4. Press [Address Book Management].
5. Check that [Program / Change] is selected.
6. Press the name you want to register or enter the registered number using the number keys.
You can search by the registered name, user code, fax number, folder name, e-mail address, or IP-Fax destination.
7. Press [Auth. Info], and then press [▼Next].
8. Press [Specify Other Auth. Info] under "LDAP Authentication".
9. Press [Change] under "Login User Name".



10. Enter the login user name, and then press [OK].
11. Press [Change] under "Login Password".
12. Enter the password, and then press [OK].
13. Enter the password again to confirm, and then press [OK].
14. Press [OK].
15. Press [Exit].
16. Press the [User Tools/Counter] key.

 **Note**

- To register the name, see "Registering Names".
- You can enter up to 128 characters for the user name.
- You can enter up to 128 characters for the password.

 **Reference**

- p.66 "Programming the LDAP server"
- p.235 "Registering Names"

6. Special Operations under Windows

This chapter describes how to print files directly from Windows.

Printing Files Directly from Windows

You can print files directly using Windows commands (lpr, ftp, or sftp). For example, you can print PostScript files for PostScript 3.

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 machine 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/Vista/7, Windows Server 2003/2003 R2/ 2008/2008 R2, install "Printing service for UNIX" as the network application.**

Reference

- p.309 "Using DHCP"

Using a Host Name Instead of an IPv4 Address

When a host name is defined, you can specify a printer by host name instead of 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.

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.

1. Open the hosts file using memo pad files, for instance.

On computers running Windows 2000, the hosts file can be found in the following folder:

```
\\WINNT\\SYSTEM32\\DRIVERS\\ETC\\HOSTS
```

On computers running Windows XP/Vista/7 and Windows Server 2003/2003 R2/2008/2008 R2, the hosts file can be found in the following folder:

```
\\WINDOWS\\SYSTEM32\\DRIVERS\\ETC\\HOSTS
```

2. 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.

3. Save the file.

↓ Note

- When using a host name under Windows Server 2003/2003 R2/2008/2008 R2, with IPv6 protocol, perform host name resolution using an external DNS server. The host file cannot be used.

Printing Commands

The following explains printing operations using the "lpr", "ftp" and "sftp" commands.

Enter commands using the command prompt window. The location of the command prompts varies depending on operating systems:

- Windows 2000
[Start] - [Programs] - [Accessories] - [Command Prompt]
- Windows XP/Vista/7, Windows Server 2003/2003 R2/2008/2008 R2
[Start] - [All Programs] - [Accessories] - [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)
 - ftp: 3
 - sftp: 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] \path\file name
```

When using a host name instead of an IP address

```
c:> lpr -Sprinter's host name [-Poption] [-ol] \path\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
```

Printing from the virtual printer

```
C:\>lpr -S "printer's IP address" -P[virtual printer name] [-ol] \path\file name
```

Note

- For details about the virtual printer configuration, see "Using the Virtual Printer", Printer Reference.

ftp / sftp

Use the "put" or "mput" command according to the number of files to be printed.

When one file is printed

```
ftp> put \path\file name [option]
```

Printing from the virtual printer

```
ftp> put \path\file name [virtual printer name],
```

When multiple files are printed

```
ftp> mput \path\file name [\path\file name...] [option]
```

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

1. **Formulate the printer's IP address or the host name of the hosts file printer as an argument and use the "ftp" command.**

```
% ftp "printer's IP address"
```

2. **Enter the user name and password, and then press the [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.

3. **When printing a binary file, set the file mode to binary.**

```
ftp> bin
```

When printing a binary file in ASCII mode, print may not come out correctly.

4. **Specify files to be printed.**

The following shows the examples of printing a PostScript file named "file 1" in the "C:\PRINT" directory and printing file 1 and file 2.

```
ftp> put C:\PRINT\file1 filetype=RPS
```

```
ftp> mput C:\PRINT\file1 C:\PRINT\file2
```

5. **Quit ftp.**

```
ftp> bye
```

↓ Note

- "=", ";", "_", and ":" cannot be used for filenames. File names will be read as option strings.
- If you are using ftp, you cannot specify an option using the "mput" command.
- If you are using ftp, you cannot specify an option using the "pwd" command.
- If you are using sftp, you cannot specify an option using the "cd" command.
- If you are using sftp, you cannot specify an option using the "pwd" command.
- To use SFTP, you must create an open key for SSH communication. Use Web Image Monitor to create an open key. For details, see Web Image Monitor help.
- If personal authentication (Basic, Windows, LDAP, or Integrated Server Authentication) is enabled, only authenticated users (users authenticated by login user name and password) can log in.
- 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.
- For details about login user name and password, see Security Reference, which is the administrator's manual.
- For details about the virtual printer configuration, see "Using the Virtual Printer", Printer Reference.

7. Appendix

When Using Windows Terminal Service/Citrix Presentation Server/Citrix XenApp

The following explains how to use Windows Terminal Service and Maintenance.

Operating Environment

The following operating systems and Citrix Presentation Server/Citrix XenApp versions are supported.

Citrix Presentation Server 4.0, 4.5/XenApp 5.0

- Windows 2000 Server / Advanced Server
- Windows Server 2003/2003 R2
- Windows Server 2008

Supported Printer Drivers

When Windows Terminal Service is operating

- PCL drivers
- PostScript 3

Limitations

The following limitations apply to the Windows Terminal Service environment.

These limitations are built in Windows Terminal Service or Citrix Presentation Server/Citrix XenApp.

Windows Terminal Service

In the Windows Terminal Service environment, some of the printer driver's functions are unavailable.

In an environment where Windows Terminal Service is installed, some of the printer driver's functions are available, 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 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:

```
CHANGE USER /INSTALL
```

To quit the install mode, enter the following command in the MS-DOS command prompt.

CHANGE USER /EXECUTE

Citrix Presentation Server/Citrix XenApp [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 Citrix 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.

Citrix Presentation Server/Citrix XenApp [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, and Windows Server 2003/2003/2008/2008 R2, and the DHCP server included with NetWare and UNIX.
- If you do not use the WINS server, reserve the printer's IP address in the DHCP server so the same IP address is assigned every time.
- To use the WINS server, change the WINS server setting to "active" using the control panel.
- Using the WINS server, you can configure the host name via the remote network printer port.
- DHCP relay-agent is not supported. If you use DHCP relay-agent on a network via ISDN, it will result in increased line charges. This is because your computer connects to the ISDN line whenever a packet is transferred from the printer.
- If there is more than one DHCP server, use the same setting for all servers. The machine operates using data from the DHCP server that responds first.
- DHCP servers can operate in an IPv6 environment, but they cannot be configured to allocate IPv6 addresses or obtain host names.

Using AutoNet

If the machine 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 machine.

↓ 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.
- 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

This section explains 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.

↓ Note

- The WINS server is supported with Windows 2000 Servers WINS Manager.
- For details about the WINS server settings, see Windows Help.
- If there is no reply from the WINS server, the NetBIOS name is registered by broadcast.
- The NetBIOS name can be entered using up to 15 alphanumeric characters.

Using Web Image Monitor

1. **Start a Web browser.**
2. **Enter "http://(machine's IP address or host name) /" in the address bar to access the printer whose settings you want to change.**
Top Page of Web Image Monitor appears.
3. **Click [Login].**
The dialog box for entering the user name and password appears.
4. **Enter the user name and password, and then click [Login].**
Contact your administrator for information about the settings.
Depending on the configuration of your Web browser, the login user name and password might be saved. If you do not want to save them, configure your Web browser's settings so that this information is not saved.
5. **In the menu area, click [Configuration].**
6. **Under "Network", click [IPv4].**
7. **Check that [Active] is selected for [WINS] in the [Ethernet + Wireless LAN] column, and then enter the WINS server IPv4 address in [Primary WINS Server] and [Secondary WINS Server].**
8. **Click [OK].**
9. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**
10. **Quit Web Image Monitor.**

📖 Reference

- p.133 "Using Web Image Monitor"

Using telnet

You can also use telnet to configure WINS.

Use the "wins" command to make the setting with telnet.

Reference

- p.155 "Remote Maintenance Using telnet"

Using the Dynamic DNS Function

Dynamic DNS is a function which dynamically updates (registers and deletes) records (A record, AAAA record, CNAME, and PTR record) managed by the DNS server. When a DNS server is part of the network environment to which this machine, a DNS client, is connected, records can be dynamically updated using this function.

Updating

Updating procedure varies depending on whether the machine IP address is static or acquired by DHCP.

★ Important

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

For a static IPv4 setting

If the IP address or host name is changed, the A and PTR records are updated. If the A record is registered, CNAME is also registered. CNAMEs that can be registered are as follows:

- Ethernet and IEEE 802.11
RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)
However, if CNAME (PRNXXXXXX) overlaps with the host name, CNAME will not be registered.

For DHCPv4 settings

As a substitute for the machine, the DHCP server updates the record, and one of the following occurs:

- When the machine acquires the IP address from the DHCP server, the DHCP server updates the A and PTR records.
- When the machine acquires the IP address from the DHCP server, the machine 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 802.11
RNPXXXXXX (XXXXXX represents the last 3 hexadecimal bytes of the MAC address)

For IPv6 settings

This machine updates the AAAA record and PTR record.

It also updates CNAME when the AAAA record is updated.

When a stateless address is newly set, it is automatically registered on the DNS server also.

↓ Note

- When the dynamic DNS function is not used, records managed by the DNS server must be updated manually, if the machine's IP address is changed.
- To update the record using the machine, the DNS server has to have one of the following:

- No security settings are made.
- If security settings are made, an IP-specified client (this machine) permits updating.

DNS servers targeted for operation

For static IP setting

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008/2008 R2 features
- BIND 8.2.3 or higher

For DHCP setup, when the machine updates the A record

- Microsoft DNS servers with standard Windows 2000 Server/Windows Server 2003/2003 R2/2008/2008 R2 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 2003/2003 R2/2008/2008 R2 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 2003/2003 R2/2008/2008 R2 features
- BIND 9.2.3 or higher

DHCPv4 servers targeted for operation

As a substitute for the machine, 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 2003/2003 R2/2008 features
- ISC DHCP 3.0 or higher
- DHCP server with standard NetWare 5 (or a higher version) features

Setting the dynamic DNS function

Make settings with telnet using the "dns" command.

 **Note**

- For details, see "Remote Maintenance Using telnet".

 **Reference**

- p. 155 "Remote Maintenance Using 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.

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

The MAC address of the filtering printer is printed on the printer configuration page.

For more information about configuring the printer if the router cannot be configured, see the following instructions.

Configuring the printer with NetWare

1. Following the setup method described earlier in this manual, configure the file server.
2. Set the frame type for NetWare environment.

Configuring the printer without NetWare

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

Note

- For more information about selecting a frame type, see "Interface Settings".
- For more information about selecting a protocol, see "Interface Settings".

Reference

- p.39 "Interface Settings"

When using network 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.

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 the ScanRouter delivery software and DeskTopBinder.

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 the ScanRouter delivery software, Auto Document Link, or DeskTopBinder. In addition, set up connected devices using the I/O settings of the ScanRouter delivery software 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. Also, set the correct information for the connected devices using the I/O settings of the ScanRouter delivery software administration utility.

When connected to a computer that uses dial-up access

- Do not install the ScanRouter delivery software on a computer which uses dial-up access.
- When using the ScanRouter delivery software, DeskTopBinder, 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

★ Important

- IPv6 cannot be used on this function.

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

Printing after resetting the 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 IEEE 802.11 Interface Unit is Installed

Please pay attention to the following when using the IEEE 802.11 interface on the network.

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.
-  **Region A** (mainly Europe and Asia)

There is 40 to 60 mm between the antennas, so that they do not touch.

-  **Region B** (mainly North America)

There is 1.6 to 2.4 inch between the antennas, so that they do not touch.

- The exposure glass cover and the ADF do not knock the antennas.

If the network area provides poor radio environment

Where radio wave conditions are bad, the network may not function due to interrupted or failed connections. When checking the wireless LAN signal and the access point, follow the procedure below to improve the situation:

- Position the access point nearer to the 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 more information about access point radio wave conditions, refer to the access point manual.

Configuring IEEE 802.1X

IEEE 802.1X can be configured using Web Image Monitor's administrator mode. You can select four types of EAP authentication method: EAP-TLS, LEAP, EAP-TTLS and PEAP. Note that each EAP authentication method has different configuration settings and authentication procedures.

Types and requirements of certificates are as follows:

EAP Types Requiring a "Site Certificate"

EAP-TLS, EAP-TTLS, PEAP (Necessary except LEAP)

EAP Types Requiring a "Site Certificate" and a "Device Certificate"

EAP-TLS, PEAP (Phase 2 is for TLS only)

If a certificate is required, configure all settings after installing the certificate.

Installing a Site Certificate

Access the authentication server and obtain the CA certificate.

Methods of obtaining certificates differ according to the operating system you are using.

1. Log in to Web Image Monitor in the administrator mode.
2. In the menu area, click [Configuration].
3. Under "Security", click [Site Certificate].
4. Click [Browse] on the "Site Certificate to Import" window, and then select the CA certificate you obtained.
5. Click [Import].
6. Check that the imported certificate's [Status] shows "Trustworthy".
If [Site Certificate Check] shows [Active], and the [Status] of the certificate shows [Untrustworthy], communication might not be possible.
