

CLX-9252 9352 Series  
SCX-8230 8240 Series

# Multi-Functional Printer Administrator's Guide

imagine the possibilities

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# about this administrator's guide

This administrator's guide provides advanced information for administrator's to use and manage the machine. Your machine provides features that are available only for administrators, such as remotely installing the driver or creating the installer package. You can also refer to this guide for maintenance information (eg., cleaning the machine, replacing toner cartridges). This guide provides instructional screen images, easy-to-read tables of features, and step-by-step instructions.

-  • Read the safety information before using the machine.
- If you have a problem using the machine, refer to the troubleshooting chapter in the user's guide on the User's Guide CD.
- Terms used in this administrator's guide are explained in the glossary chapter (see "Glossary" on page 124).
- Use the Index to find information.
- The illustrations in this administrator's guide may differ from your machine depending on its options or models but the procedures are the same.
- The screenshots in this administrator's guide may differ from your machine depending on the machine's firmware/driver version.
- The procedures in this administrator's guide are mainly based on Windows XP.

## Convention

The following table offers the conventions of this guide:

Convention	Description	Example
<b>Bold</b>	For texts on the display or button names on the machine.	<b>Start</b>
<b>Note</b>	Provides additional information or detailed specification of the machine function and feature.	 The date format may differ from country to country.
<b>Caution</b>	Gives users information to protect the machine from possible mechanical damage or malfunction.	 Do not touch the surface of the drum located in the toner cartridge or imaging unit.
<b>Footnote</b>	Provides additional information on certain words or a phrase.	a. pages per minute
<b>("Cross-reference")</b>	Guides users to a reference page for the additional detailed information.	(See "Glossary" on page 124.)

## Intended audience

The expected user for this guide is an administrator with an understanding of:

- General knowledge of machine and other optional parts.
- Basic technical knowledge.
- The network printing environment.
- Network protocols – subnets, security features, addresses.
- Windows operating systems on server and client computers.

## Security policies for administrators

Administrators need to adhere to the following policies in order to securely manage the machine:

- The administrator should place the machine in a secure place where the machine can be protected by the physical contact or modulation,
- The administrator should be fully aware of the security policies the organization has and follow them to manage the machine.
- The administrator should give the right to use the machine to users according to the security policies and procedures.
- The administrator should not use the authority one has over the machine with ill intention.
- The administrator should manage the machine in a trusted network supported environment.
- The administrator should guarantee that the certifying service via certification server is through a safe channel and is safely managed.

- The administrator should provide a Time Stamp feature to keep an accurate system log history.
- The administrator should provide a safe secure network channel with SSL.
- The administrator should save the system log files exported by the Exporting feature in a safe place and protected.
- The administrator should protect the machine from any unauthorized contact with external interfaces.

## Terminology used in this guide

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The following terms are used throughout this guide in examples, instructions, and descriptions:

### Synonym

Some terms in this guide are used interchangeably, as below:

Terms	Synonym
Document	original
Paper	media, print media
Machine	printer, MFP, device
User’s Guide	manual, guide

### Acronyms

The following acronyms are used throughout this guide in examples, instructions, and descriptions:

Acronyms	Meaning
DBMS	Data Base Management System
EAP-MD5	Extensible Authentication Protocol-Message Digest 5
EAP-MS-CHAPv2	Extensible Authentication Protocol-Microsoft Challenge-Handshake Authentication Protocol version 2
IP	Internet Protocol
HTTP	Hypertext Transfer Protocol
HTTPS	Secure Hypertext Transfer Protocol
PEAPv0/EAP-MS-CHAPv2	Protected Extensible Authentication Protocol version 0/Extensible Authentication Protocol-Microsoft Challenge-Handshake Authentication Protocol version 2
SMTP	Simple Mail Transfer Protocol
MFP	Multi-Functional Peripheral/Multi-Functional Printer
S/N	Serial Number
SNMP	Simple Network Management Protocol
SNTP	Simple Network Time Protocol
TLS	Transport Layer Security
UPnP	Universal Plug and Play
MDNS	Multicast Domain Name System
LDAP	Lightweight Directory Access Protocol
SLP	Service Location Protocol
SMB	Server Message Block
SWS	SyncThru™Web Service
WINS	Windows Internet Name Service

Acronyms	Meaning
WSD	Web Service for Device

**Glossary**  
(See "Glossary" on page 124.)

**Product support information**

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**Contact Samsung’s printer service**  
<http://www.samsung.com/printer>

# menu overview and advanced features

This chapter shows an overview of menus provided by your machine and explains the Machine Setup menu in detail. The Machine Setup menu provides various options for administrators to set in order to use the machine to its full capabilities. Read this chapter carefully to understand the diverse features your machine provides.

- For detailed information on how to use each feature, refer to the *User's Guide* on the User's Guide CD. This administrator's guide mainly describes features administrators would often use and settings to set before using the machine.
- For some options, you need to contact your local service provider

**This chapter includes:**

- Menu overview


## Menu overview




Your machine is equipped with various menus that will be useful for both users and administrators. With the menus, administrators can set the settings for the machine or use the various features provided. You can access the menus by pressing the display screen on the control panel.

The following table shows the menus provided by your machine. Use the following table to view the menu structure. The menu column shows the main menu and the option column shows its submenu.

- Some menus may not appear on the display screen depending on the settings or models. If so, it is not applicable to your machine.

## Display screen

The display screen consists of basic menus needed for using the machine. Some menus are grayed out depending on your model. You can return to the main display screen by pressing the  icon on the upper left corner of the screen.

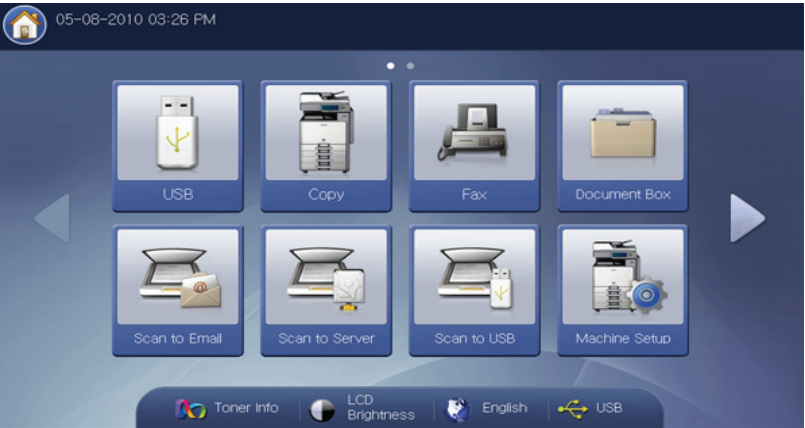
- You can easily move from one menu to another without returning to the main display screen. Press  and you can see other menus. Press the one you want and the screen will change to the selected menu.
- The layout order of the menus may differ depending on how you set them (see "Home Setting (administrator only)" on page 19).
- Options related to color are only available for CLX-9252 9352 series.
- Press the **Back (Cancel)** button to return to the previous screen.
- If there are more menus available, press  or  to move

to set the settings.

- Some menus may not appear on the display screen depending on the settings or models. If so, it is not applicable to your machine.
- Options related to color are only available for CLX-9252 9352 series.

- Machine setup

between pages.



Menu	Option
USB	USB Format USB Capacity USB Print Scan to USB

Menu	Option
Copy	Basic
	Paper Supply
	Reduce/Enlarge
	Duplex
	Color Mode
	Output
	Darkness
	Programs
	Save Document
	Advanced
	Original Size
	Original Orientation
	ID Copy
	N-Up
	Image Repeat
	Image Shift
	Booklet
	Book Copy
	Covers
	Transparency
	Watermark
	Overlay
	Stamp
	Poster Copy
	Duplex Scan Speed
	Job Completion Notification
	Build Job
	Programs
	Save Document
	Image
	Original Type
	Erase Edge
	Sharpness
	Contrast
	Mirror
	Adjust Background
	Erase Backside Image
	Negative Image
	Color Adjustments <sup>a</sup>
	Programs
	Save Document

Menu	Option
Fax	Basic
	Address Book
	Recent
	Pause
	On Hook
	Add to Address
	Fax Line
	Resolution
	Programs
	Save Document
	Advanced
	Original Size
	Duplex
	Original Orientation
	Delay Send
	Priority Send
	Quick Start Fax
	Polling
	Mailbox
	Programs
	Save Document
	Image
	Original Type
	Color Mode <sup>a</sup>
	Darkness
	Adjust Background
	Erase Backside Image
	Programs
	Save Document
Document Box	Favorite
	Box
	Detail
	Search
	Save Document

Menu	Option
Scan to Email	Basic
	Address Book
	Recent
	Add/Edit
	Cc/Bcc
	Attach
	Duplex
	Resolution
	Programs
	Save Document
	Advanced
	Original Size
	Original Orientation
	Delay Send
	Book Scan
	Build Job
	Job Completion Notification
	Bates Numbering
	Programs
	Save Document
	Image
	Original Type
	Color Mode
	Darkness
	Sharpness
	Contrast
	Adjust Background
	Erase Background
	Erase Backside Image
	Scan to Edge
	Programs
	Save Document
	Output
	Quality
	Scan Preset
	File Format
	File Name
	Programs
	Save Document

Menu	Option
Scan to Server	Basic
	Address Book
	Recent
	Add
	Attach
	Duplex
	Resolution
	Programs
	Save Document
	Advanced
	Original Size
	Original Orientation
	Delay Send
	Book Scan
	Build Job
	Job Completion Notification
	Bates Numbering
	Programs
	Save Document
	Image
	Original Type
	Color Mode
	Darkness
	Sharpness
	Contrast
	Adjust Background
	Erase Backside Image
	Scan to Edge
	Programs
	Save Document
	Output
	Quality
	Scan Preset
	File Format
	Programs
	Save Document

Menu	Option
Scan to USB	<b>Basic</b>
	Select
	New Folder
	Detail
	Edit
	Delete
	File Name
	Duplex
	Resolution
	Programs
	Save Document
	<b>Advanced</b>
	Original Size
	Original Orientation
	Book Scan
	Build Job
	Bates Numbering
	Programs
	Save Document
	<b>Image</b>
	Original Type
	Color Mode
	Darkness
	Sharpness
	Contrast
	Adjust Background
	Erase Backside Image
	Scan To Edge
	Programs
	Save Document
	<b>Output</b>
	Quality
	Scan Preset
	File Format
	File Policy
	Folder Creation
	Programs
	Save Document

Menu	Option
<b>Machine Setup</b> If you have selected <b>Basic Authentication</b> , you need to log-in as an administrator and authenticate to access options with an “a” mark under the <b>Machine Setup</b> menu (see "Authentication" on page 40).	<b>Counter</b>
	Device
	User <sup>b</sup>
	<b>Machine Details</b>
	Hardware Options Configuration
	Software Versions
	Manual Versions
	<b>General Settings</b>
	Standard Paper Size
	Measurements
	Color <sup>ab</sup>
	Density <sup>bc</sup>
	Sound
	Date and Time <sup>b</sup>
	Altitude Adjustment
	Power Saver
	Contention Management <sup>b</sup>
	Machine Test <sup>b</sup>
	Supplies Management <sup>b</sup>
	Timers <sup>b</sup>
	Home Setting <sup>b</sup>
	Home Window Background <sup>b</sup>
	PDF Format <sup>b</sup>
	Power Button Operation <sup>c</sup>
	Output

Menu	Option
	<b>Supplies Life</b> <ul style="list-style-type: none"><li>Toner Cartridge</li><li>Imaging Unit</li><li>ITB Assembly<sup>a</sup></li><li>ITB Cleaner<sup>a</sup></li><li>Fuser Assembly</li><li>Finisher Stapler Cartridge</li><li>Booklet Stapler Cartridge</li><li>Punch Waste Hopper</li><li>Waste Toner Container</li></ul>
	<b>Report</b> <ul style="list-style-type: none"><li>System Report</li><li>Fax Reports</li><li>Scan Report</li><li>Font Reports</li><li>Accounting Reports<sup>b</sup></li></ul>
	<b>Application Setting</b> <ul style="list-style-type: none"><li>Copy Settings</li><li>Fax Settings</li><li>Scan to Email Settings</li><li>Scan to Server Settings</li><li>Address Book</li><li>Box Setting<sup>b</sup></li><li>Scan to USB Settings</li></ul>
	<b>Tray Settings</b> <ul style="list-style-type: none"><li>Settings</li></ul>
	<b>Eco Settings<sup>b</sup></b> <ul style="list-style-type: none"><li>Default Eco Mode</li><li>Default Option Settings</li></ul>
	<b>Initial Settings<sup>b</sup></b> <ul style="list-style-type: none"><li>Select language setting for the device</li><li>Installation Wizard</li><li>Device General Settings</li><li>Verify connections</li><li>Network Settings</li><li>Administrator password</li><li>Device Date/Time</li><li>Measurement &amp; Default Paper Size</li><li>Altitude Adjustment</li><li>SNMP Community</li><li>Completed</li></ul>
	<b>Customer Support</b> <ul style="list-style-type: none"><li>Service Center</li><li>Contact Info</li></ul>

Menu	Option
	<b>Application Management<sup>b</sup></b> <ul style="list-style-type: none"><li>Application</li><li>License</li></ul>
	<b>Print Settings</b> <ul style="list-style-type: none"><li>Layout</li><li>Default Paper</li></ul>
	<b>Network Settings<sup>b</sup></b> <ul style="list-style-type: none"><li>TCP/IP</li><li>UPnP Settings</li><li>Print Settings</li><li>SNMP Settings</li><li>MDNS Settings</li><li>Kerberos Settings</li><li>SNTP Settings</li><li>SetIP Settings</li><li>LDAP Settings</li><li>SLP Settings</li><li>Network Filtering Settings</li><li>SMB Auth Settings</li><li>SMTp</li><li>SWS</li><li>Network Test</li></ul>
	<b>Language</b>
	<b>Security<sup>b</sup></b> <ul style="list-style-type: none"><li>Certificate Manager</li><li>HTTPS Settings</li><li>IPSec Settings</li><li>Image Overwrite</li><li>Overwrite Method</li><li>Accounting</li><li>Authentication</li><li>User Profile</li><li>Bates Numbering</li></ul>

- a. CLX-9252 9352 Series only
- b. May only be available for the administrator depending on the authentication settings selected (see "Authentication" on page 40).
- c. SCX-8230 8240 Series only

Counter button

This button leads you to counter options under **Machine Setup** menu. You can access the same options by pressing the **Machine Setup > Counter** on the display screen (see "Counter" on page 11).

Eco button

This button turns the Eco mode on/off which helps you to save printing resources. If the administrator set the Eco mode on, this button lights on, users can turn the mode off by pressing this button. However if the administrator has set the password, users need to enter the correct password to turn this mode off (see "Eco Settings (administrator only)" on page 31).

Job Status button

This button shows the job in process, job in waiting and, in completed, and error messages.

## Machine setup



- Some options are only available to the administrator depending on the authentication settings selected (see "Authentication" on page 40).
- Press the **Back (Cancel)** button if you want to return to the previous screen.

### Log-in

Depending on the authentication settings you selected, you may need to log-in as an administrator to access some options under **Machine Setup** menu (see "Authentication" on page 40).

- Press **Machine Setup** from the display screen.
- Select the option you want. If the option is available for only the administrator, the following screen appears.  
Enter the **ID**, **Password**, and **Domain** using the pop-up keyboard which appears when you press each field.



- Enter the ID and password you first set when you turned on the machine: **Initial Settings** (see "Initial settings (administrator only)" on page 32).
- You can also use the **Recent Users** button to find the recently used ID and **Domain List** button to find the domain from the list stored in the machine.
- When you log-in, you can see the ID of the logged in user on the display.

- Press **OK**.

### Counter

You can check how many pages/jobs were printed, copied, scanned, and faxed-out. You can check the counter by device or users.



You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Information tab > Usage Counters** (see "Usage Counters" on page 71).

## Device

- Press **Machine Setup > Counter** from the display screen.
- Select **Device** using the left/right arrows and check the usage count. You can select the categories below to narrow your search. Each category shows the usage count by job types (mono/color simplex, mono/color duplex)

Total Usage	Print	Copy	Fax Print	Report	Total
Mono Simplex	157	45	0	144	346
Mono Duplex	389	16	0	0	405
Color Simplex	53328	403	0	42	53773
Color Duplex	3925	862	0	54	4841
Total Impressions	57799	1326	0	240	59365

- Total Usage:** Shows the total usage count of your machine.
- Large Page:** Shows the total usage count of impressions on large-sized paper. If the counting method for large-sized paper has changed, the previous usage count may also have changed. You can change the counting method through your machine's service provider.
- Print:** Shows the count of print jobs.
- Copy:** Shows the count of copy jobs.
- Fax Print:** Shows the count of received fax jobs printed.
- Report:** Shows the count of reports printed.
- Send Usage:** Shows the count of images sent via email, server, etc.
- Fax Send Usage (PSTN):** Shows the count of faxes sent.
- Print:** Prints all the usage counter report of your machine.

## User (administrator only)

- Press **Machine Setup > Counter** from the display screen.
- Select **User** using the left/right arrows and check the usage count.

ID	Total Print Usage	Total Copy Usage	Total Scan Usage	Total Fax Usage
admin	0	0	0	0
sunyoung	0	0	0	0
heywood	0	0	0	0
manual	0	0	3	0

### Searching for a user

You can search for the user for whom you want to see job count information.

- Press the input field.  
A pop-up keyboard appears.
- Enter the user name. You do not need to enter the whole name.

3. Press **OK**.
4. The page is reloaded with the search results.

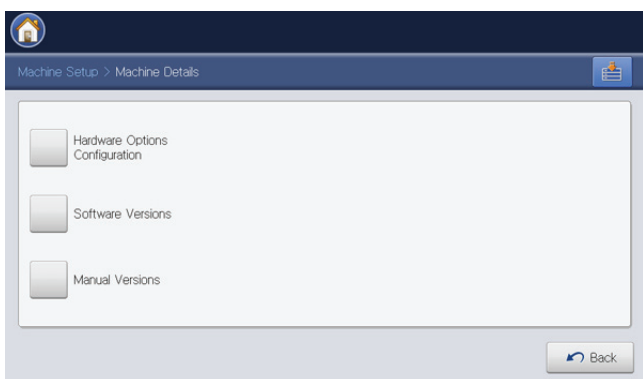
### Checking the information in detail

1. Select the user for whom you want to see detailed information and press **Detail**.
2. Check the information.  
You can edit the information by pressing the **Edit** button.  
You can reset the information by pressing the **Reset** button.
3. Press **Back (Cancel)** to return to the previous screen.