7. Click [OK].
8. Click [Logout].
9. Quit the Web Image Monitor.

Installing Device Certificate

1. Log in to Web Image Monitor in the administrator mode.
2. In the menu area, click [Configuration].
3. Under "Security", click [Device Certificate].
4. Click [Certificate 2] on the "Device Certificate" window, and then click [Request].

5. Enter appropriate "Common Name" and "Country Code" on "Certificate Information" page, and then click [OK].
6. "Updating..." appears. Wait for about 2 minutes, and then click [OK].
7. Click [Details], shown in the "Device Certificate" window as the memo pad icon for "Requesting".
8. Select all, and then copy the entire "Text for Requested Certificate" text that is displayed in the "Certificate Status" window.
9. Access the certificate authority server, and then obtain the CA signified certificate using the text copied into "Text for Requested Certificate" windows.

Obtaining the certificate differs depending on the environment you want to use.

10. Click [Certificate 2] on "Device Certificate" window, and then click [Install].
11. Using a text editor, open the CA signified certificate downloaded in step 9, and then copy over all the text.
12. In the "Enter Certificate Request" window, paste all the text copied into the CA signified certificate.
13. Click [OK].
14. "Updating..." appears. Wait for about one or two minutes, and then click [OK].
15. Check that the "Device Certificate" shows "Installed".
16. Click [Certificate 2] on "Certification", and then click [OK].
17. Click [Logout].
18. Quit Web Image Monitor.

↓ Note

- If you request two certificates simultaneously, the certificate authority might not display either certificate. Click [Cancel Request] to cancel the request.
- You can select [Certificate 1-4] in the "Device Certificate" window. Note that if you select [Certificate 1] in the "Device Certificate" window, you must select "Certificate 1" in the "IEEE 802.1X" drop down menu in the "Certification" window.
- Click [Cancel Request] to cancel the request for the server certificate.
- If "Not found" appears after clicking [OK] in steps 6 and 14, wait one or two minutes, and then click [Refresh].

Setting Items of IEEE 802.1X for Ethernet

1. Log in to Web Image Monitor in the administrator mode.
2. In the menu area, click [Configuration].
3. Under "Security", click [IEEE 802.1X].

4. In "User Name", enter the user name set in the RADIUS server.

5. Enter the domain name in "Domain Name".

6. Select "EAP Type". Configurations differ according to the EAP Type.

EAP-TLS

- Make the following settings according to the operating system you are using:
 - Select [On] or [Off] in "Authenticate Server Certificate".
 - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
 - Enter the host name of the RADIUS server on "Server ID".
 - Select [On] or [Off] in "Permit Sub-domain".

LEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.

EAP-TTLS

- Click [Change] in "Password", and then enter the password set in the RADIUS server.
- Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".
Certain methods might not be available, depending on the RADIUS server you want to use.
- Make the following settings according to the operating system you are using:
 - Select [On] or [Off] in "Authenticate Server Certificate".
 - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
 - Enter the host name of the RADIUS server in "Server ID".
 - Select [On] or [Off] in "Permit Sub-domain".

PEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.
If [TLS] is selected for "Phase 2 Method", you do not need to specify a password.
- Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [MSCHAPv2] or [TLS] in "Phase 2 Method".
When you select [TLS], you must install "IEEE 802.1X Client Certificate".
- Make the following settings according to the operating system you are using:
 - Select [On] or [Off] in "Authenticate Server Certificate".
 - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
 - Enter the host name of the RADIUS server on "Server ID".
 - Select [On] or [Off] in "Permit Sub-domain".

7. Click [OK].

8. "Updating..." appears. Wait for about one or two minutes, and then click [OK].
9. In the menu area, click [Configuration].
10. Under "Interface", click [Interface Settings].
11. Select [Active] in "Ethernet Security".
12. Click [OK].
13. "Updating..." appears. Wait for about one or two minutes, and then click [OK].
14. Click [Logout].
15. Quit the Web Image Monitor.

 **Note**

- If there is a problem with settings, you might not be able to communicate with the printer. To identify the problem, print a network summary.
- If you cannot identify the problem, reset the printer interface to normal, and then repeat the procedure from the beginning.

Setting Items of IEEE 802.1X for Wireless LAN

7

1. Log in to Web Image Monitor in the administrator mode.
2. In the menu area, click [Configuration].
3. Under "Security", click [IEEE 802.1X].
4. In "User Name", enter the user name set in the RADIUS server.
5. Enter the domain name in "Domain Name".
6. Select "EAP Type". Configurations differ according to the EAP Type.

EAP-TLS

- Make the following settings according to the operating system you are using:
 - Select [On] or [Off] in "Authenticate Server Certificate".
 - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
 - Enter the host name of the RADIUS server on "Server ID".
 - Select [On] or [Off] in "Permit Sub-domain".

LEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.

EAP-TTLS

- Click [Change] in "Password", and then enter the password set in the RADIUS server.
- Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".

Certain methods might not be available, depending on the RADIUS server you want to use.

- Make the following settings according to the operating system you are using:
 - Select [On] or [Off] in "Authenticate Server Certificate".
 - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
 - Enter the host name of the RADIUS server in "Server ID".
 - Select [On] or [Off] in "Permit Sub-domain".

PEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.
If [TLS] is selected for "Phase 2 Method", you do not need to specify a password.
- Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [MSCHAPv2] or [TLS] in "Phase 2 Method".

When you select [TLS], you must install "IEEE 802.1X Client Certificate".

- Make the following settings according to the operating system you are using:
 - Select [On] or [Off] in "Authenticate Server Certificate".
 - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
 - Enter the host name of the RADIUS server on "Server ID".
 - Select [On] or [Off] in "Permit Sub-domain".

7. Click [OK].
8. "Updating..." appears. Wait for about one or two minutes, and then click [OK].
9. In the menu area, click [Configuration].
10. Under "Interface", click [Wireless LAN Settings].
11. Select [Wireless LAN] in "LAN Type".
12. Select [Infrastructure Mode] in "Communication Mode".
13. Enter the alphanumeric characters (a-z, A-Z, or 0-9) in [SSID] according to the access point you want to use.
14. Select [WPA] in "Security Method".
15. Select [TKIP] or [CCMP (AES)] in "WPA Encryption Method" according to the access point you want to use.
16. Select [WPA] or [WPA2] in "WPA Authentication Method".
17. Click [OK].
18. "Updating..." appears. Wait for about one or two minutes, and then click [OK].
19. Click [Logout].
20. Quit the Web Image Monitor.

 **Note**

- If there is a problem with settings, you might not be able to communicate with the printer. To identify the problem, print a network summary.
- If you cannot identify the problem, reset the printer interface to normal, and then repeat the procedure from the beginning.

Specifications

Component	Specification
Interface	1000BASE-T, 100BASE-TX, 10BASE-T, IEEE 802.11 a/b/g
Frame type	Ethernet II, IEEE 802.2, IEEE 802.3, SNAP
Printer (LAN-Fax)	<ul style="list-style-type: none"> • TCP/IP (IPv4/IPv6) <ul style="list-style-type: none"> LPR RSH RCP DIPRINT FTP IPP IPP-SSL • IPX/SPX (NetWare) • SMB • WSD (Printer)
Internet Fax	<ul style="list-style-type: none"> • TCP/IP (IPv4/IPv6) <ul style="list-style-type: none"> SMTP SMTP-C POP3 IMAP4
Network Scanner	<ul style="list-style-type: none"> • IPv4 <ul style="list-style-type: none"> RSH FTP FTP-C SMTP SMTP-C POP3 • SMB • NCP • WSD (Scanner)

Component	Specification
Document Server	<ul style="list-style-type: none"> • TCP/IP (IPv4/IPv6) FTP FTP-C HTTP HTTPS
Management Function	<ul style="list-style-type: none"> • TCP/IP (IPv4/IPv6) RSH RCP FTP FTP-C SNMP SNMP-C HTTP HTTPS TELNET NBT DHCP DNS DNS-C LDAP

7

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

To use IPP under Windows XP/Vista/7, Windows Server 2003/2003 R2/ 2008/2008 R2, use the Standard IPP port.

To use IPP under Windows 2000, use SmartDeviceMonitor for Client.

Under Windows Vista/7, or Windows Server 2008/2008 R2, WSD (Printer), WSD (Scanner), uses the WSD Port.

Only the rsh / rcp commands in the Unix OS standard command set are supported.

Copyrights

Boost

Boost Software License - Version 1.0 - August 17th, 2003

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

expat

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Centre, Ltd. and Clark Cooper.

Copyright (c) 2001, 2002 Expat maintainers.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

FreeBSD 4.6.2/netipx

Copyright (c) 1984, 1985, 1986, 1987, 1993

The Regents of the University of California. All rights reserved.

Modifications Copyright (c) 1995, Mike Mitchell

Modifications Copyright (c) 1995, John Hay

Heimdal

Copyright (c) 1997-2005 Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm, Sweden). All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

7

ILU

Copyright (c) 1991-1999 Xerox Corporation. All Rights Reserved.