## Machine Details

You can check the detailed machine information. Check the status of installed hardware and software versions to help you maintain the machine. You can download the latest software from the Samsung website (<http://www.samsung.com/printer>).

1. Press **Machine Setup > Machine Details** from the display screen.
2. Press the option you want.

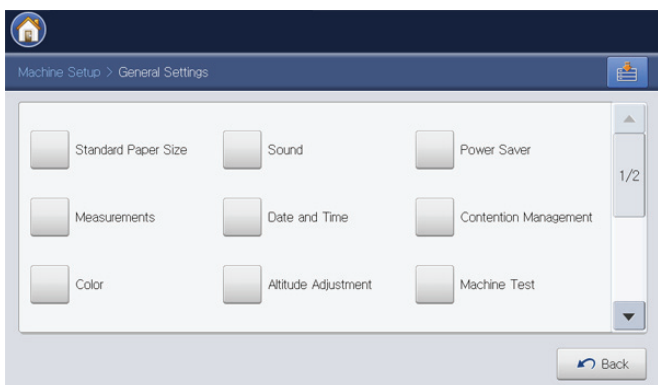


- **Hardware Options Configuration:** Shows the status of installed hardware including optional parts .
- **Software Versions:** Shows the software versions of the systems installed.
- **Manual Versions:** Shows the versions of the User's Guide and Administrator's Guide installed.

3. Press **Back** for return to the previous screen.

## General Settings

Before using the machine, set up the general settings, as follows:  
Press **Machine Setup > General Settings** from the display screen.




Feature	Description
<b>Standard Paper Size</b>	Allows you to set the default paper size to use in the trays (see "Standard Paper Size" on page 13).
<b>Measurements</b>	Allows you to choose the measuring unit (mm or inch) and set the numeric separation (comma or period) for thousands separator (see "Measurements (Setting the measuring unit)" on page 13).
<b>Color<sup>ac</sup></b>	Allows you to adjust the color so the printouts are more sharper and clearer (see "Color (administrator only; CLX-9252 9352 Series only)" on page 13).
<b>Density<sup>bc</sup></b>	Allows you to adjust the density so the printouts are more sharper and clearer (see "Density (administrator only; SCX-8230 8240 Series only)" on page 15).
<b>Sound</b>	Allows you to set the volume for button sound, notice alarm, and sounds occurring during fax job. You can test the volume right after you set the level (see "Sound" on page 15).
<b>Date and Time<sup>c</sup></b>	Allows you to set the date and time. The date and time you set in this option will be used for sending/printing delayed fax/print jobs or will be printed on reports (see "Date and Time (administrator only)" on page 15).
<b>Altitude Adjustment</b>	Allows you to choose the altitude your machine is placed in. Print quality is affected by atmospheric pressure. The atmospheric pressure is determined by the height of the machine above sea level. The higher the altitude, the higher the adjustment, the highest being <b>High 3</b> (see "Altitude Adjustment" on page 16).
<b>Power Saver</b>	Allows you to reduce energy consumption. If you set this option, the machine goes into power saving mode when not in use. There are two power saving modes (see "Power Saver" on page 17).
<b>Contention Management<sup>c</sup></b>	Allows you to select the priority of processing jobs (see "Contention Management (administrator only)" on page 17).
<b>Machine Test<sup>c</sup></b>	Allows you to adjust print/scan area (see "Machine Test (administrator only)" on page 17).
<b>Supplies Management<sup>c</sup></b>	Allows you to set a supply-related notification alarm to help you prepare supplies in advance (see "Supplies Management (administrator only)" on page 19).
<b>Timers<sup>c</sup></b>	Allows you to set the time for machine to return to the default setting or cancel the held job if there is no input for an extended time (see "Timers (administrator only)" on page 19).
<b>Home Setting<sup>c</sup></b>	Allows you to choose the menu order of the Home window (see "Home Setting (administrator only)" on page 19).
<b>Home Window Background<sup>c</sup></b>	Allows you to choose the background image to use for the Home window (see "Home Window Background (administrator only)" on page 20).

Feature	Description
PDF Format <sup>c</sup>	Allows you to select the PDF format. If you select <b>PDF/A</b> , you can create a PDF file that can be displayed exactly the same way regardless of where the file is opened (see "PDF Format (administrator only)" on page 20).
Power Button Operation <sup>b</sup>	Allows you to select the modes for turning the power off. (see "Power Button Operation (administrator only; SCX-8230 8240 Series only)" on page 20).
Output	Allows you to set options for printouts. (see "Output" on page 20).

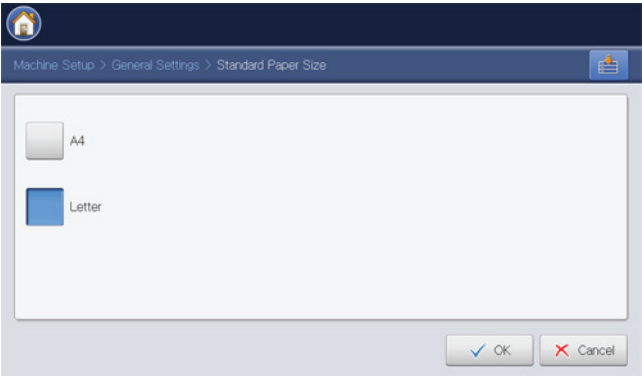
- a. CLX-9252 9352 Series only
- b. SCX-8230 8240 Series only
- c. May only be available for the administrator depending on the authentication settings selected (see "Authentication" on page 40).


Standard Paper Size

You can set the default paper size to use in the trays.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **System** (see "System" on page 76).

1. Press **Machine Setup** > **General Settings** > **Standard Paper Size** from the display screen.
2. Select the appropriate option.

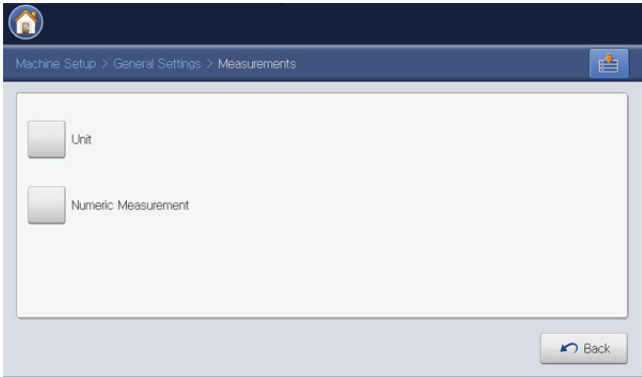


- **A4:** Select to set A4 as the default paper size.
  - **Letter:** Select to set Letter as the default paper size.
-  Depending on the option you select, the order of the paper type listed in the paper related option will be different. For example, if you select **A4**, metric unit paper will be on top of the list.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

Measurements (Setting the measuring unit)

You can choose the measuring unit and numeric separation to use on the screen.

1. Press **Machine Setup** > **General Settings** > **Measurements** from the display screen.
2. Select the appropriate option.




- **Unit:** Select mm or inches.
  - **Numeric Measurement:** Select comma or period to use for the thousand separator.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

Color (administrator only; CLX-9252 9352 Series only)

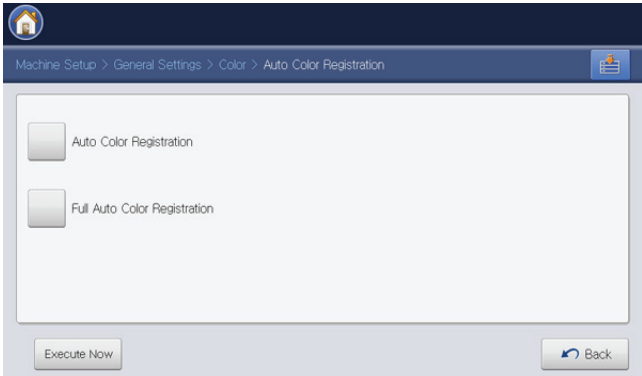
Allows you to adjust the color so the printouts are sharper and clearer.

Auto Color Registration

The machine virtually prints certain patterned image to calibrate the color printing position. This feature enhances the colored image sharper and clearer, which means the machine prints the colored image on the paper more like the one in the monitor.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Color** (see "Color (CLX-9252 9352 Series only)" on page 78).

1. Press **Machine Setup** > **General Settings** > **Color** > **Auto Color Registration** from the display screen.
2. Select the option you want and press **Execute Now**.



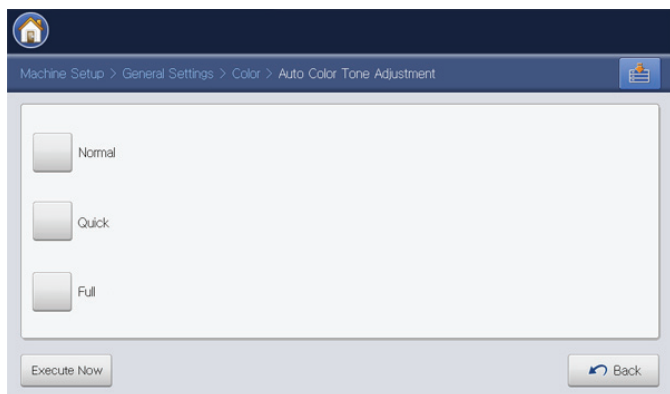
- **Auto Color Registration:** Select to perform auto color registration.

- **Full Auto Color Registration** : .Select to perform full auto color registration.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Auto Color Tone Adjustment

Allows you to automatically adjust color tone for the best possible color print quality.

1. Press **Machine Setup > General Settings > Color > Auto Color Tone Adjustment** from the display screen.
2. Select the appropriate option and press **Execute Now**.

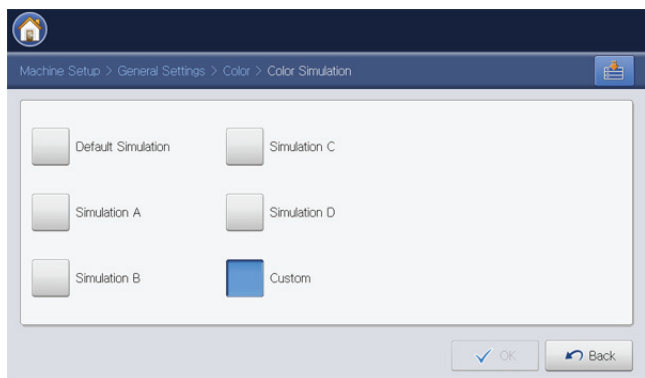


- **Normal:** Automatically adjusts the color tone. Takes more time than **Quick**, but the result is better.
  - **Quick:** Quickly adjusts the color tone. Takes less time than **Normal**.
  - **Full:** Changes the color table to adjust the color tone.
3. The machine starts color tone adjustment.

### Color Simulation

Allows you to choose the color. If you are not satisfied with the current printout color, you can choose the color simulation to suit your needs.

1. Press **Machine Setup > General Settings > Color > Color Simulation** from the display screen.
2. Select the appropriate option and press **OK**.

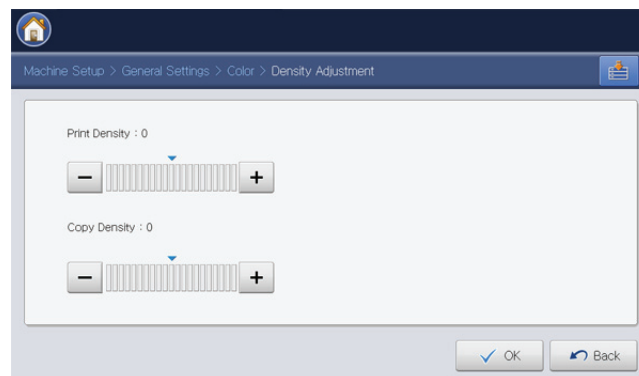


- **Default Simulation:** Returns to the default color setting.
  - **Simulation A~D:** Choose the color setting you want. Each simulation has a different color setting.
  - **Custom:** If you want other color setting than the above, contact the service provider and ask for custom setting.
3. Press **Back (Cancel)** to return to the previous screen.

### Density Adjustment

Allows you to adjust color density for print and copy job.

1. Press **Machine Setup > General Settings > Color > Density Adjustment** from the display screen.
2. Use the “+” and “-” button to adjust the density.

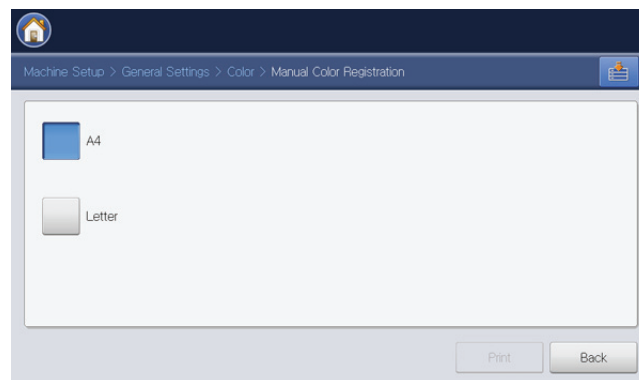


- **Print Density:** Adjust the print density.
  - **Copy Density:** Adjust the copy density.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Manual Color Registration

Allows you to manually register color. The machine virtually prints certain patterned image to calibrate the color printing position. This feature enhances the colored image sharper and clearer, which means the machine prints the colored image on the paper more like the one in the monitor

1. Press **Machine Setup > General Settings > Color > Manual Color Registration** from the display screen.
2. A pop-up window asking you if you want to adjust the color registration manually appears. Press **OK** to adjust the color registration.
3. Select the paper size for which you want to adjust color registration.



4. Press **Print**.
5. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

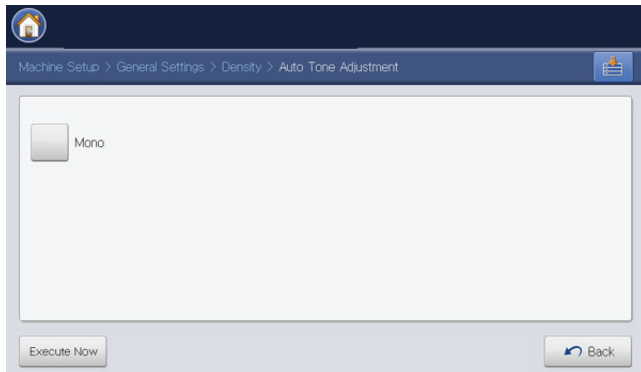
## Density (administrator only; SCX-8230 8240 Series only)

Allows you to adjust the tone and density so the printouts are sharper and clearer.

### Auto Tone Adjustment

Allows you to automatically adjust tone for the best possible print quality.

1. Press **Machine Setup > General Settings > Density > Auto Tone Adjustment** from the display screen.
2. Select the appropriate option and press **Execute Now**.

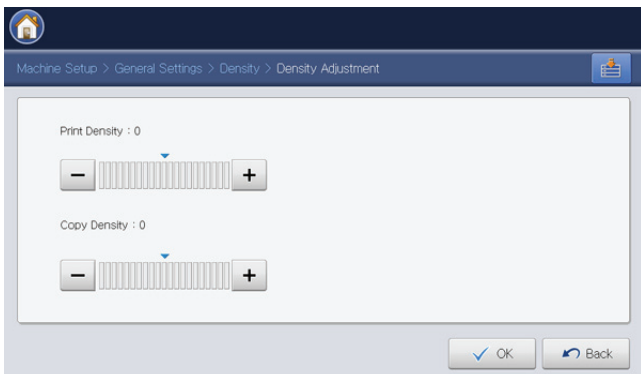


- **Mono:** Automatically adjusts the mono tone.
3. The machine starts tone adjustment.

### Density Adjustment

Allows you to adjust density for print and copy job.


1. Press **Machine Setup > General Settings > Density > Density Adjustment** from the display screen.
2. Use the “+” and “-” button to adjust the density.



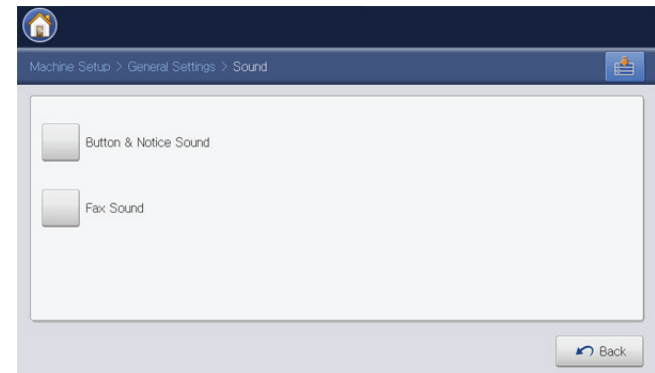
- **Print Density:** Adjust the print density.
  - **Copy Density:** Adjust the copy density.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Sound


You can set the volume for button sound, notice alarm, and the sounds occurring during a fax job. Using the **Quiet/Loud** buttons select the desired volume and press the **Test** button to test the volume.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Sound/Volume** (see "Sound/Volume" on page 77).

1. Press **Machine Setup > General Settings > Sound** from the display screen.
2. Select the appropriate option.




- **Button & Notice Sound:** You can set the sound volume for when pressing the button and notice alarm.
  - **Fax Sound:** You can set the sound occurring during a fax job. This option has other sub-options.
3. If you have selected **Button & Notice Sound**, skip to step 4. If you have selected **Fax Sound**, select the sub option.
  4. Select the volume using the **Quiet/Loud** button. If you want to mute the sound, press the **Mute** button. If you want to check the volume before applying it, press the **Test** button.

 For speaker volume, you can check **Sounds Only in Communication** to turn the speaker on when transmitting a fax.
  5. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.


## Date and Time (administrator only)

When you set the time and date, it will be used for sending/printing delayed fax/print jobs or will be printed on reports. However, if they are not correct, you need to change it to the correct time.

-  • You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** > **Machine Settings** > **System** (see "System" on page 76).
- If the machine's power is cut off, you need to reset the correct time and date once the power has been restored.