Unlimited use, reproduction, modification, and distribution of this software and modified versions thereof is permitted. Permission is granted to make derivative works from this software or a modified version thereof. Any copy of this software, a modified version thereof, or a derivative work must include both the above copyright notice of Xerox Corporation and this paragraph. Any distribution of this software, a modified version thereof, or a derivative work must comply with all applicable United States export control laws. This software is made available AS IS, and XEROX CORPORATION DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND NOTWITHSTANDING ANY OTHER PROVISION CONTAINED HEREIN, ANY LIABILITY FOR DAMAGES RESULTING FROM THE SOFTWARE OR ITS USE IS EXPRESSLY DISCLAIMED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR STRICT LIABILITY, EVEN IF XEROX CORPORATION IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IPS™ print language emulations

Copyright (c) 1987-2006 Zoran Corporation. All rights reserved.

JPEG LIBRARY

- The software installed on this product is based in part on the work of the Independent JPEG Group.

libusb

libusb is covered by the LGPL:

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA.

7

libxml2

Copyright (C) 1998-2003 Daniel Veillard. All Rights Reserved.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE DANIEL VEILLARD BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE

Lua

License for Lua 5.0 and later versions

Copyright © 1994-2008 Lua.org, PUC-Rio.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN

AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The m17n library

<http://www.m17n.org/index.html>

The m17n library 1.2.0 release

Copyright (C) 2003, 2004

National Institute of Advanced Industrial Science and Technology (AIST) Registration Number H15PRO112

The m17n library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The m17n library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with the m17n library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307, USA.

7

MD4

Copyright (c) 1990-2, RSA Data Security, Inc. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD4 Message-Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD4 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

MD5

Copyright (c) 1991-2, RSA Data Security, Inc. Created 1991. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

nana

Copyright (c) 1995, 1996, 1997, 1998 Phil Maker All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Net-SNMP

Various copyrights apply to this package, listed in various separate parts below. Please make sure that you read all the parts.

---- Part 1: CMU/UCD copyright notice: (BSD like) -----

Copyright 1989, 1991, 1992 by Carnegie Mellon University

Derivative Work - 1996, 1998-2000

Copyright 1996, 1998-2000 The Regents of the University of California

All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of CMU and The Regents of the University of California not be used in advertising or publicity pertaining to distribution of the software without specific written permission.

CMU AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL CMU OR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM THE LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

---- Part 2: Networks Associates Technology, Inc copyright notice (BSD) ----

Copyright (c) 2001-2003, Networks Associates Technology, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the Networks Associates Technology, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 3: Cambridge Broadband Ltd. copyright notice (BSD) ----

Portions of this code are copyright (c) 2001-2003, Cambridge Broadband Ltd.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Cambridge Broadband Ltd. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 4: Sun Microsystems, Inc. copyright notice (BSD) ----

Copyright © 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Use is subject to license terms below.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, the Sun logo and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the Sun Microsystems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 5: Sparta, Inc copyright notice (BSD) ----

Copyright (c) 2003-2008, Sparta, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Sparta, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 6: Cisco/BUPTNIC copyright notice (BSD) ----

Copyright (c) 2004, Cisco, Inc and Information Network

Center of Beijing University of Posts and Telecommunications.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Cisco, Inc, Beijing University of Posts and Telecommunications, nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---- Part 7: Fabasoft R&D Software GmbH & Co KG copyright notice (BSD) ----

Copyright (c) Fabasoft R&D Software GmbH & Co KG, 2003

oss@fabasoft.com

Author: Bernhard Penz <bernhard.penz@fabasoft.com>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * The name of Fabasoft R&D Software GmbH & Co KG or any of its subsidiaries, brand or product names may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetBSD

1. Copyright Notice of NetBSD

For all users to use this product: This product contains NetBSD operating system:

For the most part, the software constituting the NetBSD operating system is not in the public domain; its authors retain their copyright.

The following text shows the copyright notice used for many of the NetBSD source code. For exact copyright notice applicable for each of the files/binaries, the source code tree must be consulted.

A full source code can be found at <http://www.netbsd.org/>.

Copyright (c) 1996-2005 The NetBSD Foundation, Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed by the NetBSD Foundation, Inc. and its contributors.

4. Neither the name of The NetBSD Foundation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

7

2. Authors Name List

All product names mentioned herein are trademarks or registered trade-marks of their respective owners.

The following notices are required to satisfy the license terms of the software that we have mentioned in this document:

- This product includes software developed by the University of California, Berkeley and its contributors.
- This product includes software developed by the NetBSD Foundation.
- This product includes software developed by The NetBSD Foundation, Inc. and its contributors.
- This product includes software developed for the NetBSD Project. See <http://www.netbsd.org/> for information about NetBSD.
- This product contains software developed by Ignatios Souvatzis for the NetBSD project.
- This product contains software written by Ignatios Souvatzis and Michael L. Hitch for the NetBSD project.
- This product contains software written by Michael L. Hitch for the NetBSD project.

- This product includes cryptographic software written by Eric Young(eay@cryptsoft.com)
- This product includes cryptographic software written by Eric Young(eay@mincom.oz.au)
- This product includes software designed by William Allen Simpson.
- This product includes software developed at Ludd, University of Lulea, Sweden and its contributors.
- This product includes software developed at Ludd, University of Lulea.
- This product includes software developed at the Information Technology Division, US Naval Research Laboratory.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by David Jones and Gordon Ross.
- This product includes software developed by Gordon W. Ross and Leo Weppelman.
- This product includes software developed by Hellmuth Michaelis and Joerg Wunsch.
- This product includes software developed by Internet Research Institute, Inc.
- This product includes software developed by Leo Weppelman and Waldi Ravens.
- This product includes software developed by Mika Kortelainen.
- This product includes software developed by Aaron Brown and Harvard University.
- This product includes software developed by Adam Ciarcinski for the NetBSD project.
- This product includes software developed by Adam Glass and Charles M.Hannum.
- This product includes software developed by Adam Glass.
- This product includes software developed by Advanced Risc Machines Ltd.
- This product includes software developed by Alex Zepeda, and Colin Wood for the NetBSD Projct.
- This product includes software developed by Alex Zepeda.
- This product includes software developed by Alistair G. Crooks.
- This product includes software developed by Alistair G. Crooks. for the NetBSD project.
- This product includes software developed by Allen Briggs.
- This product includes software developed by Amancio Hasty and Roger Hardiman.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by Berkeley Software Design, Inc.
- This product includes software developed by Bill Paul.
- This product includes software developed by Bodo Moeller. (If available, substitute unlauted o for oe)
- This product includes software developed by Boris Popov.
- This product includes software developed by Brad Pepers
- This product includes software developed by Bradley A. Grantham.
- This product includes software developed by Brini.

- This product includes software developed by Causality Limited.
- This product includes software developed by Charles D. Cranor and Seth Widoff.
- This product includes software developed by Charles D. Cranor and Washington University.
- This product includes software developed by Charles D. Cranor, Washington University, and the University of California, Berkeley and its contributors.
- This product includes software developed by Charles D. Cranor, Washington University, the University of California, Berkeley and its contributors.
- This product includes software developed by Charles D. Cranor.
- This product includes software developed by Charles Hannum.
- This product includes software developed by Charles M. Hannum, by the University of Vermont and State Agricultural College and Garrett A. Wollman, by William F. Jolitz, and by the University of California, Berkeley, Lawrence Berkeley Laboratory, and its contributors.
- This product includes software developed by Charles M. Hannum.
- This product includes software developed by Christian E. Hopps, Ezra Story, Kari Mettinen, Markus Wild, Lutz Vieweg and Michael Teske.
- This product includes software developed by Christian E. Hopps.
- This product includes software developed by Christian Limpach
- This product includes software developed by Christopher G. Demetriou for the NetBSD Project.
- This product includes software developed by Christopher G. Demetriou.
- This product includes software developed by Christos Zoulas.