1. Press **Machine Setup > General Settings > Date and Time** from the display screen.
2. Select the appropriate option.



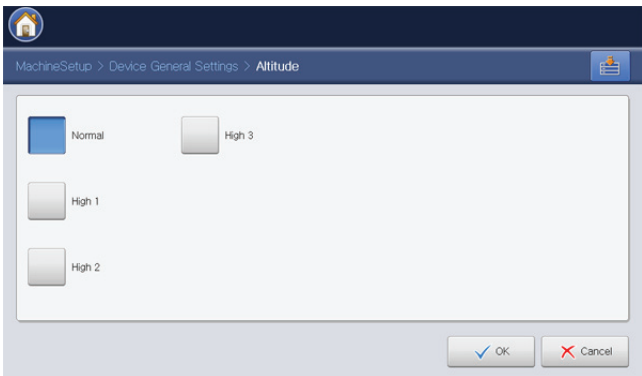
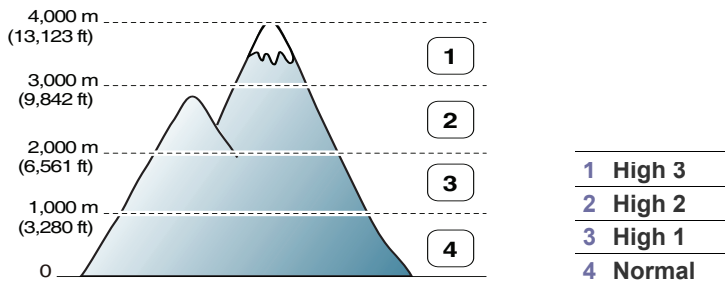
- **Date & Time:** Select the date, time and time offset using the up/down and left/right arrows.  
 Example for selecting the time offset: If your local time is 4 hours faster than **UTC**, press the right arrow until **+4** shows.
  - **Date Format:** Select the date format you want.
  - **Time Format:** Select the time format you want.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Altitude Adjustment

You can choose the altitude of the place where your machine is located. The print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. Therefore, it is important to set the right altitude.


 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **System** (see "System" on page 76).

1. Press **Machine Setup > General Settings > Altitude Adjustment** from the display screen.
2. Press the altitude your machine is in. Refer to the picture below.



3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

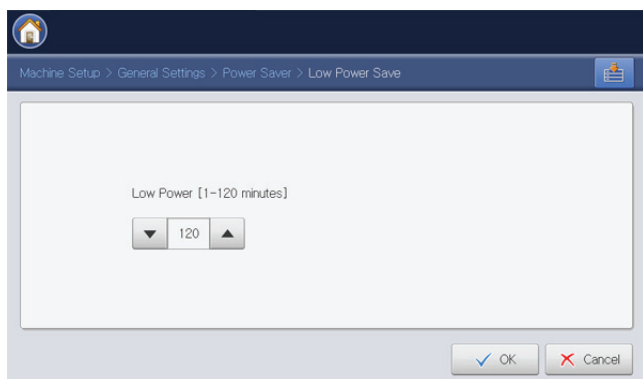
## Power Saver

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **System** (see "System" on page 76).


### Using the low power save option

**Low Power Save** option allows your machine to save power. When you are not using the machine for a while, some parts of the machine automatically enter **Low Power Save** option. **Low Power Save** option conserves less power than **Power Save** option.

1. Press **Machine Setup** > **General Settings** > **Power Saver** > **Low Power Save** from the display screen.
2. Select the appropriate time using the up/down arrows.



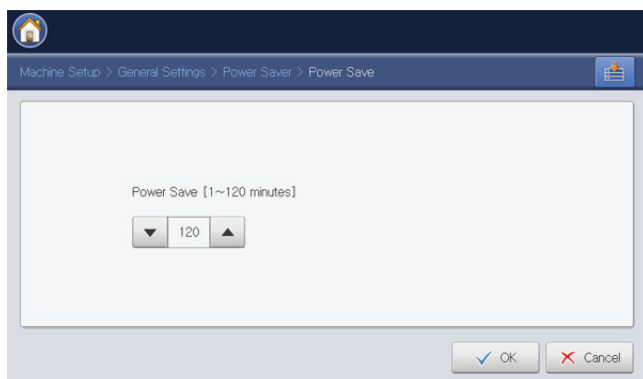
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

 The **Low Power Save** option can be canceled by pressing any button on the control panel or by pressing the display screen.


### Using the power save option

When you are not using the machine for a while, use this option to save power. The machine conserves more power in **Power Save** option than in **Low Power Save** mode.

1. Press **Machine Setup** > **General Settings** > **Power Saver** > **Power Save** from the display screen.
2. Select the appropriate time using the up/down arrows.



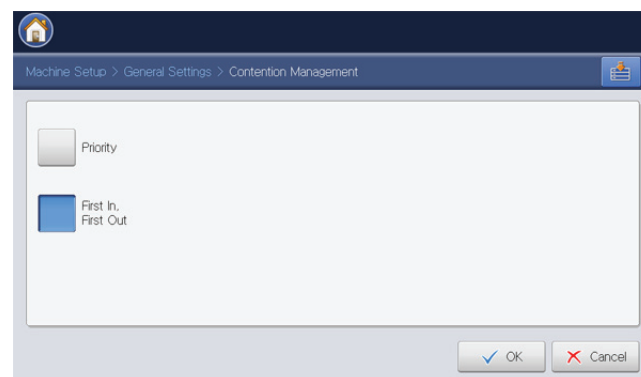
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

 The **Power Save** option can be canceled by pressing any button on the control panel or by pressing the display screen.

## Contention Management (administrator only)

When copy and print jobs are sent to the machine at the same time, you can set the job processing order.

1. Press **Machine Setup** > **General Settings** > **Contention Management** from the display screen.
2. Select the appropriate option.



- **Priority:** Set the priority by numbering the job between 1-16 using the up/down arrows. Higher number has a priority.
- **First In, First Out:** The machine proceeds with the jobs in the requested order.

3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

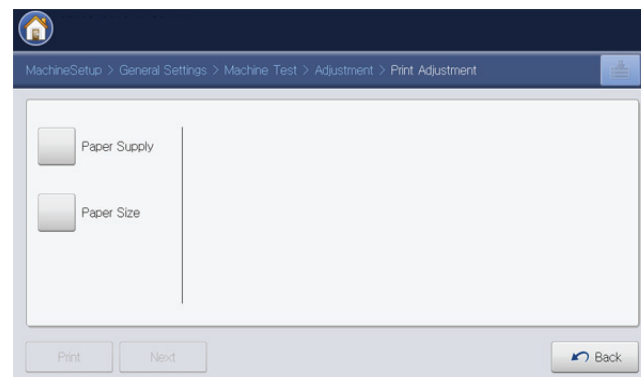
## Machine Test (administrator only)

Press **Machine Setup** > **General Settings** > **Machine Test** from the display screen.


### Print Adjustment

Allows you to adjust the print area. When images are printed off the page or shifted, adjust the print area.

1. Press **Machine Setup** > **General Settings** > **Machine Test** > **Adjustment** > **Print Adjustment** from the display screen.



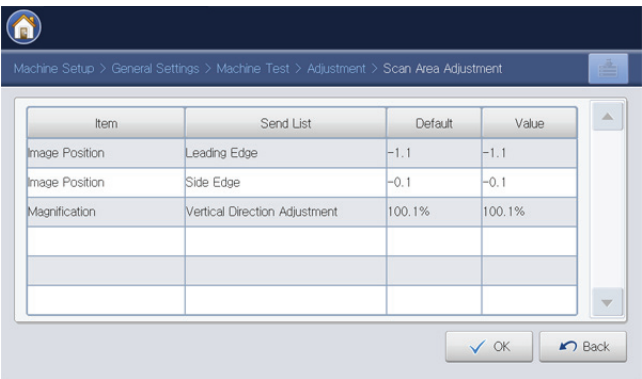
2. Press **Paper Supply** and select the tray to supply the paper from.
3. Press **Paper Size** and select the paper size to use.
4. Press **Print**. The adjustment pattern (chart) is printed.
5. Press **Next** and follow the instruction on the screen.

 The **Next** button is enabled after you press **Print**.

### Scan Area Adjustment

Automatically adjusts scan area. When the machine does not detect the scan area properly, adjust the scan area.

1. Press **Machine Setup > General Settings > Machine Test > Adjustment > Scan Area Adjustment** from the display screen.
2. Load the A4 (or LRT) DADF test chart supplied with DADF faced down into the scanner glass.
3. Check the setting and press **OK**. The settings are set to adjust the paper size you selected.

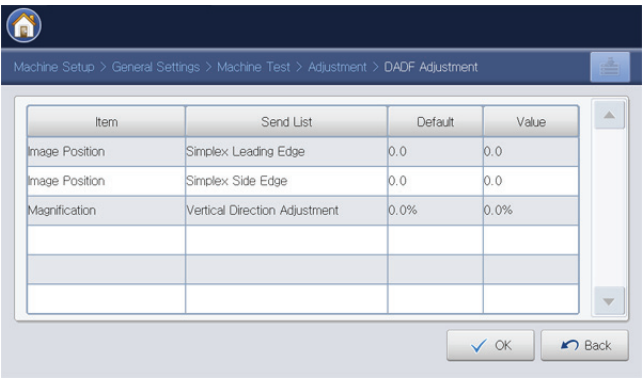


4. The machine automatically adjusts the scan area. When it is done, a pop-up message appears with result. Check the result and press **Close**.
5. Press **Back** to return to the previous screen.

### DADF Adjustment

Automatically adjusts DADF scan area.

1. Press **Machine Setup > General Settings > Machine Test > Adjustment > DADF Adjustment** from the display screen.
2. Load the A4 (or LRT) DADF test chart supplied with DADF faced down into the DADF.
3. Check the setting and press **OK**. The settings are set to adjust the paper size you selected.

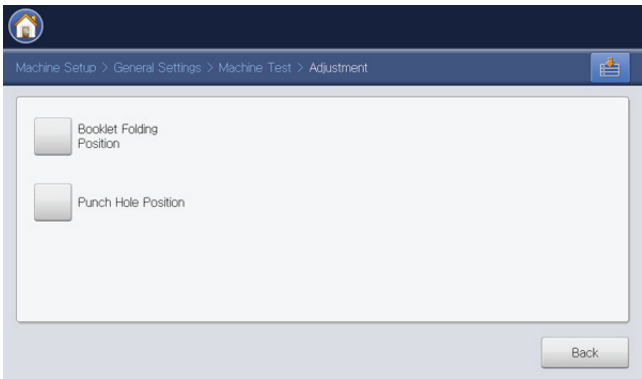


4. The machine automatically adjusts the DADF scan area. When it is done, a pop-up message appears with result.
5. Press **Back** to return to the previous screen.


### Finisher Adjustment

You can adjust the booklet folding position and punch hole position.


1. Press **Machine Setup > General Settings > Machine Test > Adjustment > Finisher Adjustment** from the display screen.
2. Select the appropriate option.




- **Booklet Folding Position:** You can set the position for folding the paper for booklet printing.

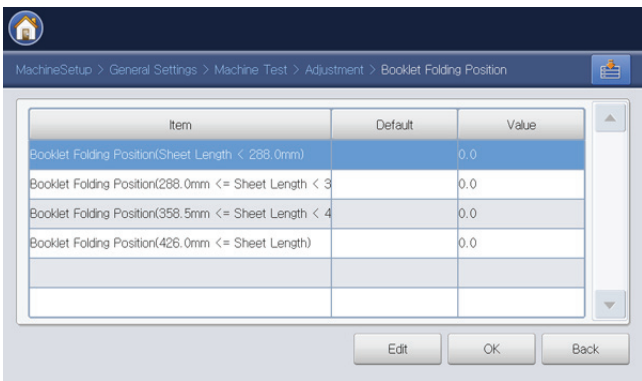
 This option is available only if you have installed the 3,250-Sheet Booklet Finisher. Refer to the *Supplies & Accessories* guide.

- **Punch Hole Position:** You can set the punch hole position.

 This option is available only if you have installed the Hole Punch Kit. Refer to the *Supplies & Accessories* guide.

 The positive number moves the position near to the lead-edge and the negative number moves the position near to the trail-edge.

3. Select the item you want to adjust and press **OK**. If you want to edit the values, select the item and press **Edit**.

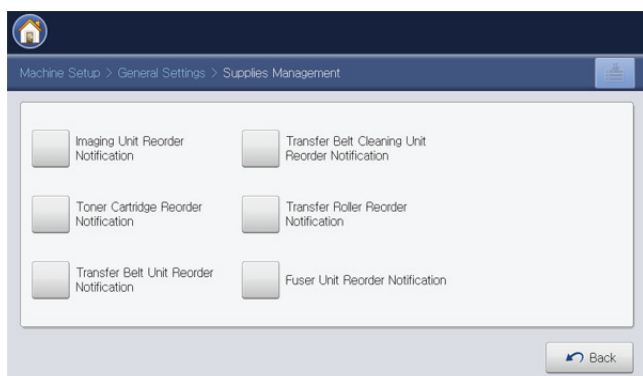


4. The machine automatically adjusts the position.
5. Press **Back** to return to the previous screen.

## Supplies Management (administrator only)

Allows you to set options for supplies reorder notification. If you set this option, the machine will display a warning message when the supplies are running out. Prepare the supplies in advance.

1. Press **Machine Setup > General Settings > Supplies Management** from the display screen.
2. Select the option you want.



- **Low Alert:** Select whether to use this alarm or not.
- **Low Alert Level:** Select the remaining percentage for which you want to receive notification. For example, if you set this value to 10% for imaging unit, and the average imaging unit yield is 20,000 pages, when about 2,000 pages (10% of 20,000 pages) are left, a notification will be sent.

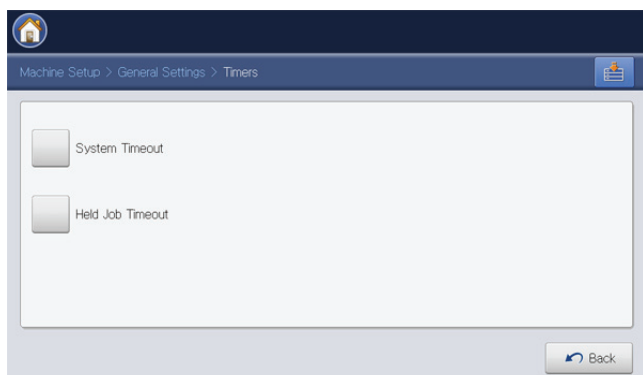
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Timers (administrator only)

When there is no input for a certain period of time, the machine cancels the held job or exits the current menu and goes in to the default settings. You can set the amount of time the machine will wait before it cancels a held job or exits the current menu.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Machine Settings > System** (see "System" on page 76).

1. Press **Machine Setup > General Settings > Timers** from the display screen.
2. Press the option you want to use.

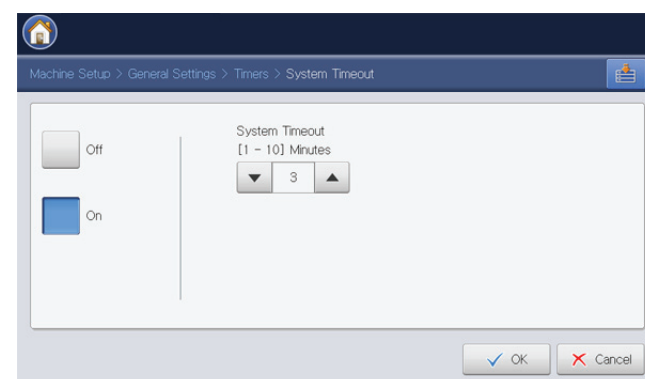


- **System Timeout:** The machine returns to the Copy menu if

there is no input for the given time. The maximum time you can set is 10 minutes.

- **Held Job Timeout:** When an error occurs while printing and there is no signal from the computer, the machine holds a job for a specific time period before deleting it.

3. Press **On**.
4. Select the duration time using the up/down arrows.

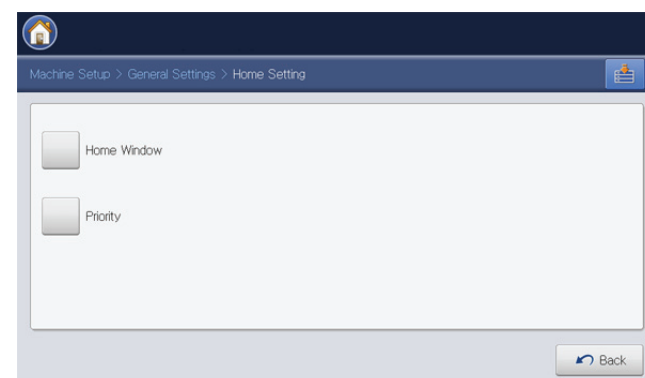


5. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Home Setting (administrator only)

Allows you to set the home window and order of menus in the home window.


1. Press **Machine Setup > General Settings > Home Setting** from the display screen.
2. Select the option you want.



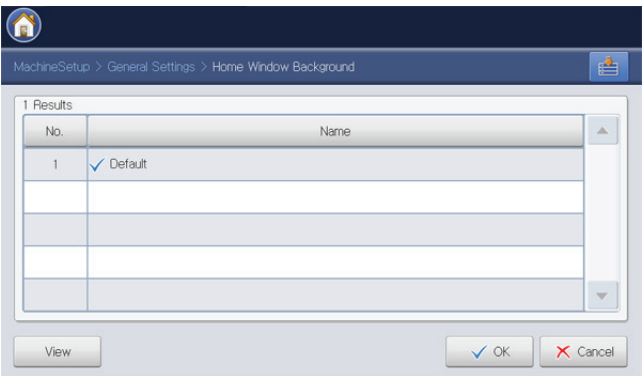
- **Home Window:** You can select the menus to appear on the Home screen. Select the menu to be appeared on the Home screen and press **Enable** and **OK**.
  - **Priority :** You can select the order of the home window menus. Select the **Bundle Name** you want to move up/down and press the **Up/Down** buttons.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.


### Home Window Background (administrator only)

Allows you to choose the background image to use for the Home window.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Home Window Customization** (see "Home Window Customization" on page 78).

1. Press **Machine Setup** > **General Settings** > **Home Window Background** from the display screen.
2. From the list, select the file you want to use for home window background and press **OK**.



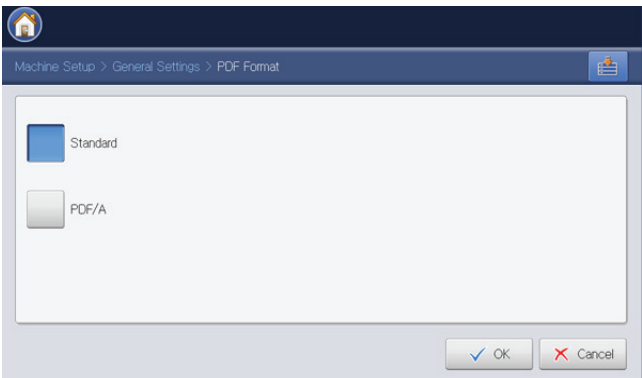
 If you want to see the background image before applying, select the image file and press the **View** button. You can also apply the background image from there.

3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.


### PDF Format (administrator only)

Allows you to select the PDF type when saving the data as a PDF file.

1. Press **Machine Setup** > **General Settings** > **PDF Format** from the display screen.
2. Select the option you want.




- **Standard:** Saves the data as a regular PDF.
- **PDF/A:** Saves the data as a PDF that has the necessary information to render itself in any environment.

 A PDF/A file must be self-contained: it cannot rely on another application to render fonts, open hyperlinks, or execute scripts, audio files, or video files.

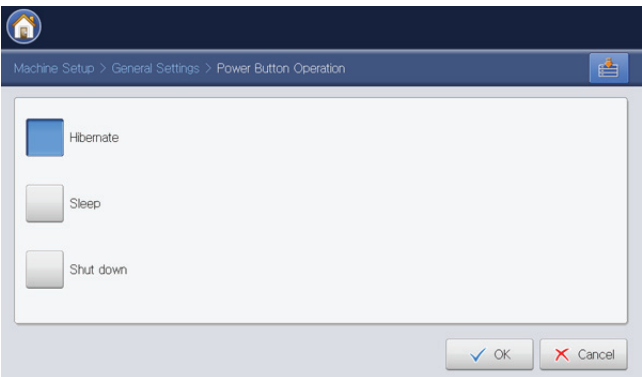
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Power Button Operation (administrator only; SCX-8230 8240 Series only)

Allows you to select the modes for turning the power off. When you turn the machine's power off using the **Power** button, there are three modes you can choose to put the machine into: **Sleep**, **Hibernate**, or **Shut down**. The mode you choose here will be applied to the machine when the user presses the **Power** button to turn the power off.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **System** > **General** > **Power Button Operation** (see "System" on page 76).

1. Press **Machine Setup** > **General Settings** > **Power Button Operation** from the display screen.
2. Select the option you want.




- **Hibernate:** The electricity is completely cut-off. However, it will take more time to revive the system than the **Sleep** mode.
- **Sleep:** The system revival time is shorter, but the amount of saved electricity is less.
- **Shut down:** The electricity and the system is completely shut down. It will take a few minutes to revive the system.

3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Output

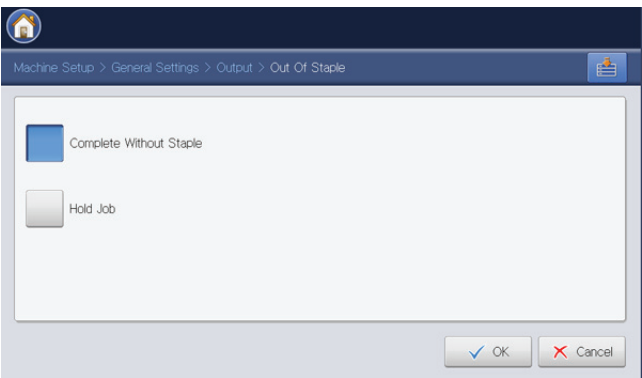
Allows you to set options for printouts.

 This option only appears if you have installed a finisher.

### Out of Staple

Allows you to select what to do when a job that requires stapling is submitted, but the stapler cartridge is not installed or empty.

1. Press **Machine Setup > General Settings > Output > Out Of Staple** from the display screen.
2. Select the option you want.



- **Complete Without Staple:** Continues to print the job.
  - **Hold Job:** Holds the job until the stapler cartridge is installed or replaced.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Other settings


Option	Description
<b>Supplies Life</b>	Shows the remaining percentage of each supply. If you experience frequent paper jams or printing problems, check the <b>Supplies Life</b> screen. If necessary, replace the corresponding parts. This menu could help you forecast when to replace the toner cartridge or other replaceable supplies. Please refer to the <i>Supplies &amp; Accessories</i> guide for each supply's yield (see "Supplies Life" on page 21).
<b>Report</b>	Shows the list of reports you can print. Select the report you want to print and press <b>Print</b> (see "Report" on page 21).
<b>Application Setting</b>	Allows you to set the default settings for some features (see "Application Setting" on page 22).
<b>Tray Settings</b>	Allows you to check the current tray settings and change the settings if necessary (see "Tray settings" on page 30).
<b>Eco Settings<sup>a</sup></b>	Allows you to set the Eco mode as a default and change settings for Eco mode. Using Eco mode can save printing resources (see "Eco Settings (administrator only)" on page 31).
<b>Initial Settings<sup>a</sup></b>	Allows you to set the basic settings needed to be set before using the machine (see "Initial settings (administrator only)" on page 32).
<b>Customer Support</b>	Allows you to set the contact information where users can ask for help (see "Customer support" on page 34).
<b>Application Management<sup>a</sup></b>	Allows you to manage application and licenses (see "Application Management (administrator only)" on page 34).

Option	Description
<b>Print Settings</b>	Allows you to set the default print settings (see "Print Settings" on page 36).
<b>Network Settings<sup>a</sup></b>	Allows you to set the network related settings (see "Network Settings (administrator only)" on page 36).
<b>Language</b>	Allows you to select the language that appears on the display screen ("Language" on page 37).
<b>Security<sup>a</sup></b>	Allows you to set up the security related settings (see "Security (administrator only)" on page 37).

a. May only be available for the administrator depending on the authentication settings selected (see "Authentication" on page 40).

## Supplies Life

This feature allows you to check the remaining percentage of each supply.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Information** tab > **Supplies** (see "Supplies" on page 70).


1. Press **Machine Setup > Supplies Life** from the display screen.
2. Check the remaining value.

Supply	Measure	Value
Toner Cartridge - C	% Remaining	34
Toner Cartridge - M	% Remaining	54
Toner Cartridge - Y	% Remaining	63
Toner Cartridge - K	% Remaining	65
Imaging Unit - C	% Remaining	87
Imaging Unit - M	% Remaining	79
Imaging Unit - Y	% Remaining	79
Imaging Unit -K	% Remaining	78

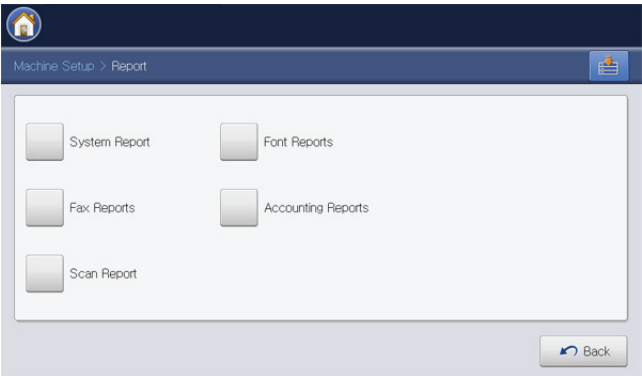
3. Press **Back** to return to the previous screen.

## Report

This feature allows you to print all the reports provided by your machine. You can use these reports to help you maintain your machine.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Information** > **Print information** (see "Print Information" on page 72).

1. Press **Machine Setup > Report** from the display screen.
2. Select the report you want to print and press **Print**.



- **System Report**
  - **Configuration Report:** Print to see the machine configuration information. Product information, version information, product setting, and paper setting are included.
  - **Usage Counter Report:** Print to check the count of the jobs performed. Print usage, scan usage, and fax usage information are included.
  - **Demo Page:** Print demo page to check if the machine is working properly.
  - **Error Information Report:** Print to check what errors have occurred in the machine. Error types and counts are included.
  - **Network Configuration Report:** Print to see the network configuration information. Network configuration information such as TCP/IP, Raw TCP/IP, and LPD information are printed.
- **Fax Reports**
  - **Settings:** You can set the machine to print a report whether a fax transmission or reception was successfully completed or not. If you select **On-Error**, the machine prints a report only when a transmission is not successful.
    - If you select **On** for **Multi Fax Transmission Result** and **Fax Transmission Result** the machine print the transmission report after each transmission.
    - If you select **On** for **Fax Transmission History** and **Fax Reception History** the machine print the history report after 50 transmissions.
  - **Fax Reception History Report:** Print to check the list of faxes received.
  - **Fax Transmission History Report:** Print to check the list of faxes sent.
  - **Scheduled Fax Job Report:** Print to check the list of scheduled fax jobs.
- **Scan Report:**
  - **Email Transmission History Report:** Print to check the transmission state of the **Scan to Email** job.
  - **Server Transmission History Report:** Print to check the transmission state of the **Scan to Server** job.
- **Font Reports:**
  - **PCL Font List:** Print to see the PCL font list.
  - **PS3 Font List:** Print to see the PS3 font list
- **Accounting Reports:** You need to log-in as an administrator to use print this report (see "Log-in" on page 11).
  - **Accounting Report:** Print to check the usage amount of an

individual/group. You need to enable accounting mode to see this option (see "Accounting" on page 39).


- **Supplies Information Report:** Print to check the consumable. Consumables such as toner, imaging unit, transfer belt, and their yield information are included.

3. Press **Back** to return to the previous screen.

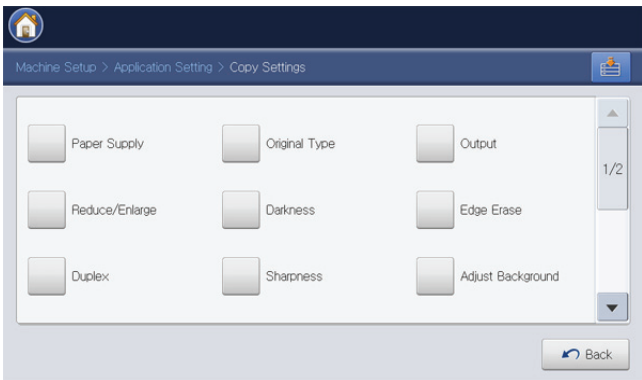
## Application Setting

### Copy Settings

You can set the default copy options. Set the most frequently used copy settings.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Machine Settings > Copy** (see "Copy" on page 79).

1. Press **Machine Setup > Application Setting > Copy Settings** from the display screen.
2. Select the appropriate option. For more information about the options, refer to the *User's Guide* on the User's Guide CD.






Option	Description
<b>Paper Supply</b>	You can select the default tray to use when copying.
<b>Reduce/Enlarge</b>	You can reduce or enlarge the original to fit the paper to which you are copying. For example, if the original is A4 and you want it to be copied on B5 sized paper, press <b>(86%)A4 -&gt; B5</b> . You can also use the up/down arrows to select the reduce/enlarge percentage.
<b>Duplex</b>	You can select the duplex and binding options. <ul style="list-style-type: none"> <li>• <b>Original Binding:</b> Select the binding of the original.</li> <li>• <b>Output Binding:</b> Select how to bind the output.</li> </ul>
<b>Original Type</b>	You can select the type of original you are copying. This will give you a better copy result.
<b>Darkness</b>	You can select the darkness of the copy.
<b>Sharpness</b>	You can select the sharpness of the copy.

Option	Description
Output	<p>You can select the options for how you want the outputs to be arranged.</p> <ul style="list-style-type: none"><li>• <b>Sort:</b> Select how to sort the output.<ul style="list-style-type: none"><li>- <b>Collated:</b> The outputs are in sets to match the sequence of originals.</li><li>- <b>Uncollated:</b> The outputs are sorted into stacks of individual pages.</li></ul></li><li>• <b>Offset:</b> Select <b>On</b>, if you do not want the printout-sets to be in one stack. The machine places printout-sets slightly offset from one another.</li><li>• <b>Output Tray:</b> Select the tray to be used as a output tray.</li><li>• <b>Staple:</b> Select the staple options for the output. You can choose the orientation of the staple.<ul style="list-style-type: none"><li>- <b>Off:</b> Select not to staple the output.</li><li>- <b>1 Staple:</b> Select to staple the output with one staple.</li><li>- <b>2 Staple:</b> Select to staple the output with two staples.</li></ul></li><li>• <b>Punch:</b> Select the punch options for the output. You can choose the orientation of the punch hole.<ul style="list-style-type: none"><li>- <b>Off:</b> Select not to hole-punch on the output.</li><li>- <b>2 Holes:</b> Select to hole-punch 2 holes on the output.</li><li>- <b>3 Holes:</b> Select to hole-punch 3 holes on the output.</li><li>- <b>4 Holes:</b> Select to hole-punch 4 holes on the output.</li></ul></li></ul>
Edge Erase	<p>You can select the option to erase edges when copying.</p> <ul style="list-style-type: none"><li>• <b>Off:</b> Select not to erase the edge.</li><li>• <b>Border Erase:</b> Select to erase an equal amount of edges from all copies.</li><li>• <b>Hole Punch Erase:</b> Select to erase hole-punch marks from the left edge of copies.</li></ul>
Adjust Background	<p>You can select options to reduce dark backgrounds or paper patterns, as in newspaper originals.</p> <ul style="list-style-type: none"><li>• <b>Off:</b> Select not to adjust the background.</li><li>• <b>Auto:</b> Select to automatically optimize the background.</li><li>• <b>Enhance:</b> Select to enhance the background. The higher the number is, the more vivid the background is.</li><li>• <b>Erase:</b> Select to enhance the background. The higher the number is, the lighter the background is.</li></ul>
Original Size	<p>You can select the default original's size.</p>


Option	Description
Color Mode <sup>a</sup>	<p>You can select the default color mode to use for copy jobs.</p> <ul style="list-style-type: none"><li>• <b>Auto:</b> Select this setting to automatically detect whether the scanned document is in color or black and white, and then select an appropriate color setting.</li><li>• <b>Full Color:</b> Select this setting to print the same as the original image color.</li><li>• <b>B/W:</b> Select this setting to print the copy in black and white, regardless whether the scanned document is in color or in black and white.</li></ul>

Option	Description
<b>Color Adjustments<sup>a</sup></b>	<p>You can select options to adjust color.</p> <ul style="list-style-type: none"><li>• <b>Color Balance Adjustment:</b> Select to adjust the color balance as you prefer. This adjustment changes the overall mixture of the colors in an image. You can use this effect to create your own personal color preference, or to match company branding. For example, if you want your printouts to have more cyan, move the color balance closer to cyan. The set value will be reflected in the printouts.</li><li>• <b>Color Shift Adjustment:</b> Select to gradually change the selected color in the original image to the next color on the left or right. This options can emphasize an area on an image, or it can express your color preference.</li><li>• <b>Saturation Adjustment:</b> Select to adjust the level of saturation of the colors in the image. You can use this adjustment to make images more vibrant. The more gray there is in a color, the less saturated it is. The less gray in a color, the more saturated it is. So, a fully saturated color is the purest version of that color. Select a color, and adjust the level of saturation using the left/right arrows.</li><li>• <b>UCR:</b> Select to adjust the color of cyan, magenta, yellow, or black in dark area. For example, some black colors include cyan, magenta, yellow, so the level of black or CMY can be adjusted for such texts and images in black. This effect can enhance the readability and reduce toner usage.</li><li>• <b>Fine Density:</b> Select to increase or decreases the image density on relatively bright or dark areas of an image. By regulating the amount of CMYK toner, you can use this option to emphasize area of an image, or you can improve the image quality. You can also enhance text readability by using this option.</li></ul>


Option	Description
<b>Stamp</b>	<p>You can apply the stamp feature, prints the time and date, IP address, page number, or user ID, to the copy output.</p> <ul style="list-style-type: none"><li>• <b>Page Number:</b> Select to print page numbers on the copy output.</li><li>• <b>Time &amp; Date:</b> Select to print time and date on the copy output.</li><li>• <b>User ID:</b> Select to print user ID on the copy output.</li><li>• <b>IP Address:</b> Select to print IP address on the copy output.</li></ul>  <ul style="list-style-type: none"><li>• <b>Off:</b> Select not to apply the stamp. Users can turn this feature on manually from the <b>Copy</b> menu.</li><li>• <b>On:</b> Select to apply the stamp. You can also choose the pages to which to apply this feature and the position. Users can turn this feature off manually from the <b>Copy</b> menu.</li><li>• <b>On-Force:</b> Select to turn the stamp feature on. You can also choose the pages to which to apply this feature and the position. If <b>On-Force</b> is selected, users can not turn this feature off in the <b>Copy</b> menu.</li><li>• The Stamp feature cannot be applied with Booklet and Poster features.</li></ul>

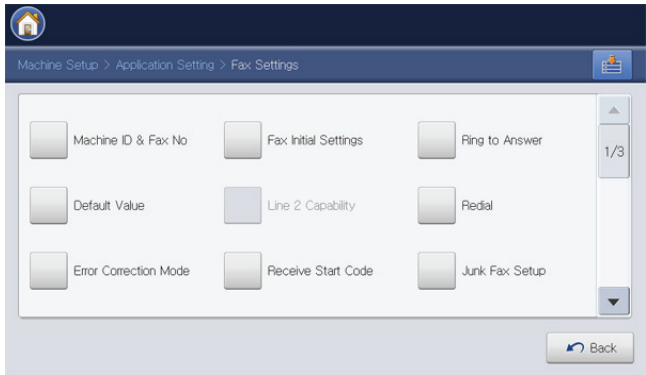
Option	Description
Overlay	<p>You can store scanned forms on the HDD as an overlay to apply to copy output. You can also add/edit/delete the overlay or see the overlay in detail.</p> <ul style="list-style-type: none"><li>• <b>Off:</b> Select not to apply overlay forms. Users can turn this feature on manually from the <b>Copy</b> menu.</li><li>• <b>On:</b> Select to apply overlay forms. You can select the overlay to apply from the list. Users can turn this feature off manually from the <b>Copy</b> menu.</li><li>• <b>On-Force:</b> Select to apply overlay. If <b>On-Force</b> is selected, user cannot turn this feature off in the <b>Copy</b> menu.</li></ul> <p> To add a new overlay form,</p> <ol style="list-style-type: none"><li>1. Select <b>On</b> or <b>On-Force</b> and press the <b>New</b> button. A pop-up window will appear.</li><li>2. Enter the <b>File Name</b> and set other settings.</li><li>3. Place the form to be scanned on the scanner glass and press the <b>Start</b> button on the control panel.</li><li>4. When the form is successfully stored, the stored form name will be added to the form list.</li></ol> <p>To edit/delete or see the overlay in detail,</p> <ol style="list-style-type: none"><li>1. Select the form to edit/delete or see from the list.</li><li>2. Press <b>Edit</b>, <b>Delete</b>, or <b>Detail</b>.</li></ol> <ul style="list-style-type: none"><li>• <b>Overlap:</b> You can select the overlap option for applying the overlay.<ul style="list-style-type: none"><li>- <b>Front:</b> The overlay will be printed in front of the text. Some text might not be shown under the overlay.</li><li>- <b>Back:</b> The overlay will be printed behind the text.</li><li>- <b>Transparent:</b> The overlay will be applied transparently.</li></ul></li></ul> <p> The overlay feature cannot be applied with Booklet and Poster features.</p>

a. CLX-9252 9352 Series only

3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.
- Fax Settings**
- You can set the default fax options. Set the most frequently used fax settings.
-  You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Fax** (see "Fax" on page 79).