- This product includes software developed by Chuck Silvers.
- This product includes software developed by Colin Wood for the NetBSD Project.
- This product includes software developed by Colin Wood.
- This product includes software developed by Cybernet Corporation and Nan Yang Computer Services Limited
- This product includes software developed by Daishi Kato
- This product includes software developed by Dale Rahn.
- This product includes software developed by Daniel Widenfalk and Michael L. Hitch.
- This product includes software developed by Daniel Widenfalk for the NetBSD Project.
- This product includes software developed by Darrin B. Jewell
- This product includes software developed by David Miller.
- This product includes software developed by Dean Huxley.
- This product includes software developed by Eduardo Horvath.
- This product includes software developed by Eric S. Hvozda.
- This product includes software developed by Eric S. Raymond

- This product includes software developed by Eric Young (eay@mincom.oz.au)
- This product includes software developed by Eric Young (eay@cryptsoft.com)
- This product includes software developed by Eric Young (eay@mincom.oz.au)
- This product includes software developed by Ezra Story and by Kari Mettinen.
- This product includes software developed by Ezra Story, by Kari Mettinen and by Bernd Ernesti.
- This product includes software developed by Ezra Story, by Kari Mettinen, Michael Teske and by Bernd Ernesti.
- This product includes software developed by Ezra Story, by Kari Mettinen, and Michael Teske.
- This product includes software developed by Ezra Story.
- This product includes software developed by Frank van der Linden for the NetBSD Project.
- This product includes software developed by Gardner Buchanan.
- This product includes software developed by Gary Thomas.
- This product includes software developed by Gordon Ross
- This product includes software developed by Gordon W. Ross
- This product includes software developed by HAYAKAWA Koichi.
- This product includes software developed by Harvard University and its contributors.
- This product includes software developed by Harvard University.
- This product includes software developed by Herb Peyerl.
- This product includes software developed by Hubert Feyrer for the NetBSD Project.
- This product includes software developed by Iain Hibbert
- This product includes software developed by Ian F. Darwin and others.
- This product includes software developed by Ian W. Dall.
- This product includes software developed by Ichiro FUKUHARA.
- This product includes software developed by Ignatios Souvatzis for the NetBSD Project.
- This product includes software developed by Internet Initiative Japan Inc.
- This product includes software developed by James R. Maynard III.
- This product includes software developed by Jared D. McNeill.
- This product includes software developed by Jason L. Wright
- This product includes software developed by Jason R. Thorpe for And Communications, <http://www.and.com/>
- This product includes software developed by Joachim Koenig-Baltes.
- This product includes software developed by Jochen Pohl for The NetBSD Project.
- This product includes software developed by Joerg Wunsch
- This product includes software developed by John Birrell.

- This product includes software developed by John P. Wittkoski.
- This product includes software developed by John Polstra.
- This product includes software developed by Jonathan R. Stone for the NetBSD Project.
- This product includes software developed by Jonathan Stone and Jason R. Thorpe for the NetBSD Project.
- This product includes software developed by Jonathan Stone.
- This product includes software developed by Jukka Marin.
- This product includes software developed by Julian Highfield.
- This product includes software developed by Kazuhisa Shimizu.
- This product includes software developed by Kazuki Sakamoto.
- This product includes software developed by Kenneth Stailey.
- This product includes software developed by Kiyoshi Ikehara.
- This product includes software developed by Klaus Burkert, by Bernd Ernesti, by Michael van Elst, and by the University of California, Berkeley and its contributors.
- This product includes software developed by LAN Media Corporation and its contributors.
- This product includes software developed by Leo Weppelman for the NetBSD Project.
- This product includes software developed by Leo Weppelman.
- This product includes software developed by Lloyd Parkes.
- This product includes software developed by Luke Mewburn.
- This product includes software developed by Lutz Vieweg.
- This product includes software developed by MINOURA Makoto, Takuya Harakawa.
- This product includes software developed by Manuel Bouyer.
- This product includes software developed by Marc Horowitz.
- This product includes software developed by Marcus Comstedt.
- This product includes software developed by Mark Brinicombe for the NetBSD project.
- This product includes software developed by Mark Brinicombe.
- This product includes software developed by Mark Murray
- This product includes software developed by Mark Tinguely and Jim Lowe
- This product includes software developed by Markus Wild.
- This product includes software developed by Martin Husemann and Wolfgang Solfrank.
- This product includes software developed by Masanobu Saitoh.
- This product includes software developed by Masaru Oki.
- This product includes software developed by Mats O Jansson and Charles D.Cranor.
- This product includes software developed by Mats O Jansson.

- This product includes software developed by Matt DeBergalis
- This product includes software developed by Matthew Fredette.
- This product includes software developed by Matthias Pfaller.
- This product includes software developed by Michael Graff for the NetBSD Project.
- This product includes software developed by Michael Graff.
- This product includes software developed by Michael L. Hitch.
- This product includes software developed by Michael Shalayeff.
- This product includes software developed by Michael Smith.
- This product includes software developed by Mike Glover and contributors.
- This product includes software developed by Mike Pritchard.
- This product includes software developed by Minoura Makoto.
- This product includes software developed by Nan Yang Computer Services Limited.
- This product includes software developed by Niels Provos.
- This product includes software developed by Niklas Hallqvist, Brandon Creighton and Job de Haas.
- This product includes software developed by Niklas Hallqvist.
- This product includes software developed by Onno van der Linden.
- This product includes software developed by Paul Kranenburg.
- This product includes software developed by Paul Mackerras.
- This product includes software developed by Per Fogelstrom
- This product includes software developed by Peter Galbavy.
- This product includes software developed by Phase One, Inc.
- This product includes software developed by Philip A. Nelson.
- This product includes software developed by Philip L. Budne.
- This product includes software developed by RiscBSD.
- This product includes software developed by Roar Thronaas.
- This product includes software developed by Rodney W. Grimes.
- This product includes software developed by Roger Hardiman
- This product includes software developed by Roland C. Dowdeswell.
- This product includes software developed by Rolf Grossmann.
- This product includes software developed by Ross Harvey for the NetBSD Project.
- This product includes software developed by Ross Harvey.
- This product includes software developed by Scott Bartram.
- This product includes software developed by Scott Stevens.

- This product includes software developed by Shingo WATANABE.
- This product includes software developed by Softweyr LLC, the University of California, Berkeley, and its contributors.
- This product includes software developed by Soren S. Jorvang.
- This product includes software developed by Stephan Thesing.
- This product includes software developed by Steve Woodford.
- This product includes software developed by Takashi Hamada
- This product includes software developed by Takumi Nakamura.
- This product includes software developed by Tatoku Ogaito for the NetBSD Project.
- This product includes software developed by Terrence R. Lambert.
- This product includes software developed by Tetsuya Isaki.
- This product includes software developed by Thomas Gerner
- This product includes software developed by Thomas Klausner for the NetBSD Project.
- This product includes software developed by Tobias Weingartner.
- This product includes software developed by Todd C. Miller.
- This product includes software developed by Tohru Nishimura and Reinoud Zandijk for the NetBSD Project.
- This product includes software developed by Tohru Nishimura for the NetBSD Project.
- This product includes software developed by Tohru Nishimura. for the NetBSD Project.
- This product includes software developed by Tools GmbH.
- This product includes software developed by Toru Nishimura.
- This product includes software developed by Trimble Navigation, Ltd.
- This product includes software developed by WIDE Project and its contributors.
- This product includes software developed by Waldi Ravens.
- This product includes software developed by Wasabi Systems for Zembu Labs, Inc. <http://www.zembu.com/>
- This product includes software developed by Winning Strategies, Inc.
- This product includes software developed by Wolfgang Solfrank.
- This product includes software developed by Yasushi Yamasaki
- This product includes software developed by Zembu Labs, Inc.
- This product includes software developed by the Alice Group.
- This product includes software developed by the Center for Software Science at the University of Utah.
- This product includes software developed by the Charles D. Cranor, Washington University, University of California, Berkeley and its contributors.

- This product includes software developed by the Computer Systems Engineering Group at Lawrence Berkeley Laboratory.