1. Press **Machine Setup** > **Application Setting** > **Fax Settings** from the display screen.
2. Select the appropriate option. For more information about the options, refer to the *User's Guide* on the User's Guide CD.

-  • If the optional fax is not installed, the fax icon will not appear on the display screen.
- The fax options are different from country to country depending on the International Communications Regulatory. If some of the fax options explained in the instructions have been grayed-out, it means that the grayed-out option is not supported in your communication environment.



Option	Description
Machine ID & Fax No	You can set the machine ID and fax number which will be printed at the top of each page. If you have installed the fax multi-line kit, you need to select a line first.
Default Value	<p>You can set the default settings for fax.</p> <ul style="list-style-type: none"><li>• <b>Resolution:</b> Select to set the resolution.</li><li>• <b>Original Type:</b> Select the type of the original you are scanning. This will enhance the fax quality based on the type of the original document being scanned.</li><li>• <b>Darkness:</b> Select to set the level of lightness or darkness of the fax.</li><li>• <b>Color Mode:</b> Select to set the color mode you want to use for sending the fax.</li><li>• <b>Adjust Background:</b> Select to reduce a dark background or paper patterns, as in newspaper originals.</li></ul>
ErrorCorrection Mode	You can set the machine to correct the error. It helps with poor line quality and ensures any faxes you send are properly transmitted to any other error correction mode-equipped fax machines. Sending a fax using error correction mode may take more time. If you have installed the fax multiline kit, you need to select a line first.

Option	Description
<b>Fax Initial Settings</b>	<p>You can set <b>Receive Mode</b> and <b>Dial Type</b> options. If you have installed the fax multi-line kit, you need to select a line first.</p> <ul style="list-style-type: none"> <li>• <b>Receive Mode:</b> Select to change the fax receiving mode. <ul style="list-style-type: none"> <li>- <b>Telephone:</b> Receives a fax by pressing <b>On Hook Dial</b> and then <b>Start</b>.</li> <li>- <b>Fax:</b> Answers an incoming fax call and immediately goes into the fax reception mode.</li> <li>- <b>Answering Machine/Fax:</b> Is for when an answering machine is attached to your machine. Your machine answers an incoming call, and the caller can leave a message on the answering machine. If the fax machine senses a fax tone on the line, the machine automatically switches to <b>Fax</b> mode to receive the fax.</li> </ul> </li> <li>• <b>Dial Type:</b> You can select the dial type. Some countries may not support this option. Contact your local telephone company for <b>Dial Type</b> setting information.</li> </ul>
<b>Receive Start Code</b>	You can set this option to receive a fax using the external phone. If the external phone is connected to the machine, when the phone rings and it is fax, the user can just press the <b>**receive start code**</b> to receive the fax without going to the machine.
<b>Ring to Answer</b>	You can set the number of times the machine rings before answering an incoming call. If you have installed the fax multi-line kit, you need to select a line first.
<b>Redial</b>	<p>You can set the machine to re-dial the fax number if the recipient's fax machine is busy or not answering. You can set the number of re-dial attempts and the interval between attempts. If you have installed the fax multi-line kit, you need to select a line first</p> <ul style="list-style-type: none"> <li>• <b>Redial Term:</b> Select the terms for re-dialing using the up/down arrows.</li> <li>• <b>Redial Times:</b> Select the re-dial time using the up/down arrows. Selecting 0 for <b>Redial Times</b> means that the machine will not re-dial.</li> </ul>
<b>Junk Fax Setup</b>	You can set the machine to not accept faxes sent from remote stations if their numbers are stored in the memory as spam or junk fax numbers. You can enter up to 10 junk fax numbers. Press <b>On &gt; Junk Fax Number List &gt; Add</b> to add junk numbers.
<b>Received Fax Printing</b>	You can set options for printing received faxes.
<b>Prefix Dial</b>	You can set the number to be dialed before a number is dialed. Users may set this to access a PABX (e.g., 9) or area code (e.g., 02). Once this number is set, it will automatically appear on the screen when entering a phone/fax number.
<b>Send Batch</b>	You can add new pages to the delayed fax and send it at once if the receiving destination is the same.

Option	Description
<b>Secure Receive<sup>a</sup></b>	<p>You can set the machine to keep the received faxes in memory so that unauthorized people cannot access them when you are absent. This option restricts printing of received faxes when the machine is unattended. If you have installed the fax multi-line kit, you need to select a line first.</p> <ul style="list-style-type: none"> <li>• <b>Off:</b> Select to not use secure receive.</li> <li>• <b>On:</b> Select to use secure receive.</li> <li>• <b>Print:</b> Select to print faxes in the memory. You need to log-in as an administrator to print out received faxes in memory.</li> </ul>
<b>Mailbox Setup<sup>a</sup></b>	<p>You can set the options for managing the mailbox.</p> <ul style="list-style-type: none"> <li>• <b>Document Policy:</b> You can set when to delete the documents stored in the Mailbox. <ul style="list-style-type: none"> <li>- <b>Delete On Poll:</b> The fax data will be deleted after it has been transmitted.</li> <li>- <b>Delete On Print:</b> The fax data will be deleted after it has been printed.</li> </ul> </li> <li>• <b>Mailbox Configuration:</b> You can create, edit, or delete a Mailbox.</li> </ul>
<b>Caller ID<sup>a</sup></b>	You parse the sender's caller ID. If you set this function to <b>On</b> , you can store each caller's fax in the box classified by the caller ID.
<b>Toll Save<sup>a</sup></b>	You can set the machine to send a fax in the toll save time for saving money. If you have installed the fax multi-line kit, you need to select a line first.
<b>Fax Forward Settings<sup>a</sup></b>	You can set the machine to forward a sent or received fax to other destinations via fax or email. If you have installed the fax multi-line kit, you need to select a line first.
<b>Display fax number</b>	You can set the machine to display the fax number you set in <b>Machine ID &amp; Fax No</b> on the Fax screen.
<b>Original Size</b>	You can set the default original's size to use.

a. May only be available for the administrator depending on the authentication settings selected (see "Authentication" on page 40).

3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

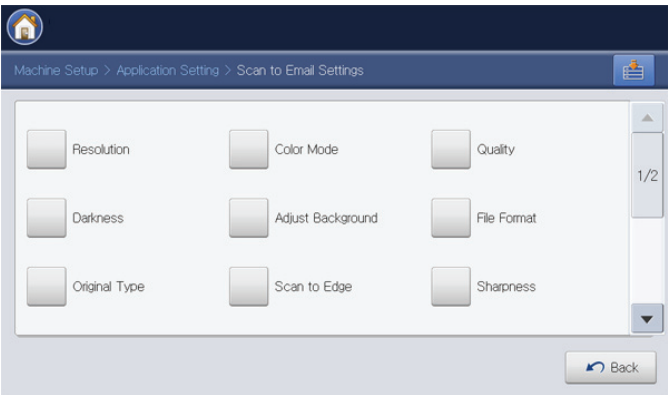
### Scan to Email Settings

You can set the options for scanning to email. The options you set here will be applied when sending the scanned data to e-mail.




You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Scan** (see "Scan" on page 81).

1. Press **Machine Setup > Application Setting > Scan to Email Settings** from the display screen.
2. Set the appropriate options and press **OK** to save the settings.




Option	Description
<b>Resolution</b>	You can select the scanning resolution value.
<b>Darkness</b>	You can select the degree of darkness of scan outputs.
<b>Original Type</b>	You can select the type of the original you are scanning. This will enhance the scan quality based on the type of the original document being scanned.
<b>Color Mode</b>	You can select the color options of the scan outputs.
<b>Adjust Background</b>	<p>You can enhance or erase the background of the original to get a clear scan result.</p> <ul style="list-style-type: none"> <li>• <b>Off:</b> Select not to adjust the background.</li> <li>• <b>Auto:</b> Select to automatically optimize the background.</li> <li>• <b>Enhance:</b> Select to enhance the background. The higher the number is, the more vivid the background is.</li> <li>• <b>Erase:</b> Select to enhance the background. The higher the number is, the lighter the background is.</li> </ul>
<b>Scan to Edge</b>	You can set the machine to scan full size of a page as it is. Usually, the machine scans a page except the edges (margin), especially when you do the scan job with certain sized paper in the tray. But if you scan and sent it right away via the network, as a file, the machine does not need to exclude the edges from the originals.
<b>Quality</b>	<p>You can select the quality of the scan outputs.</p> <ul style="list-style-type: none"> <li>• <b>Best:</b> Produces a high quality image, and the file size will be large.</li> <li>• <b>Normal:</b> Both the image quality and file size will be between <b>Best</b> and <b>Draft</b>.</li> <li>• <b>Draft:</b> Produces a low quality image, and the file size will be small.</li> </ul>

Option	Description
<b>File Format</b>	<p>You can select the file format of the scan outputs.</p> <ul style="list-style-type: none"> <li>• <b>JPEG:</b> Scans originals in JPEG format.</li> <li>• <b>PDF:</b> Scans originals in PDF format.</li> <li>• <b>TIFF:</b> Scans originals in TIFF (Tagged Image File Format).</li> <li>• <b>XPS:</b> Scans originals in XPS format. Scans originals in TIFF (Tagged Image File Format).</li> </ul> <p> If you want several originals to be scanned as one file, press <b>On</b> in the <b>Multipage</b> option. This is not available for <b>JPEG</b> format.</p>
<b>Sharpness</b>	You can select the sharpness of the scan outputs.
<b>Contrast</b>	You can select the contrast of the scan outputs.
<b>Book Scan</b>	You can set options for scanning a book or a catalog. Select pages to scan.
<b>General</b>	<p>You can set the general email information which will appear as a default when sending emails.</p> <ul style="list-style-type: none"> <li>• <b>Scan to Email:</b> Select whether to enable the scan to email feature or not.</li> <li>• <b>Auto send to self:</b> Select whether to enable auto send-to-self feature, which is sending a copy of email to oneself.</li> <li>• <b>From Address:</b> Enter the default address to appear in the <b>From Address</b> field.</li> <li>• <b>Subject:</b> Enter the default subject to appear in the <b>Subject</b> field.</li> <li>• <b>Message:</b> Enter the message to appear in the from <b>Message</b> field.</li> <li>• <b>Allow Edit From Fields:</b> Select whether to allow users to change the <b>From</b> field when sending an email. If you select <b>Email address of Login User</b>, you can use the email address of the logged in user for the <b>From</b> field.</li> <li>• <b>Print Confirmation Sheets:</b> Select when to print the print confirmation sheet.</li> <li>• <b>Use default message:</b> Select whether to the use default message or not. If you set this option <b>On</b>, the <b>From Address</b>, <b>Subject</b>, and <b>Message</b> you entered will be automatically applied when sending an email.</li> </ul>
<b>Outgoing Email Server (SMTP)</b>	You can see the status of the outgoing email server (SMTP) configuration.
<b>Original Size</b>	You can set the default original's size to use.

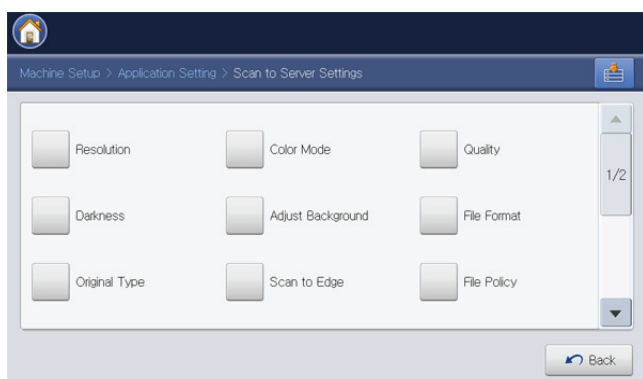
3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

### Scan to Server Settings

You can set the options for scanning to server. The options you set here will be applied when sending the scanned data to server.

-  You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Scan** (see "Scan" on page 81).

1. Press **Machine Setup > Application Setting > Scan to Server Settings** from the display screen.
2. Set the appropriate options.



Option	Description
<b>Resolution</b>	You can select the scanning resolution value.
<b>Darkness</b>	You can select the degree of darkness of scan outputs.
<b>Original Type</b>	You can select the type of the original you are scanning. This will enhance the fax quality based on the type of the original document being scanned.
<b>Color Mode</b>	You can select the color options of scan outputs.
<b>Adjust Background</b>	<p>You can enhance or erase the background of the original to get a clear scan result.</p> <ul style="list-style-type: none"> <li>• <b>Off:</b> Select not to adjust the background.</li> <li>• <b>Auto:</b> Select to automatically optimize the background.</li> <li>• <b>Enhance:</b> Select to enhance the background. The higher the number is, the more vivid the background is.</li> <li>• <b>Erase:</b> Select to enhance the background. The higher the number is, the lighter the background is.</li> </ul>
<b>Scan to Edge</b>	You can set the machine to scan full size of a page as it is. Usually, the machine scans a page except the edges (margin), especially when you do the scan job with certain sized paper in the tray. But if you scan and sent it right away via the network, as a file, the machine does not need to exclude the edges from the originals.
<b>Quality</b>	<p>You can select the quality of the scan result to be.</p> <ul style="list-style-type: none"> <li>• <b>Best:</b> Produces a high quality image, and the file size will be large.</li> <li>• <b>Normal:</b> Both the image quality and file size will be between <b>Best</b> and <b>Draft</b>.</li> <li>• <b>Draft:</b> Produces a low quality image, and the file size will be small.</li> </ul>

Option	Description
<b>File Format</b>	<p>You can select the file format of the scan outputs.</p> <ul style="list-style-type: none"> <li>• <b>JPEG:</b> Scans originals in JPEG format.</li> <li>• <b>PDF:</b> Scans originals in PDF format.</li> <li>• <b>TIFF:</b> Scans originals in TIFF (Tagged Image File Format).</li> <li>• <b>XPS:</b> Scans originals in XPS format. Scans originals in TIFF (Tagged Image File Format).</li> </ul> <p> If you want several originals to be scanned as one file, press <b>On</b> in the <b>Multipage</b> option. This is not available for <b>JPEG</b> format.</p>
<b>File Policy</b>	<p>You can choose the policy for generating file name before you proceed with the scan job through server or USB memory device. If the server or the USB memory device already has the same name you enter, you can change the name, cancel the job, or overwrite it.</p> <ul style="list-style-type: none"> <li>• <b>ChangeName:</b> The sent file is saved as a different file name that is automatically programmed.</li> <li>• <b>Cancel:</b> Does not send the scanned file if file with same name is already there on the server.</li> <li>• <b>Overwrite:</b> Overwrites the existing file.</li> </ul>
<b>Sharpness</b>	You can select the sharpness of the scan outputs.
<b>Contrast</b>	You can select the contrast of the scan outputs.
<b>Book Scan</b>	You can set options for scanning a book or a catalog. Select pages to scan.
<b>Server Setting</b>	<p>You can set the servers used for sending scanned data.</p> <ul style="list-style-type: none"> <li>• <b>SMB:</b> You can set SMB server settings.</li> <li>• <b>WebDAV:</b> You can set WebDAV server settings.</li> <li>• <b>FTP:</b> You can set FTP server settings.</li> </ul> <p> • <b>Off/On:</b> Select whether to enable or disable the server.</p> <ul style="list-style-type: none"> <li>• <b>Server Connection Timeout:</b> You can set the time that system will wait before the server connection fails due to time-out.</li> </ul>
<b>Server Transmission Result</b>	You can set the machine to print transmission result report. If you select <b>On-Error</b> , the machine prints a report only when a transmission is not successful.
<b>Original Size</b>	You can set the default original's size to use.

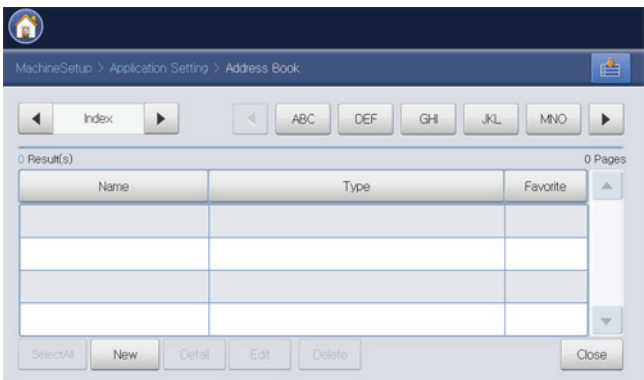
3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

### Address Book

This feature allows you to store frequently used phone numbers, fax numbers, and e-mail addresses on the machine's hard drive. When sending a fax, you can use the address book created here. It will save time entering fax numbers and e-mail addresses.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Address Book** (see "Address book tab" on page 74).

1. Press **Machine Setup > Application Setting > Address Book** from the display screen.
2. Select the appropriate option.



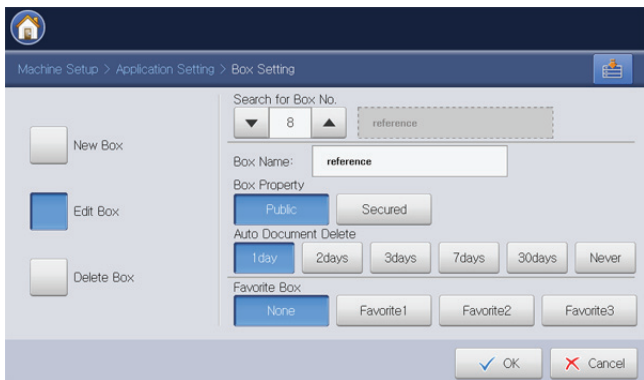
- : Use the left/right arrows to narrow your search. The categories are: **Index**, **Individual**, **Group**, **Favorite**, **Email**, **Fax**, **Speed Dial**, and **Server**.
  - **Search**: Enter the keyword (eg., the first letter of the name for which you are searching) in the blank field and press this button. The machine starts to search for the address.
    - If you selected **Index** category, instead of a search field, you can see the alphabetical and numerical index buttons. Pressing a button displays address book entries beginning with the corresponding letters/numbers.
  - **Select All**: Press this button to select all the addresses in the list.
  - **New**: Press this button to create a new address.
  - **Detail**: Press this button to see the address information in detail.
  - **Edit**: Select the address you want to edit and press this button.
  - **Delete**: Select the address you want to delete and press this button.
3. Press **Close** to return to the previous screen.

### Box Setting (administrator only)

This feature allows you to create a new box and edit or delete current boxes. The created boxes are used to store scanned data on the machine's hard drive. You can find the stored data from the **Document box** menu on the display screen.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Box** (see "Box tab" on page 72).

1. Press **Machine Setup >Application Setting > Box Setting** from the display screen.
2. Select the appropriate option and press **OK** to save the settings.



- **New Box**: You can create a new box.
- **Edit Box**: You can edit a box.
- **Delete Box**: You can delete a box.

Option	Description
<p>Left/right arrows</p>	Use the up/down arrows to search or set the box number. <ul style="list-style-type: none"> <li> For <b>New Box</b> screen, you will see the box number for the box you are creating. Enter the new box name in the field.</li> </ul>
<b>Box Name</b>	Enter a box's name or edit a box's name.
<b>Box Property</b>	Set the property of the box created or edited. <ul style="list-style-type: none"> <li>• <b>Public</b>: Box can be accessed by everyone.</li> <li>• <b>Secured</b>: Box can be accessed only after entering a password. Set the box password.</li> </ul>
<b>Auto Document Delete</b>	Set the day(s) for stored data to last in the box. After the selected period, the stored data is automatically deleted.
<b>Favorite Box</b>	You can create three favorite boxes to store frequently used data or important data. If you do not want the box to be a favorite box, select <b>None</b> . <ul style="list-style-type: none"> <li> You can set up to three favorite boxes. If all 3 favorite boxes are selected, a warning message appears.</li> </ul>

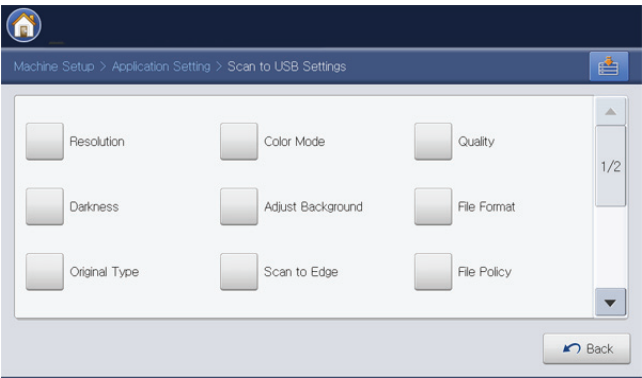
3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

### Scan to USB Settings

You can set the options for scanning to a USB drive. The options you set here will be applied when sending the scanned data to a USB drive.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Scan** (see "Scan" on page 81).

1. Press **Machine Setup > Application Setting > Scan to USB Settings** from the display screen.
2. Set the appropriate options and press **OK** to save the settings.



Option	Description
<b>Resolution</b>	You can select the scanning resolution value.
<b>Darkness</b>	You can select the degree of darkness of scan outputs.
<b>Original Type</b>	You can select the type of the original you are scanning. This will enhance the fax quality based on the type of the original document being scanned.
<b>Color Mode</b>	You can select the color options of scan outputs.
<b>Adjust Background</b>	You can enhance or erase the background of the original to get a clear scan result. <ul style="list-style-type: none"> <li>• <b>Off:</b> Select not to adjust the background.</li> <li>• <b>Auto:</b> Select to automatically optimize the background.</li> <li>• <b>Enhance:</b> Select to enhance the background. The higher the number is, the more vivid the background is.</li> <li>• <b>Erase:</b> Select to enhance the background. The higher the number is, the lighter the background is.</li> </ul>
<b>Scan to Edge</b>	You can set the machine to scan full size of a page as it is. Usually, the machine scans a page minus the edges (margin), especially when you do the scan job with smaller sized paper in the tray. But if you scan and send it right away via the network, as a file, the machine does not need to exclude the edges from the originals.
<b>Quality</b>	You can select the quality of the scanned image. <ul style="list-style-type: none"> <li>• <b>Best:</b> Produces a high quality image, and the file size will be large.</li> <li>• <b>Normal:</b> Both the image quality and file size will be between <b>Best</b> and <b>Draft</b>.</li> <li>• <b>Draft:</b> Produces a low quality image, and the file size will be small.</li> </ul>

Option	Description
<b>File Format</b>	You can select the file format of the scan outputs. <ul style="list-style-type: none"> <li>• <b>JPEG:</b> Scans originals in JPEG format.</li> <li>• <b>PDF:</b> Scans originals in PDF format.</li> <li>• <b>TIFF:</b> Scans originals in TIFF (Tagged Image File Format).</li> <li>• <b>XPS:</b> Scans originals in XPS format. Scans originals in TIFF (Tagged Image File Format).</li> </ul> <p> If you want several originals to be scanned as one file, press <b>On</b> in the <b>Multipage</b> option. This is not available for <b>JPEG</b> format.</p>
<b>File Policy</b>	You can choose the policy for generating file name before you proceed with the scan job through server or USB memory device. If the server or the USB memory device already has the same name you enter, you can rename, cancel the job or overwrite it. <ul style="list-style-type: none"> <li>• <b>ChangeName:</b> The sent file is saved as a different file name that is automatically programmed.</li> <li>• <b>Cancel:</b> Does not send the scanned file if file with same name is already there on the server.</li> <li>• <b>Overwrite:</b> Overwrites the existing the file.</li> </ul>
<b>Sharpness</b>	You can select the sharpness of the scan outputs.
<b>Contrast</b>	You can select the contrast of the scan outputs.
<b>Book Scan</b>	You can set options for scanning a book or a catalog. Select pages to scan.
<b>Original Size</b>	You can set the default original's size to use.

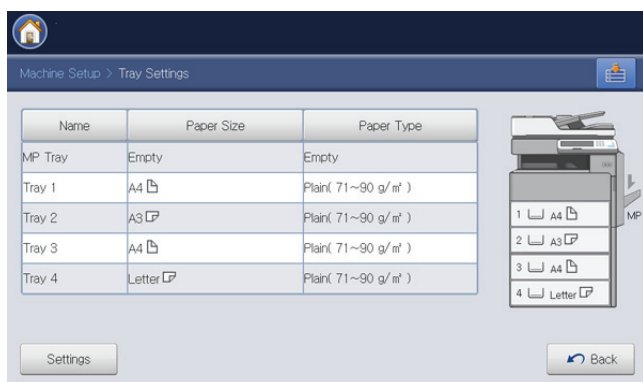
3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

### Tray settings

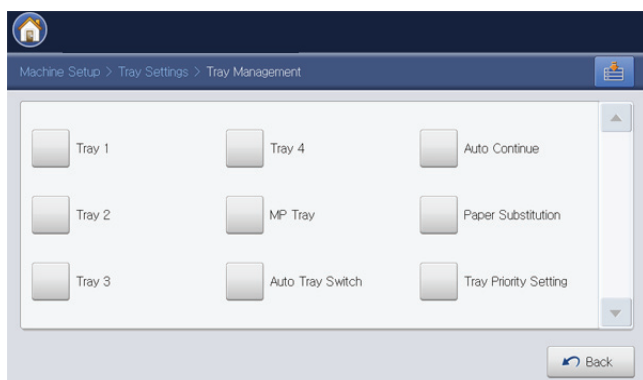
This feature allows you to check the current tray settings and change the settings if necessary. There are many options available for setting the tray and paper. Make the best use of the options to fit your needs for trays and paper.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** tab > **Machine Settings** > **Input Trays** (see "Input Trays" on page 77).

1. Press **Machine Setup > Tray Settings** from the display screen.
2. Check the current tray settings. If you do not need to change the setting, go to step 5.



3. Press **Settings** to change the current settings.
4. Press the option you want to change.



If some options are grayed out, it means that the grayed-out option is not supported for your machine or optional parts needed to use the option are not installed.

- **Tray1~4/Mp Tray:** You can set the paper size and type to use in the each tray. Also, you can activate a tray confirmation message which asks whether or not to set the paper size and type for the just opened tray.
- **Auto Tray Switch:** You can set the machine to automatically switch to the tray with the same sized paper when the tray in use is empty.
- **Auto Continue:** You can set the machine to continue printing on a larger available paper size or A4 to Letter, A3 to Ledger, and vice versa when the tray is empty or there is a mismatch between the driver and the paper in the tray.

You can use a different paper size in a job.

- **Paper Substitution:** You can set the machine to substitute paper when the requested paper for a print job is not available. For example, if the requested ledger-sized paper is not available in the tray, this machine substitutes A3 for the requested paper. For A4, Letter will be substituted and vice versa.

- You cannot use a different paper size in a job even if you use the **Paper Substitution** option. For example, if you are printing 5 sheets, you cannot print first 2 papers in the first two pages on A4 and the rest on Letter.
- Image loss can occur if you substitute paper.

- **Tray Priority Setting:** You can set the usage priority among trays with the same sized paper. Paper in the tray with the highest priority will be used first. Select the tray and use the **Up/Down** buttons to set the priority.

5. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Eco Settings (administrator only)

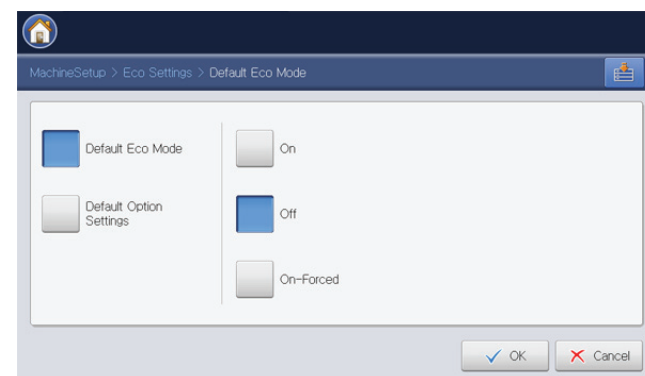
This feature allows you to set the Eco mode as a default and options related to it. Eco mode is created to set the options that reduce toner and paper usage. For example, one of the options for Eco mode is duplex printing. Instead of printing on two different pieces of paper, Eco mode is designed to print on both sides of one piece of paper (duplex). If you try to print on two different pieces of paper when Eco mode is on, a message asking if you want to disable the Eco mode appears. Follow the instructions below to set the Eco mode options.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Settings** tab > **Machine Settings** > **System** > **Eco**. (see "Eco" on page 77).

1. Press **Machine Setup > Eco Settings** from the display screen.
2. Select the appropriate option.

- **Default Eco Mode:** You can set the Eco mode on as a default. If you set this mode on, users will need to press the Eco button on the control panel to turn it off. However, if you (administrator) set the password, users need to enter the password in order to turn

this mode off. Once this feature is on, you can see the symbol next to the options set with eco mode.

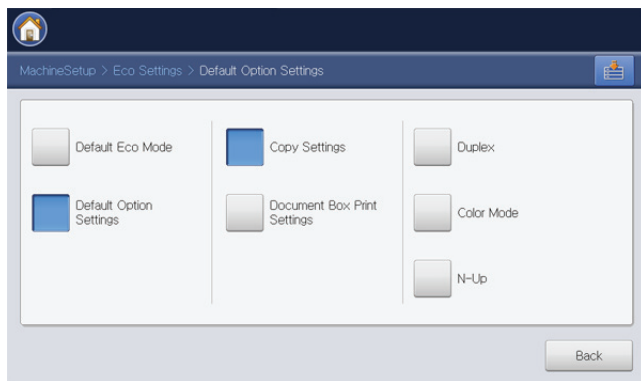


- **On:** Set the Eco mode on.
- **Off:** Set the Eco mode off.
- **On-Forced:** Set the Eco mode on with password. If a user wants to turn the Eco mode on/off, the user needs to enter the password.

If you set this mode to off, the Eco mode print job from the driver will not be calculated as a Eco mode nor will the Eco mode LED on the control be on.

- **Default Option Settings:** You can set the default options for

Eco mode.



- **Copy Settings:** You can set copy related settings. The settings you set here will be applied to all the copy jobs sent to the machine, unless the user disables Eco mode.
- **Document Box Print Settings:** You can set printing from document box related settings. The settings you set here will be applied to all the document box print jobs sent to the machine, unless the user disables Eco mode.

For detailed explanations of each setting options, refer to the *User's Guide* on the supplied User's Guide CD.

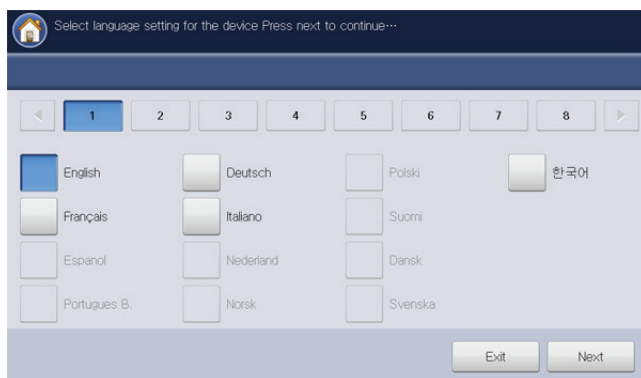
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Initial settings (administrator only)

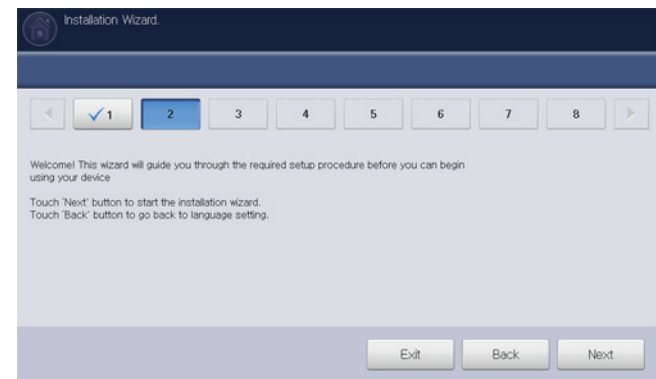
You can change the initial settings you see when you first turn the machine on.

If you want to stop adjusting the initial settings, press **Exit**. The settings you have set so far will be saved. However, the **Exit** button is not enabled if it's the first time using this option.

1. Press **Machine Setup > Initial Settings** from the display screen.
2. Press the language to use on the display screen and then press **Next**.

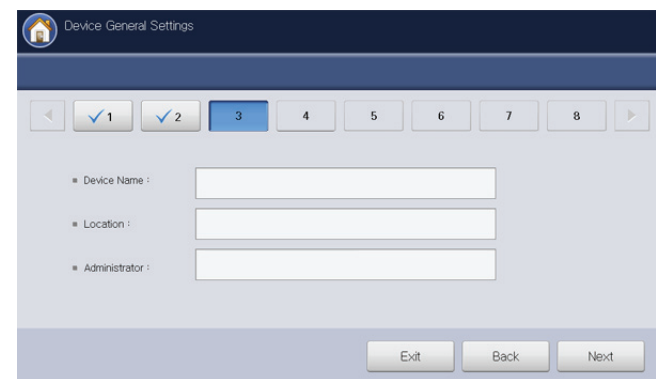


3. Read the note and then press **Next**.



If you want to reset the language, press **Back** and select the language you want.

4. Press the **Device Name** field.



The pop up keyboard appears.

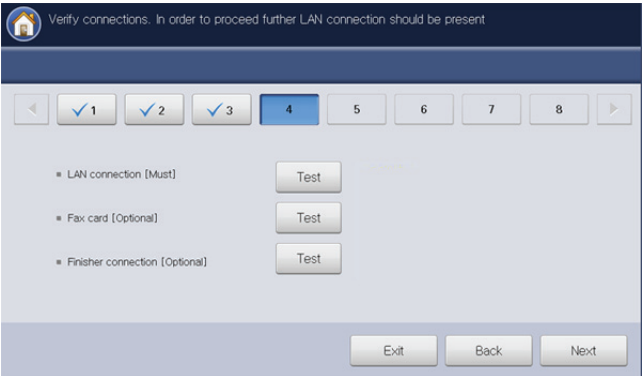


Remove the existing device name and enter the device name you want to use and then press **OK**. Then press **Next**.

Keep in mind to enter the device name to be used on the network.

- If necessary, enter the location of the machine in the **Location** field.
- If necessary, enter the information in the **Administrator** field for the person to contact when any problem occurs on the machine.

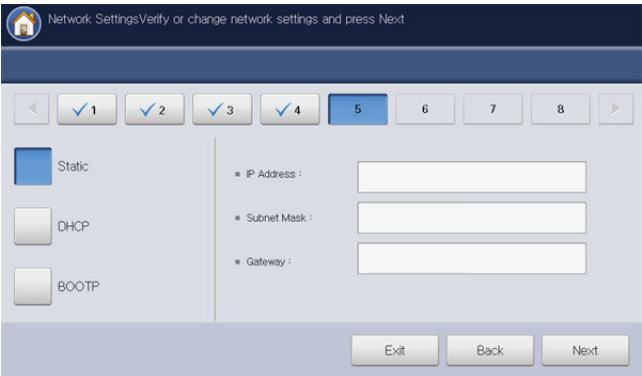
5. Press the **Test** button to verify the LAN connection. When **Connected** appears after pressing the **Test** button, press **Next**.



If **Not connected** appears, make sure that the machine is connected to the network then verify the LAN connection again.

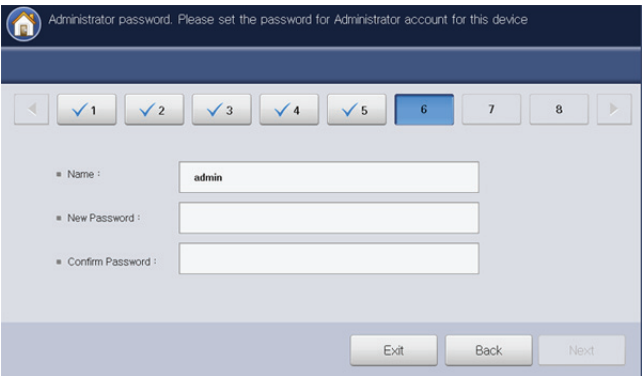
- If a network connection problem persists, contact your network administrator.
- If you installed an optional fax kit or finisher, press each **Test** button to verify connection of them.

6. Enter the IP address, subnet mask, and gateway in each field. Then press **Next**.



- If a new IP address is assigned automatically by a DHCP or BOOTP, press **DHCP** or **BOOTP**.
- If you are not sure about your network environment, contact your network administrator.