- This product includes software developed by the David Muir Sharnoff.
- This product includes software developed by the Harvard University and its contributors.
- This product includes software developed by the Kungliga Tekniska Hogskolan and its contributors.
- This product includes software developed by the Network Research Group at Lawrence Berkeley Laboratory.
- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.OpenSSL.org/>)
- This product includes software developed by the PocketBSD project and its contributors.
- This product includes software developed by the RiscBSD kernel team
- This product includes software developed by the RiscBSD team.
- This product includes software developed by the SMCC Technology Development Group at Sun Microsystems, Inc.
- This product includes software developed by the University of California, Berkeley and its contributors, as well as the Trustees of Columbia University.
- This product includes software developed by the University of California, Lawrence Berkeley Laboratory and its contributors.
- This product includes software developed by the University of California, Lawrence Berkeley Laboratory.
- This product includes software developed by the University of Illinois at Urbana and their contributors.
- This product includes software developed by the University of Vermont and State Agricultural College and Garrett A. Wollman.
- This product includes software developed by the University of Vermont and State Agricultural College and Garrett A. Wollman, by William F. Jolitz, and by the University of California, Berkeley, Lawrence Berkeley Laboratory, and its contributors.
- This product includes software developed for the FreeBSD project
- This product includes software developed for the NetBSD Project by Bernd Ernesti.
- This product includes software developed for the NetBSD Project by Christopher G. Demetriou.
- This product includes software developed for the NetBSD Project by Christos Zoulas
- This product includes software developed for the NetBSD Project by Emmanuel Dreyfus.
- This product includes software developed for the NetBSD Project by Frank van der Linden
- This product includes software developed for the NetBSD Project by Ignatios Souvatzis.
- This product includes software developed for the NetBSD Project by Jason R. Thorpe.
- This product includes software developed for the NetBSD Project by John M. Vinopal.
- This product includes software developed for the NetBSD Project by Matthias Drochner.

- This product includes software developed for the NetBSD Project by Michael L. Hitch.
- This product includes software developed for the NetBSD Project by Perry E. Metzger.
- This product includes software developed for the NetBSD Project by Scott Bartram and Frank van der Linden
- This product includes software developed for the NetBSD Project by Allegro Networks, Inc., and Wasabi Systems, Inc.
- This product includes software developed for the NetBSD Project by Genetec Corporation.
- This product includes software developed for the NetBSD Project by Jonathan Stone.
- This product includes software developed for the NetBSD Project by Piermont Information Systems Inc.
- This product includes software developed for the NetBSD Project by SUNET, Swedish University Computer Network.
- This product includes software developed for the NetBSD Project by Shigeyuki Fukushima.
- This product includes software developed for the NetBSD Project by Wasabi Systems, Inc.
- This product includes software developed under OpenBSD by Per Fogelstrom Opsycon AB for RTMX Inc, North Carolina, USA.
- This product includes software developed under OpenBSD by Per Fogelstrom.
- This software is a component of "386BSD" developed by William F. Jolitz, TeleMuse.
- This software was developed by Holger Veit and Brian Moore for use with "386BSD" and similar operating systems. "Similar operating systems" includes mainly non-profit oriented systems for research and education, including but not restricted to "NetBSD", "FreeBSD", "Mach" (by CMU).
- This software includes software developed by the Computer Systems Laboratory at the University of Utah.
- This product includes software developed by Computing Services at Carnegie Mellon University (<http://www.cmu.edu/computing/>).
- This product includes software developed by Allen Briggs.
- In the following statement, "This software" refers to the Mitsumi CD-ROM driver:
- This software was developed by Holger Veit and Brian Moore for use with "386BSD" and similar operating systems. "Similar operating systems" includes mainly non-profit oriented systems for research and education, including but not restricted to "NetBSD", "FreeBSD", "Mach" (by CMU).
- In the following statement, "This software" refers to the parallel port driver:
- This software is a component of "386BSD" developed by William F. Jolitz, TeleMuse.

Open LDAP

Copyright (c) 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

The OpenLDAP Public License Version 2.8, 17 August 2003.

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,
2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and
3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

Open SSH

The licences which components of this software fall under are as follows. First, we will summarize and say that all components are under a BSD licence, or a licence more free than that.

OpenSSH contains no GPL code.

1)

Copyright (c) 1995 Tatu Ylonen <ylo@cs.hut.fi>, Espoo, Finland All rights reserved

As far as I am concerned, the code I have written for this software can be used freely for any purpose. Any derived versions of this software must be clearly marked as such, and if the derived work is incompatible with the protocol description in the RFC file, it must be called by a name other than "ssh" or "Secure Shell".

[Tatu continues]

However, I am not implying to give any licenses to any patents or copyrights held by third parties, and the software includes parts that are not under my direct control. As far as I know, all included source code is used in accordance with the relevant license agreements and can be used freely for any purpose (the GNU license being the most restrictive); see below for details.

[However, none of that term is relevant at this point in time. All of these restrictively licenced software components which he talks about have been removed from OpenSSH, i.e.,

- RSA is no longer included, found in the OpenSSL library
- IDEA is no longer included, its use is deprecated
- DES is now external, in the OpenSSL library
- GMP is no longer used, and instead we call BN code from OpenSSL
- Zlib is now external, in a library
- The make-ssh-known-hosts script is no longer included
- TSS has been removed
- MD5 is now external, in the OpenSSL library
- RC4 support has been replaced with ARC4 support from OpenSSL
- Blowfish is now external, in the OpenSSL library

[The licence continues]

Note that any information and cryptographic algorithms used in this software are publicly available on the Internet and at any major bookstore, scientific library, and patent office worldwide. More information can be found e.g. at "<http://www.cs.hut.fi/crypto>".

The legal status of this program is some combination of all these permissions and restrictions. Use only at your own responsibility. You will be responsible for any legal consequences yourself; I am not making any claims whether possessing or using this is legal or not in your country, and I am not taking any responsibility on your behalf.

NO WARRANTY

BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY

MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

2)

The 32-bit CRC compensation attack detector in deattack.c was contributed by CORE SDI S.A. under a BSD-style license.

Cryptographic attack detector for ssh - source code

Copyright (c) 1998 CORE SDI S.A., Buenos Aires, Argentina. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that this copyright notice is retained.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES ARE DISCLAIMED. IN NO EVENT SHALL CORE SDI S.A. BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THIS SOFTWARE.

Ariel Futoransky <futo@core-sdi.com>

<<http://www.core-sdi.com>>

3)

One component of the ssh source code is under a 3-clause BSD license, held by the University of California, since we pulled these parts from original Berkeley code.

Copyright (c) 1983, 1990, 1992, 1993, 1995

The Regents of the University of California. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR

BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

4)

Remaining components of the software are provided under a standard 2-term BSD licence with the following names as copyright holders:

Markus Friedl

Theo de Raadt

Niels Provos

Dug Song

Kevin Steves

Daniel Kouril

Wesley Griffin

Per Allansson

Jason Downs

Solar Designer

Todd C. Miller

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

5)

Portable OpenSSH contains the following additional licenses:

c) Compatibility code (openbsd-compat)

Apart from the previously mentioned licenses, various pieces of code in the `openbsd-compat/` subdirectory are licensed as follows:

Some code is licensed under a 3-term BSD license, to the following copyright holders:

Todd C. Miller

Theo de Raadt

Damien Miller

Eric P. Allman

The Regents of the University of California

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Open SSL

Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"

4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.

6. Redistributions of any form whatsoever must retain the following acknowledgment:

"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

7

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLey License

Copyright (C) 1995-1998 Eric Young (ey@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (ey@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgement: "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)" The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related :-).

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publicly available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence.

[including the GNU Public Licence.]

racoon

Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.

All rights reserved.

RSA BSAFE®



- This product includes RSA BSAFE (c) cryptographic software from RSA Security Inc.
- RSA, BSAFE are either registered trademarks or trademarks of RSA Security Inc. in the United States and/or other countries.
- RSA Security Inc. All rights reserved.

Sablotron (Version 0.82)

Copyright (c) 2000 Ginger Alliance Ltd. All Rights Reserved.

a) The application software installed on this product includes the Sablotron software Version 0.82 (hereinafter, "Sablotron 0.82"), with modifications made by the product manufacturer. The original code of the Sablotron 0.82 is provided by Ginger Alliance Ltd., the initial developer, and the modified code of the Sablotron 0.82 has been derived from such original code provided by Ginger Alliance Ltd.

b) The product manufacturer provides warranty and support to the application software of this product including the Sablotron 0.82 as modified, and the product manufacturer makes Ginger Alliance Ltd., the initial developer of the Sablotron 0.82, free from these obligations.

c) The Sablotron 0.82 and the modifications thereof are made available under the terms of Mozilla Public License Version 1.1 (hereinafter, "MPL 1.1"), and the application software of this product constitutes the "Larger Work" as defined in MPL 1.1. The application software of this product except for the Sablotron 0.82 as modified is licensed by the product manufacturer under separate agreement (s).

d) The source code of the modified code of the Sablotron 0.82 is available at: <http://support-download.com/services/device/sablot/notice082.html>

e) The source code of the Sablotron software is available at: <http://www.gingerall.com>

f) MPL 1.1 is available at: <http://www.mozilla.org/MPL/MPL-1.1.html>

Samba

For SMB transmission, this machine uses Samba.

Copyright (c) Andrew Tridgell 1994-1998.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA.

 **Note**

- The source code for SMB transmission by this machine can be downloaded from the following website: <http://support-download.com/services/scbs>

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either

verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any

other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

7

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW . EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND /OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE . THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH

YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER , OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the program's name and a brief idea of what it does. Copyright (C)

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA

02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

SASL

Copyright (c) 2001 Carnegie Mellon University. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name "Carnegie Mellon University" must not be used to endorse or promote products derived from this software without prior written permission.

For permission or any other legal details, please contact:

Office of Technology Transfer

Carnegie Mellon University

5000 Forbes Avenue

Pittsburgh, PA 15213-3890

(412) 268-4387, fax: (412) 268-7395

tech-transfer@andrew.cmu.edu

4. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by Computing Services at Carnegie Mellon University (<http://www.cmu.edu/computing/>)."

CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

SPX/IPX

Copyright (c) 1984, 1985, 1986, 1987, 1993

The Regents of the University of California. All rights reserved.

Modifications Copyright (c) 1995, Mike Mitchell

Modifications Copyright (c) 1995, John Hay

TinyScheme

LICENSE TERMS

Copyright (c) 2000, Dimitrios Souflis

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of Dimitrios Souflis nor the names of the contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

TrouSerS

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

7

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

- a) it complies with the terms and conditions of this Agreement; and
- b) its license agreement:
 - i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
 - iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
 - iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

- a) it must be made available under this Agreement; and
- b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and

if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one

other than the Agreement Steward has the right to modify this Agreement. IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2 (a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

↓ Note

- To obtain the source code for opening TrouSerS (Version 0.27), which is provided with this machine, access the Web site at the following URL: <http://www.ricoh.com/support/trousers/index.html>
- TrouSerS version control is by SourceForge CVS. For methods of obtaining the source code, access the Web site at the following URL: http://sourceforge.net/cvs/?group_id=126012

WPA Supplicant

7

Copyright (c) 2003-2009, Jouni Malinen <j@w1.fi> and contributors All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and /or other materials provided with the distribution.
3. Neither the name (s) of the above-listed copyright holder (s) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Zilb

Copyright notice:

(C) 1995-2004 Jean-loup Gailly and Mark Adler

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly

jloup@gzip.org

Mark Adler

madler@alumni.caltech.edu

Trademarks

Adobe, Acrobat, Acrobat Reader, PostScript, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Apple, Bonjour, Macintosh, Mac OS, and TrueType are registered trademarks of Apple Inc, registered in the U.S. and other countries.

Citrix, Citrix Presentation Server and Citrix XenApp are either registered trademarks or trademarks of Citrix Systems, Inc.

Firefox is trademarks or registered trademarks of the Mozilla Foundation in the U.S. and other countries.

IPS is a trademark or registered trademark of Zoran Corporation and/or its subsidiaries in the United States or other countries.

JAWS® is a registered trademark of Freedom Scientific, Inc., St. Petersburg, Florida and/or other countries.

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows®, Windows Server®, and Windows Vista® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Monotype is a registered trademark of Monotype Imaging Inc.

NetWare, IPX, IPX/SPX, NCP, and NDS are either registered trademarks or trademarks of Novell, Inc.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

PCL® is a registered trademark of Hewlett-Packard Company.

UNIX is a registered trademark in the United States and other countries, licensed exclusively through, X/Open Company Limited.

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.

The proper names of the Windows operating systems are as follows:

- The product 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 Professional Edition
 - Microsoft® Windows® XP Home Edition
 - Microsoft® Windows® XP Media Center Edition
 - Microsoft® Windows® XP Tablet PC Edition
- The product names of Windows Vista are as follows:
 - Microsoft® Windows Vista® Ultimate

Microsoft® Windows Vista® Business

Microsoft® Windows Vista® Home Premium

Microsoft® Windows Vista® Home Basic

Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

Microsoft® Windows® 7 Home Premium

Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows Server 2003 are as follows:

Microsoft® Windows Server® 2003 Standard Edition

Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:

Microsoft® Windows Server® 2003 R2 Standard Edition

Microsoft® Windows Server® 2003 R2 Enterprise Edition

- The product names of Windows Server 2008 are as follows:

Microsoft® Windows Server® 2008 Standard

Microsoft® Windows Server® 2008 Enterprise

- The product names of Windows Server 2008 R2 are as follows:

Microsoft® Windows Server® 2008 R2 Standard

Microsoft® Windows Server® 2008 R2 Enterprise

INDEX

A

Account for e-mail notification.....	151
Ad-hoc Channel.....	44
Adding a group to another group.....	289
Address book.....	229
Address Book	
Change Order.....	56
Edit Title.....	58
Program / Change / Delete Group.....	56
Switch Title.....	59
Address Book Management.....	55
ADF Original Table Elevation.....	23
Administrator Authentication Management.....	61
Administrator mode.....	136
Administrator tools.....	55
Administrator's E-mail Address.....	51
Authentication information.....	240
Auto Delete File in Document Server.....	62
Auto Erase Memory Setting.....	64
Auto Logout Timer.....	38
Auto Off Setting.....	64
Auto Off Timer (Type 1 and 2).....	36
Auto Off Timer (Type 3 and 4).....	36
Auto Specify Sender Name.....	53
AutoNet.....	309

B

Back up / Restore Address Book.....	59
Bidirectional Communication.....	43

C

Capture	
Delete All Unsent Files.....	63
Owner Defaults.....	63
Ownership.....	63
Public Priority.....	63
Capture Priority.....	63
Capture Server IPv4 Address.....	48
Carrying Over Registered Data for Use by Address Book Auto Register.....	239
Changing a fax destination.....	253
Changing a group name.....	293
Changing a Registered IP-Fax destination.....	258
Changing a registered name.....	236

Changing a user code.....	242
Changing an e-mail destination.....	265
Changing an FTP Folder.....	277
Changing an NCP Registered Folder.....	283
Changing an SMB folder.....	272
Citrix XenApp.....	307
Clearing the number of prints.....	248
Communication Mode.....	44
Connecting the Telephone Line (Type 1 and 2).....	119
Connecting the Telephone Line (Type 3 and 4).....	119
Connecting to the interfaces.....	75
Copier / Document Server Auto Reset Timer.....	37
Copy Count Display.....	22
Copy speed.....	13
Copyrights.....	327
Cover Sheet Tray.....	35

D

Data Carry-over Setting for Address Book Auto-program.....	59
DDNS Configuration.....	40
Default User Name / Password (Send).....	52
Delete All Files in Document Server.....	62
Delete All Logs.....	65
Deleting a fax destination.....	256
Deleting a group.....	294
Deleting a group within another group.....	292
Deleting a registered IP-Fax destination.....	261