7. Press the Name field.



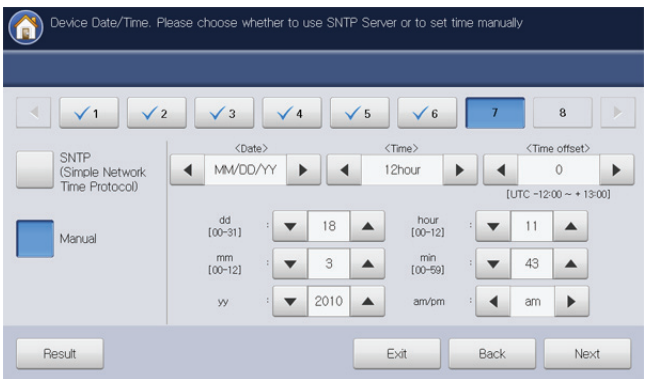
- a) The pop-up keyboard appears.
- b) The **admin** is entered as a default. If you want to replace with another name, remove **admin** and enter a new administrator name and then press **OK**.
- c) Press the **New Password** field. The pop-up keyboard appears.
- d) Enter the password to use and then press **OK**. This password is to be used for accessing the administrator account.

The password should be at least 8 characters long and it should be a combination of letters, numbers, and special characters (except for <, >, ", \).

- e) Press the **Confirm Password** field. The pop up keyboard appears.
- f) Re-enter the password to confirm it, then press **OK** and **Next**.

8. Set the time on the machine. You can set the time manually or use **SNTP (Simple Network Time Protocol)** to set time automatically using the time server.

When you press **Manual**:

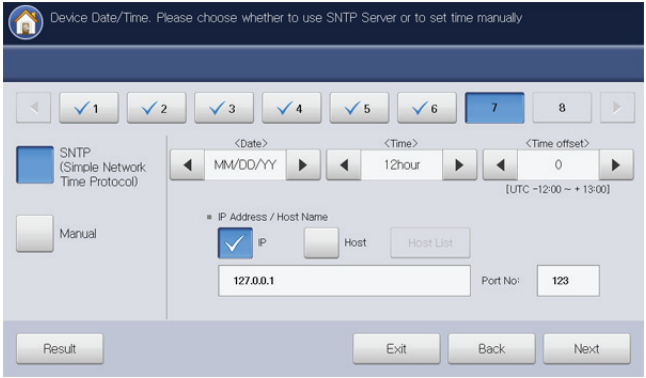


- a) Set the date, time, time offset using the left/right and up/down arrows.

Example for selecting the time offset: If your local time is 4 hours faster than **UTC**, press the right arrow until **+4** shows.

- b) Press **Result** to check the **Manual** setting and then press **Close**. If necessary, try to set it again.
- c) Press **Next**.

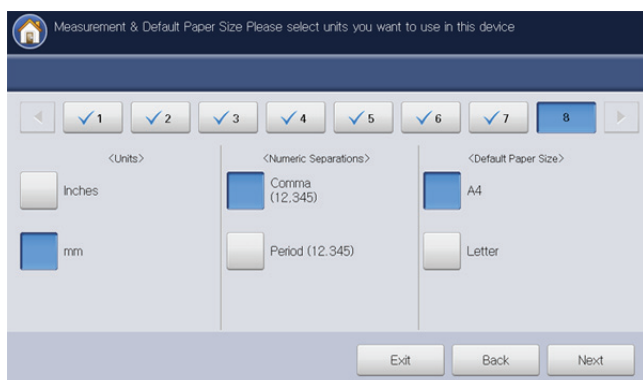
When you press **SNTP (Simple Network Time Protocol)**:



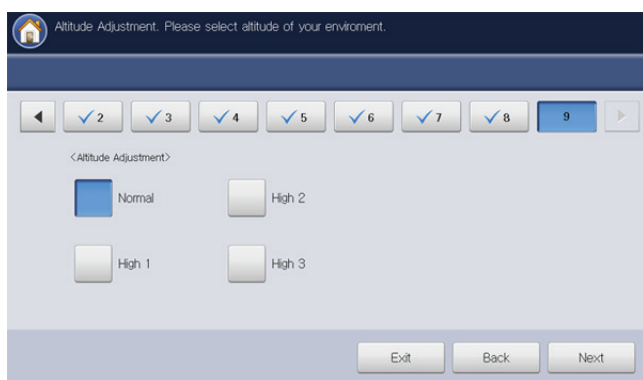
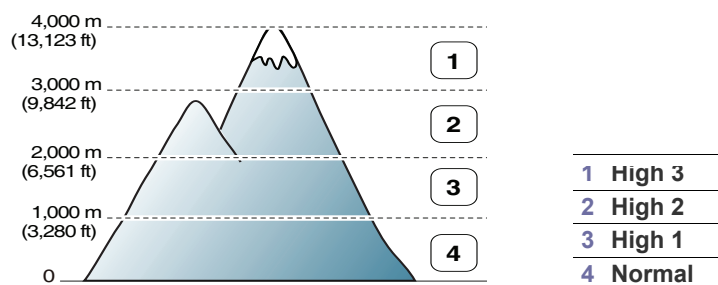
- a) Set the date, time, time offset using the left/right and up/down arrows.

Example for selecting the time offset: If your local time is 4 hours faster than **UTC**, press the right arrow until **+4** shows.

- b) If you press **IP**, go to step **c**. If you press **Host**, step **e**.
  - c) Press the **IP** field. The pop-up keyboard appears. Enter a IP address which provides the time information, and then press **OK**.
  - d) Press the **Port No** field. The pop-up keyboard appears. Enter a port number and then press **OK**. Go to step **f**.
  - e) Press the **Host** field. The pop-up keyboard appears. Enter a host name manually. You can also press **Host List**, and then select a host name in **Time Server List** and press **Close**.
  - f) Press the **Port No** field. The pop-up keyboard appears. Enter a port number and then press **OK**.
  - g) Press **Result** for checking the **SNTP** setting and then press **Close**. If necessary, try to set it again.
  - h) Press **Next**.
9. Select a unit, numeric separation, and standard paper size to be used on the display screen and then press **Next**.



10. Select an altitude level where the machine is installed. The print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. Then press **Next**.



11. Enter the **Community Name** and select the **Access Permission** then press **Finish**.

You do not need to enter the community name.



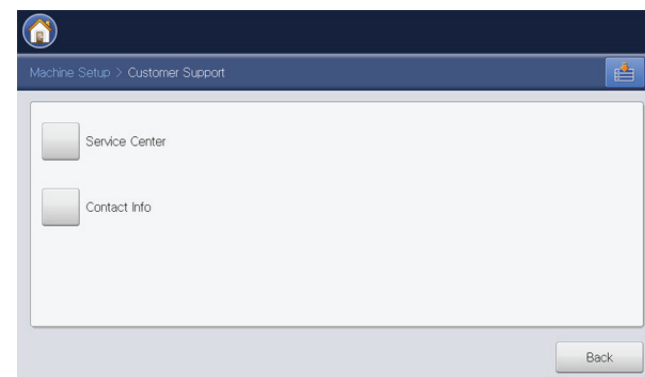
12. The **Completed** window appears. Press the **Close** button. The machine restarts.

If the engine is busy, the machine might take longer to reboot.

## Customer support

This feature allows you to view the service center's information and contact point where users can get help. If you log in as an administrator, you can change the contact information.

1. Press **Machine Setup > Customer Support** from the display screen.
2. Select the appropriate option.



- **Service Center:** Check the information of the service center.
  - **Contact Info:** Check the contact information of the administrator.
3. If you want to change the information, press **Settings** and login as an administrator.
  4. Change the information.
  5. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Application Management (administrator only)

You can install or uninstall applications/license. If you add an application, you need to activate the license of the installed application. Some applications may not have a license.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Maintenance** tab >

**Application Management.** (see "Application Management" on page 94).

- Some models may not support this feature.

### Installing an application

1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **Application** tab.
3. Connect the USB stick (with the downloaded application stored) to the machine.  
When the USB stick is detected, the **Install** button will be enabled.
4. Click the **Install** button.
5. A pop-up window with list of application appears. Select the application file and press **OK**.
6. A verification message appears. Read the agreement and check **I accept the terms of the License Agreement** and press **OK**.  
Application installation begins.

### Viewing an application in details

1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **Application** tab.
3. From the list, select the application you want to view in details and press **Detail**.
4. View the application's information in details.
5. Press **Close** to return to the previous screen.

### Enabling/Disabling an application

1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **Application** tab.
3. From the list, select the application you want to enable/disable and press **Enable/Disable**.
4. A window where you can choose to enable/disable appears. Select the option you want.
5. Press **OK**.  
The application you selected is enabled/disabled.


### Uninstalling an application

1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **Application** tab.
3. From the list, select the application you want to uninstall and press **Uninstall**.
4. A confirmation window appears. Press **Yes**.  
The application you selected is uninstalled.

### Viewing a license in details

1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **License** tab.
3. From the list, select the license you want to view in details and press **Detail**.
4. View the license information in details.
5. Press **Back (Cancel)** to return to the previous screen.

### Activating a license


1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **License** tab.
3. From the list, select the license you want to activate and press **Activate**.
4. A window appears where you can enter the license number and activation key. Enter the necessary information.  
 If you want to import the license number and activation key instead of entering it manually, insert the USB stick with the information and press the **Import** button.
5. Press **OK**.  
The license you selected is now activated.

### Returning a license

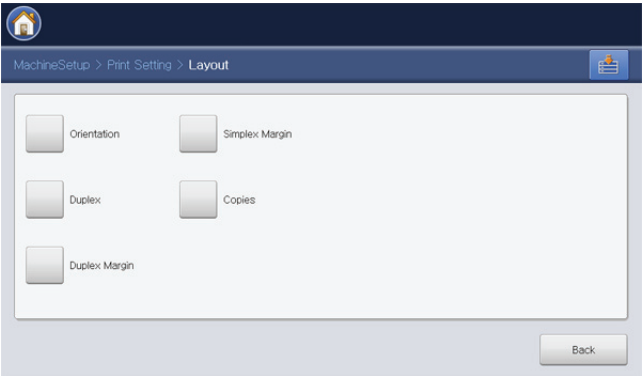
1. Press **Machine Setup > Application Management** from the display screen.
2. Select the **License** tab.
3. From the list, select the license you want to return and press **Return**.
4. A confirmation window appears. Press **Yes**.  
The application you selected is returned.

### Print Settings

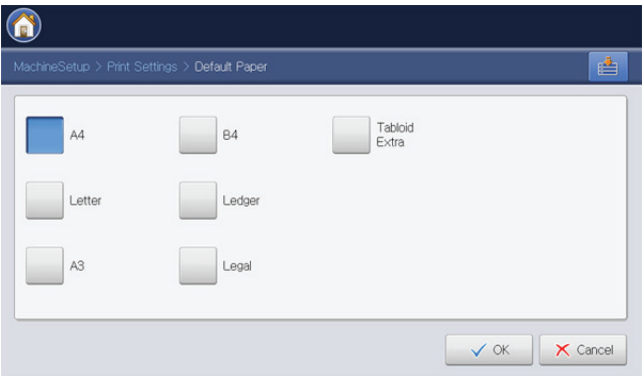
You can set print related settings. When there is no specific input for printing options, the machine prints with the settings you set here. Set the frequently used printing settings. This feature can be useful if your company has a specific printing form.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Settings** tab > **Machine Settings** > **Printer**. (see "Printer" on page 78).

1. Press **Machine Setup** > **Print Settings** from the display screen.
2. Select the appropriate option.
  - **Layout:** Provides paper layout related options.



- **Orientation:** Select the paper orientation.
- **Duplex:** Select the paper orientation for duplex mode.
- **Duplex Margin:** Select the margin for duplex mode.
- **Simplex Margin:** Select the margin for simplex mode.
- **Copies:** Select the number of copies you want to print.
- **Default Paper:** Select the default paper type to use. The paper size you set here will be applied when printing directly from the machine. For example, if you set the default paper to A4 and print a machine report, the report will be printed on A4 paper.



3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

### Network Settings (administrator only)

This feature allows you to set up the network. Before setting up the information, you must have the relevant information concerning the type of network protocols and computer system you use. If you are not sure which settings to use, contact your network administrator for such information.

1. Press **Machine Setup** > **Network Settings** from the display screen.
2. Set the appropriate options.



Option	Description
<b>TCP/IP</b>	You can set the network settings (see "Network settings (configuring TCP/IP)" on page 53).
<b>UPnP Settings</b>	You can set the UPnP settings (see "UPnP (SSDP) settings" on page 57).
<b>Print Settings</b>	You can set the ports needed for network printing (see "Print settings (Ports to set for network printing)" on page 55).
<b>SNMP Settings</b>	You can set the SNMP settings (see "SNMP Settings" on page 56).
<b>MDNS Settings</b>	You can set the MDNS settings (see "MDNS Settings" on page 57).
<b>Kerberos Settings</b>	You can set the Kerberos settings (see "Kerberos Settings" on page 58).
<b>SNTP Settings</b>	You can set the SNTP settings (see "SNTP settings" on page 62).
<b>SetIP Settings</b>	You can set the SetIP settings (see "SetIP settings" on page 62).
<b>LDAP Settings</b>	You can set the LDAP Settings (see "LDAP Settings" on page 58).
<b>SLP Settings</b>	You can set the SLP settings (see "SLP Settings" on page 56).
<b>Network Filtering Settings</b>	You can set the network filtering settings (see "Network filtering settings" on page 59).
<b>SMB Auth Settings</b>	You can set the SMB authentication settings (see "SMB Auth Settings" on page 59).

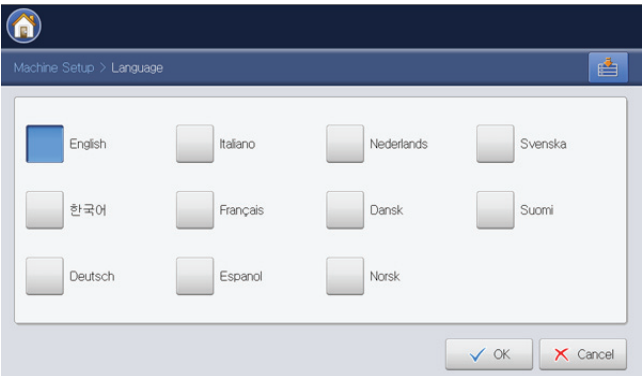
Option	Description
SMTP	You can set the SMTP settings (see "SMTP setting" on page 63).
SWS	You can set the SyncThru™ Web Service settings (see "SyncThru™ Web Service" on page 63).
Network Test	You can test the IPv4 address for its condition (see "Network Test" on page 64).

3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

Language

Allows you to select the language that appears on the display screen.


1. Press **Machine Setup > Language** from the display screen.
2. Set the appropriate options.



3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

Security (administrator only)

This feature allows you to set up the security related settings.

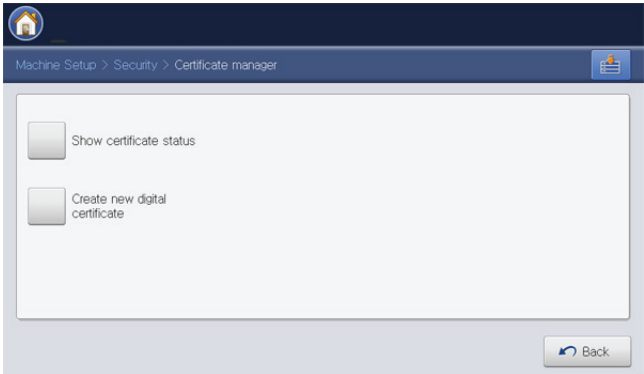
 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **Network Security**. (see "Network Security" on page 86).

1. Press **Machine Setup > Security** from the display screen.

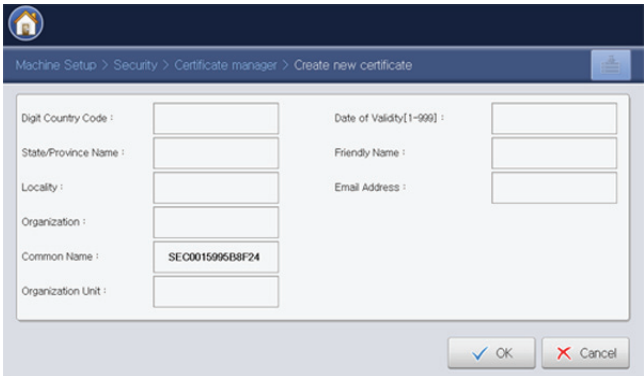
Certificate Manager

Certificates are used for SSL/TLS such as HTTPs, SMTPs, and LDAPs.

1. Press **Machine Setup > Security > Certificate Manager** from the display screen.
2. Select the appropriate option.



- **Show certificate status:** Select to check the status of certificated installed. Press the **Create** button to create a new certificate if no certificate is installed.
- **Create new digital certificate:** Select to create a new certificate. Enter necessary information and press **Create** to save the change.

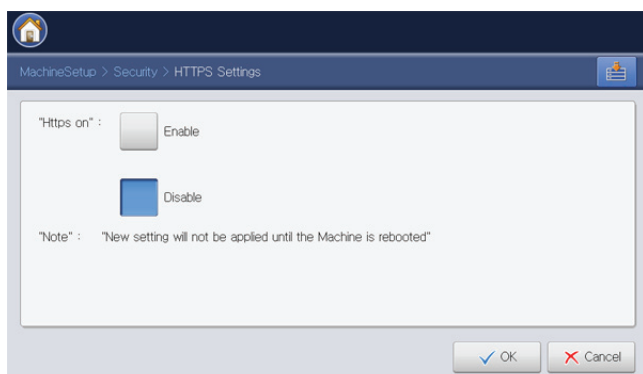


- **Digit Country Code:** Enter the country code.
- **State/Province Name:** Enter the state name or the province name.
- **Locality:** Enter the country.
- **Organization:** Enter your organization's name.
- **Common Name:** Enter the name you want to use for your machine. The machine's host name is entered as default.
- **Organization Unit:** Enter the specific unit of the organization (e.g., Marketing Group).
- **Date of Validity [1-999]:** Enter the number of days the certificate is valid. For example, if you enter 999, it means the certificate is valid for 999 days.
- **Friendly Name:** Enter the name you want to use for your machine.
- **Email Address:** Enter the contact email address of this certificate. The email address of the person/manager entered in **Common Name** or **Organization Unit** is commonly used.