Deleting a registered name.....	237
Deleting a user code.....	244
Deleting an e-mail destination.....	266
Deleting an FTP Folder.....	278
Deleting an NCP Folder.....	284
Deleting an SMB Registered Folder.....	273
Delivery Option.....	48
DHCP.....	309
DHCPv6.....	309
Dial-up router.....	315
Direct printing.....	303
Display / Clear / Print Counter per User.....	60
Display / Print Counter.....	60
Display Panel.....	18

Displayed information.....	209
Displaying names registered in a group.....	290
Displaying the counter for each user.....	245
DNS Configuration.....	39
Document server	
Ethernet.....	108
wireless LAN.....	109
Domain Name.....	40
Dynamic DNS.....	312

E

E-mail	
ethernet.....	92
wireless LAN.....	93
E-mail Communication Port.....	52
E-mail destination.....	263
E-mail Reception Interval.....	52
E-mail Storage in Server.....	52
Effective Protocol.....	40
Energy Saver Level.....	64
Energy Saver Timer.....	37
Enhanced External Charge Unit Management.....	62
Erase All Memory.....	65
Ethernet interface	
connecting.....	76
Ethernet Speed.....	41
Extended Security.....	62
External Charge Unit Management.....	62

F

Facsimile Auto Reset Timer.....	38
Fax destination.....	250
Fax E-mail Account.....	54
Fax header.....	251
Fax number.....	250
Fax RX File Transmission.....	48
File transfer.....	48
Firmware Version.....	64
Fixed USB Port.....	65
Format of on-demand e-mail messages.....	154
ftp.....	198, 207, 209, 216, 304
Function Priority.....	22
Function Reset Timer.....	22

G

General features.....	21
Gigabit Ethernet interface	
connecting.....	77
Guest mode.....	136

H

Host name.....	303
Host Name.....	42

I

IEEE 1284 Interface	
connecting.....	81
IEEE 802.11 a/b/g interface	
checking the signal.....	83
connecting.....	82
setup procedure.....	82
IEEE 802.11 interface.....	318
IEEE 802.1X.....	319
device certificate.....	319
Ethernet.....	320
site certificate.....	319
wireless LAN.....	322
IEEE 802.1X Authentication for Ethernet.....	41
info.....	207, 209
Input Prime.....	43
Interface settings.....	39
International TX mode.....	250
Internet Fax	
ethernet.....	88
wireless LAN.....	90
IP address.....	15
IP-Fax.....	251
IPsec.....	40
IPv4 Gateway Address.....	39
IPv6 Gateway Address.....	39
IPv6 Stateless Address Autoconfiguration.....	39

K

Key Counter Management.....	61
Key Repeat.....	23

L

Label insertion.....	251
LAN Type.....	42

Laws and regulations.....	16
LDAP.....	66
changing.....	70
deleting.....	70
programming.....	66
LDAP authentication.....	300
LDAP Search.....	64
Legal prohibition.....	16
Limitations.....	307
Line type.....	120
Locating the NCP folder manually.....	282
Locating the NCP folder using browse network.....	282
Locating the SMB folder manually.....	270
Locating the SMB folder using Browse Network.....	271
Login	
administrator mode.....	138
Web Image Monitor.....	136
lpr.....	304
M	
Machine Action When Limit is Reached.....	60
Machine Data Encryption Settings.....	65
Machine IPv4 Address.....	39
Machine IPv6 Address.....	39
Machine Name.....	42
Machine status	
ftp.....	198
rcp.....	198
rsh.....	198
sftp.....	198
status.....	198
Managing names in the Address Book.....	232
Managing users and machine usage.....	233
Max. Reception E-mail Size.....	52
Message.....	216
Model-specific information.....	17
Models.....	13
N	
Names of Major Items.....	14
NCP Delivery Protocol.....	40
NetWare	
banner page.....	317
form feed.....	316
printing.....	316
NetWare 3.x.....	122, 127
NetWare 4.x.....	124, 129
NetWare 5.....	124, 125, 129
NetWare 5.1.....	124, 125, 129
NetWare 6.....	124, 125, 129
NetWare 6.5.....	124, 125, 129
Network.....	39
Network delivery scanner	
Ethernet.....	99
wireless LAN.....	100
Network interface board configuration.....	210
Network Security Level.....	64
Network settings	
file transfer.....	116
interface settings.....	111
Network TWAIN scanner	
Ethernet.....	105
wireless LAN.....	106
Notes.....	14
Notice.....	12
Notify Machine Status.....	64
Number of Scanner Resends.....	54
NW Frame Type.....	40
O	
Output Copier.....	22
Output Document Server.....	22
Output Facsimile.....	22
Output Printer.....	23
Output Tray Settings (Type 1 and 2).....	23
Output Tray Settings (Type 3 and 4).....	24
P	
Panel Key Sound.....	21
Panel Off Timer.....	37
Paper Tray Priority	
Copier.....	27
Facsimile.....	27
Printer.....	27
Paper Type	
Bypass Tray.....	30
LCT(the LCT).....	34
Tray 1.....	30
Tray 2.....	31

Tray 3.....	33	sftp.....	207
Tray 3-4.....	32	Printer server.....	121
Tray 3(the LCT).....	33	Printer/LAN-Fax	
Parallel Communication Speed.....	43	Ethernet.....	85
Parallel Interface.....	43	wireless LAN.....	86
Parallel Timing.....	43	Printing commands	
Permit SNMPv3 Communication.....	42	ftp.....	304
Permit SSL / TLS Communication.....	42	lpr.....	304
Ping Command.....	42	sftp.....	304
POP before SMTP.....	50	Printing the counter for all users.....	247
POP3 / IMAP4 Settings.....	51	Printing the counter for each user.....	246
Preventing unauthorized user access to shared folders from the machine.....	233	prnlog.....	209
Print Address Book		Program / Change / Delete E-mail Message.....	52
Destination List.....	57	Program / Change / Delete LDAP Server.....	63
Print job information		Program / Change / Delete Realm.....	65
ftp.....	209	Program / Change Administrator.....	61
info.....	209	Program/Change/Delete User Text.....	21
rcp.....	209	Pure IP environment	
rsh.....	209	NetWare 5.....	125
sftp.....	209	NetWare 5.1.....	125
Print List.....	46	NetWare 6.....	125
Print log information		NetWare 6.5.....	125
ftp.....	209	R	
prnlog.....	209	rcp.....	198, 207, 209, 216
rcp.....	209	Realm.....	72
rsh.....	209	changing.....	73
sftp.....	209	deleting.....	74
Print Priority.....	22	programming.....	72
Print server		Reception Protocol.....	51
NetWare 3.x.....	122	Registering a fax destination.....	252
NetWare 4.x.....	124	Registering a FTP folder.....	274
NetWare 5.....	124	Registering a Group.....	286
NetWare 5.1.....	124	Registering a protection code.....	296
NetWare 6.....	124	Registering a protection code to a group user.....	297
NetWare 6.5.....	124	Registering a protection code to a single user.....	296
Print speed.....	13	Registering a user code.....	240
Print Volume Use Limitation		Registering an e-mail destination.....	263
Unit Count Setting.....	60	Registering an IP-Fax destination.....	257
Printer Auto Reset Timer.....	38	Registering an NCP Folder.....	279
Printer Bypass Paper Size.....	29	Registering an SMB folder.....	268
Printer configuration		Registering folders.....	268
ftp.....	207	Registering names.....	235
info.....	207		
rcp.....	207		
rsh.....	207		

Registering names to a group.....	286	status.....	198
Registering Names to a Group.....	287	SUB Code.....	250, 251
Remote maintenance.....	155	Supported printer drivers.....	307
Remote printer		Symbol.....	13
NetWare 3.x.....	127	syslog.....	216
NetWare 4.x.....	129	System Auto Reset Timer.....	37
NetWare 5.....	129	System log information	
NetWare 5.1.....	129	ftp.....	216
NetWare 6.....	129	rcp.....	216
NetWare 6.5.....	129	rsh.....	216
Removing a name from a group.....	291	sftp.....	216
Restore Factory Defaults.....	45	syslog.....	216
Restore IEEE 802.1X Authentication to Defaults.....	42	System Status/Job List Display Time.....	23
rsh.....	198, 207, 209, 216		

S

Scan to folder function	
Ethernet.....	96
wireless LAN.....	97
Scanner Auto Reset Timer.....	38
Scanner Resend Interval Time.....	54
Security Method.....	45
Select Line.....	250
Select Protocol.....	251
Selection Signal Status.....	43
Sending e-mail by quick dial.....	233
Sending fax by quick dial.....	232
Sending scanned files to a shared folder directly.....	233
SEP Code.....	250, 251
Service Mode Lock.....	64
Service Test Call.....	64
Set Date.....	38
Set Time.....	38
sftp.....	198, 207, 209, 216, 304
Signal Control.....	43
Slip Sheet Tray.....	35
Small Size Paper Tray.....	23
SMB Computer Name.....	41
SMB Work Group.....	41
SMTP Authentication.....	49, 299
SMTP Server.....	49
SNMP.....	197
SSID Setting.....	44

T

telnet.....	155
8021x.....	194
access.....	156
authfree.....	157
autonet.....	158
bonjour.....	158
devicename.....	160
dhcp.....	160
dhcp6.....	161
diprint.....	162
dns.....	163
domainname.....	165
etherauth.....	165
etherconfig.....	165
help.....	166
hostname.....	166
ifconfig.....	167
info.....	168
ipp.....	168
ipsec.....	169
ipv6.....	169
logout.....	170
lpr.....	170
netware.....	171
passwd.....	172
pathmtu.....	172
prnlog.....	173
rhttp.....	173
route.....	174
set.....	175
show.....	178
slp.....	178
smb.....	179

snmp.....	180	Web Image Monitor.....	133
sntp.....	183	administrator mode.....	136
spoolsw.....	184	auto e-mail notification.....	153
ssdp.....	185	e-mail notification.....	149
ssh.....	185	guest mode.....	136
status.....	186	help.....	146
syslog.....	186	log out.....	136
upnp.....	186	login.....	136
web.....	187	mail authentication.....	151
wiconfig.....	187	menu.....	136
wins.....	192	mode.....	136
wsmfp.....	193	on-demand e-mail notification.....	153
Timer settings.....	36	setting items.....	139
To change the fax number.....	254	top page.....	134
To change the SEP code.....	254	When Using IPP with SmartDeviceMonitor for Client IPP.....	148
To change the SUB code.....	254	SmartDeviceMonitor for Client.....	148
To select line.....	254	WINS Configuration.....	40
To select the fax header.....	255	WINS server.....	310
To set label insertion.....	255	telnet.....	311
To set the international TX mode.....	255	Web Image Monitor.....	310
Top Page.....	135	Wireless LAN.....	44, 318
Trademarks.....	365	Wireless LAN interface	
Transfer Log Setting.....	65	checking the signal.....	83
Tray paper settings.....	27	connecting.....	82
Tray Paper Size		setup procedure.....	82
Tray 2.....	27	Wireless LAN Signal.....	45
Tray 2-4(the small size paper tray).....	29	WSD scanner	
Tray 3.....	28	Ethernet.....	102
Tray 3-4.....	28	wireless LAN.....	103

U

USB Host Interface	
connecting.....	80
USB interface	
connecting.....	80
User Authentication Management.....	61
User tools.....	19
change the settings.....	19
quit the settings.....	20
Using NetWare.....	122

V

Virtual printer.....	304
----------------------	-----

W

Warm-up Beeper.....	22
---------------------	----