3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

## HTTPS Settings

1. Press **Machine Setup > Security > HTTPS Settings** from the display screen.
2. Select **Enable** to enable HTTPS.

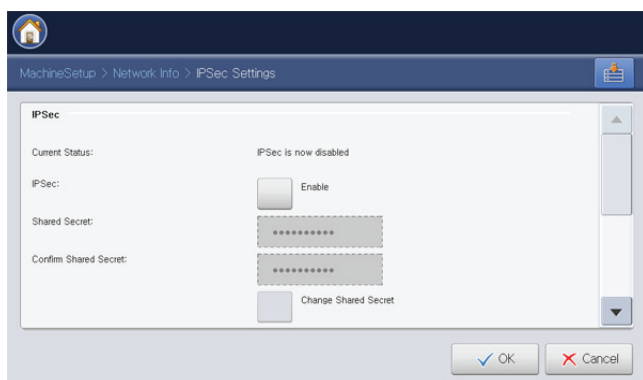


3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.


 To apply the change, you need to reboot the machine.

## IPSec Settings

1. Press **Machine Setup > Security > IPSec Settings** from the display screen.
2. Set the settings.




- **Current Status:** Shows the current status of IP security functionality.
  - **IPSec:** Select to enable IP security.
  - **Shared Secret:** Enter a new Pre-Shared Key for IP security communication.
  - **Confirm Shared Secret:** Confirm the Pre-Shared Key for IP security communication.
  - **Change Shared Secret:** Select to change the **Shared Secret**. You need to check this option to enter **Shared Secret** and **Confirm Shared Secret**.
  - **Clear Connection :** Clear all previous IP security connections with the client.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

 To apply the change, you need to reboot the machine.

## Image Overwrite

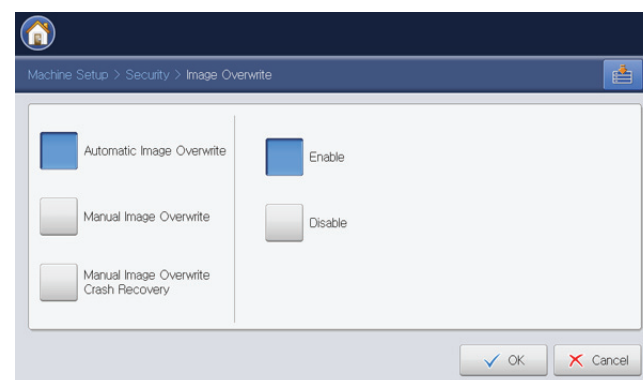
You can set the machine to overwrite data stored in the memory. The machine overwrites the data with different patterns eliminating the possibilities of recovery.

 This feature may not be available depending on models or option kits installed.

### Automatic Image Overwrite

When a job is completed, there are temporal images left in the memory. For security reasons, you can set the machine to automatically overwrite secure non-volatile memory. If you want to secure memory space, you can set the machine to automatically overwrite secure non-volatile memory.

1. Press **Machine Setup > Security > Image Overwrite > Automatic Image Overwrite** from the display screen.
2. Select the appropriate option.

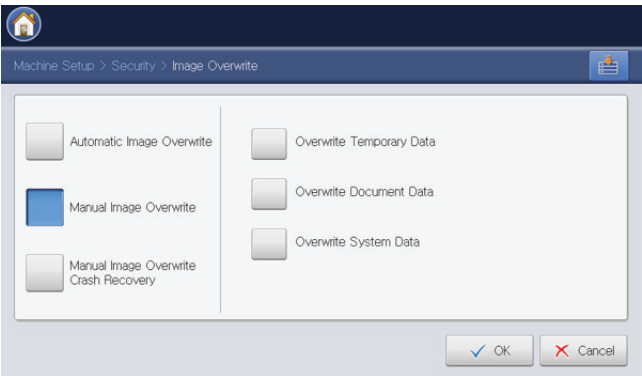


- **Enable:** Select to enable automatic image overwrite.
  - **Disable:** Select to disable automatic image overwrite.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.


### Manual Image Overwrite

When printing, copying, scanning, and faxing, the machine temporarily uses memory space. For security reasons, you can set the machine to manually overwrite secure non-volatile memory. If you want to secure memory space, you can manually overwrite secure non-volatile memory.

1. Press **Machine Setup > Security > Image Overwrite > Manual Image Overwrite** from the display screen.
2. Select the appropriate option.



- **Overwrite Temporary Data:** Select to overwrite temporary data.
- **Overwrite Document Data:** Select to overwrite document data.
- **Overwrite System Data:** Select to overwrite system data.

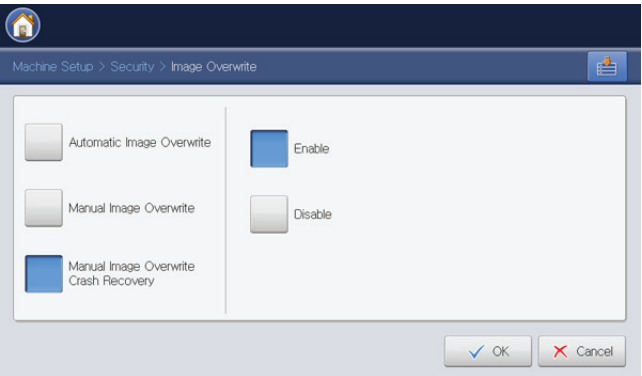
 When you overwrite the data manually, note that all the data in the system including the ones in the hard disk is overwritten.

3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Manual Image Overwrite Crash Recovery

If the system crashes during the manual image overwrite process, the administrator can set the machine to repeat the manual image overwrite after the system is rebooted.

1. Press **Machine Setup > Security > Image Overwrite > Manual Image Overwrite Crash Recovery** from the display screen.
2. Select the appropriate option.



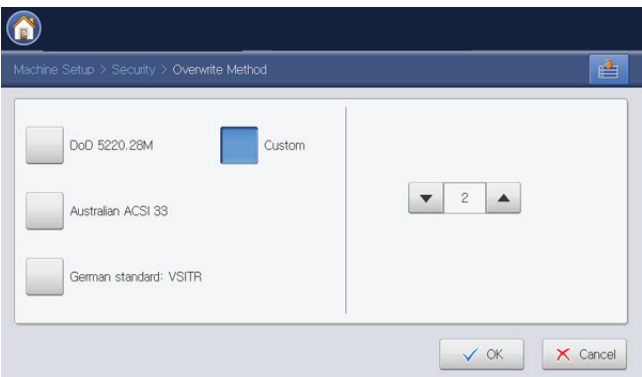
- **Enable:** The machine will repeat manual image overwrite after the system reboot.
- **Disable:** The machine will go to the normal booting mode after the system reboot.

3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Overwrite Method

You can select the method for overwriting the secure non-volatile memory (hard disk).

1. Press **Machine Setup > Security > Overwrite Method** from the display screen.
2. Select the appropriate option.




- **DoD 5220.28M:** Select to overwrite the memory 3 times. When overwriting three times, patterns 0x35, 0xCA, 0x97 are used to overwrite the disk's content. This method of overwriting the disk is specified by US DoD.
- **Australian ACSI 33:** Select to overwrite the memory 5 times. When overwriting 5 times, character "C" and its complement alternatively are used to overwrite the disk. After the 2nd time, there is a mandatory validation. For the 5th time, random data is used.
- **German standard VSITR:** Select to overwrite the memory 7 times. When overwriting for the 6 times, alternate 0x00 and 0xff are used to overwrite the disk, and, in the 7th time, the disk is written with 0xAA.
- **Custom:** Select to determine the number of times the memory will be overwritten. The hard disk will be overwritten as many times as the number you select.

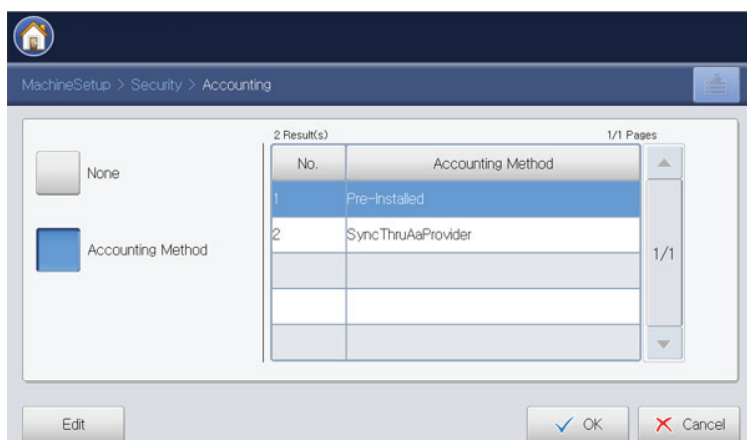
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Accounting

You can set usage limits for each user to use each feature if **Pre-installed** accounting method is chosen (see "Authentication" on page 40).

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **User Access Control** > **Accounting** > **Accounting Setup**. (see "Quota" on page 93).

1. Press **Machine Setup > Security > Accounting** from the display screen.
2. Select the appropriate option.



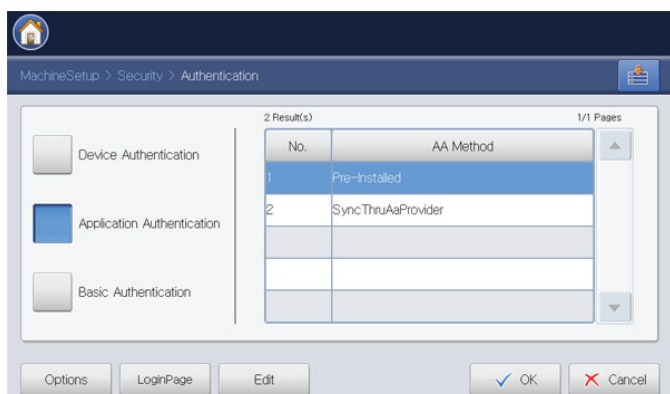
- **None:** Select not to use this feature.
  - **Accounting Method:** Select the accounting method.
    - **Pre-Installed:** Select to use the installed job accounting method.
    - **SyncThruAaProvider:** Select to use the job accounting method provided by the SyncThru™ Web Admin Service (For detailed information, refer to the SyncThru™ Web Admin Service guide).
    - **Edit:** You can edit the usage limit. If this option is not available, this button will be disabled.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Authentication

This feature allows you to choose the authentication method for user authentication.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **User Access Control**. (see "Authentication (Activating access control)" on page 90).

1. Press **Machine Setup > Security > Authentication** from the display screen.
2. Select the appropriate option.



- **Device Authentication:** Activate device authentication. Device

authentication requests a user to login before being able to use the device. Users cannot use any application without logging in.

- **Application Authentication:** Activate application authentication. An administrator can choose the application(s) to require user to login to use. Users cannot use the selected application(s) without logging-in. If you select **Application Authentication**, press the **Edit** button and select the application(s) to enable/disable authentication.
  - **Basic Authentication:** Activate basic authentication. Users are asked to login when they select options that are only available to administrators. Those options are marked with "a" or "(administrator only)" in this guide.
3. Select the authentication method from the list. If you choose **Basic Authentication**, go to step 9.
  4. Press **Options**.
  5. Select the appropriate option.
    - **Login Identification**
      - **Local Authentication:** Select what to require for the user to login.
        - **Password expiration period:** Select whether to set an expiration period for the password.
        - **Minimum password length:** Select the password policy. If you enable the **Apply strong password**, the password should be at least 8 characters long and it should be a combination of letters, numbers, and special characters (except for <, >, ", \).
      - **Remote Authentication:** Select the server to use for remote authentication.
    - **Login restriction:** Select what to do when users keep fail to log-in. Select **Enable** to enable this feature and set the sub options. For example, if you set **Minutes** to 3, **No. of attempts** to 3, and **Lock-out period** to 5, users can try to log-in 3 times in 3 minutes and if they fail, they cannot try to log-in for 5 minutes.
      - **Minutes:** Select the time the user can try to log-in
      - **No. of attempts:** Select the number of attempts the user can try to log-in.
      - **Lock-out period:** Select the time to restrict users from attempting to log-in.
    - **Logout Policy:** Select when to log users out.
      - **No logout:** Select to allow users to log-out manually.
      - **Force to logout:** Select to automatically log users out when a job is completed.
      - **Logout reminder:** Select to show users a log-out request message when a job is completed.
      - **Auto logout time :** Select the time for automatic log-out. When there are no jobs in process or no input for the selected time, the system logs out automatically logs out.
  6. Press **LoginPage**. Select the login page to use for the LCD screen (**LUI Login Page**) on the machine and SyncThru™ Web Service (**SWS Login Page**) and press **OK**.
  7. Press **Edit**.
  8. Select the feature/application you want to enable/disable authentication and press **Enable/Disable** then press **OK**.
  9. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## User Profile

This feature allows you to store user information on the machine's hard drive. You can use this feature to manage the users using the machine.

You can group the users and manage them as a group. You can add up to 1,000 entries.

Users identified by user IDs and passwords are allowed to modify their passwords. They are also allowed to view all of their profile information. When it comes to the role, users are allowed to see only the role they belong to but not its permissions.

1. Press **Machine Setup > Security > User Profile** from the display screen.
2. Select **Individual** or **Group** using the left/right arrows and select the appropriate option.

User ID	User Name	Email	Fax No.	Group Name
admin	Admin			AdminDefault
gunyoung	Admin			AdminDefault
heywood	Admin			AdminDefault
manual	manual			AdminDefault

#### • Individual

- **New:** Press this button to create a new user.
  - **User ID:** Enter the user ID you want to use. You can enter up to 63 characters.
  - **User Name:** Enter the user name you want to use.
  - **Password:** Enter the password you want to use. You can enter up to 63 characters.
  - **Confirm Password:** Re-enter the password for confirmation.
  - **Email:** Enter the email address.
  - **Fax No.:** Enter the fax number.
  - **PIN Code:** Enter the pin code.
  - **Group Name:** Enter the group name you want to be in. Press the **Search** button to browse the groups.
- **Detail:** Select the user you want to print and press this button.
- **Edit:** Select the user you want to edit and press this button.
- **Delete:** Select the user you want to delete and press this button.
- **Search:** Enter the user ID you want to find and press this button.

#### • Group

- **New:** Press this button to create a new user.
  - **Group Name:** Enter the group name you want to use.
  - **Role:** Select the role of the group.
- **Detail:** Select the group you want to print and press this button.
- **Edit:** Select the group you want to edit and press this button.
- **Delete:** Select the group you want to delete and press this button.
- **Search:** Enter the group name you want to find and press this button.

3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## 802.1x

You can enable 802.1x authentication, which is a port-based authentication. If this authentication is enabled, the machine is not allowed to access through the protected side of the network until the machine is authorized. Use this feature to protect your network.



You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **Network Security** (see "802.1x" on page 89).

1. Press **Machine Setup > Security > 802.1x** from the display screen.

2. Select **On**.
3. Select the appropriate option. If you select **EAP-MD5** or **EAP-MS-CHAPv2**, go to step 4. If you select **PEAPv0/EAP-MS-CHAPv2** or **TLS**, go to step 5.
  - **EAP-MD5:** Offers minimal security. The MD5 hash function is vulnerable to dictionary attacks, and does not support key generation.
  - **PEAPv0/EAP-MS-CHAPv2:** Recommended for users who only intend to use Microsoft desktop clients and servers. For other users, it is not recommended.
  - **EAP-MS-CHAPv2:** MS-CHAPv2 provides two-way authentication between peers by combining a peer Challenge message with the Response packet and an authenticator Response message on the Success packet.
  - **TLS:** This is used to provide secure communication over the Internet between a client and server.
4. Enter the necessary information and press **OK**. Go to step 6.
5. Press **Certificate** and select the certificate to use. Enter the necessary information and press **OK**.
6. Press **Back (Cancel)** to return to the previous screen.

# software installation

This chapter gives you step-by-step instructions for installing the machine driver. There are some installation methods useful for administrators (Windows only). Read this chapter carefully to use different installation methods.

**This chapter includes:**

- System requirements
- Installing a network connected machine's driver
- Administrator Installation

## System requirements

Before you begin, make sure that your system meets the following requirements:

### Windows

Your machine supports the following Windows operating systems.

OPERATING SYSTEM	Requirement (recommended)		
	CPU	RAM	free HDD space
Windows® 2000	Intel® Pentium® II 400 MHz (Pentium III 933 MHz)	64 MB (128 MB)	600 MB
Windows® XP	Intel® Pentium® III 933 MHz (Pentium IV 1 GHz)	128 MB (256 MB)	1.5 GB
Windows Server® 2003	Intel® Pentium® III 933 MHz (Pentium IV 1 GHz)	128 MB (512 MB)	1.25 GB to 2 GB
Windows Server® 2008	Intel® Pentium® IV 1 GHz (Pentium IV 2 GHz)	512 MB (2048 MB)	10 GB
Windows Vista®	Intel® Pentium® IV 3 GHz	512 MB (1024 MB)	15 GB
Windows® 7	Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher	1 GB (2 GB)	16 GB
	<ul style="list-style-type: none"><li>• Support for DirectX® 9 graphics with 128 MB memory (to enable the Aero theme).</li><li>• DVD-R/W Drive</li></ul>		
Windows Server® 2008 R2	Intel® Pentium® IV 1 GHz (x86) or 1.4 GHz (x64) processors (2 GHz or faster)	512 MB (2048 MB)	10 GB

- Internet Explorer® 6.0 or higher is the minimum requirement for all Windows operating systems.
- Users who have administrator right can install the software.
- **Windows Terminal Services** is compatible with this machine.

## Macintosh

OPERATING SYSTEM	Requirements (recommended)		
	CPU	RAM	free HDD space
Mac OS X 10.5	<ul style="list-style-type: none"><li>• Intel Processors</li><li>• 867 MHz or faster Power PC G4/ G5</li></ul>	512 MB (1 GB)	1 GB
Mac OS X 10.6	<ul style="list-style-type: none"><li>• Intel Processors</li></ul>	1 GB (2 GB)	1 GB

## Linux

Item	Requirements
Operating system	RedHat Enterprise Linux WS 4, 5 (32/64 bit) Fedora Core 2~10 (32/64 bit) SuSE Linux 9.1 (32 bit) OpenSuSE 9.2, 9.3, 10.0, 10.1, 10.2, 10.3, 11.0, 11.1 (32/64 bit) Mandrake 10.0, 10.1 (32/64 bit) Mandriva 2005, 2006, 2007, 2008, 2009 (32/64 bit) Ubuntu 6.06, 6.10, 7.04, 7.10, 8.04, 8.10 (32/64 bit) SuSE Linux Enterprise Desktop 9, 10 (32/64 bit) Debian 3.1, 4.0, 5.0 (32/64 bit)
CPU	Pentium IV 2.4 GHz (IntelCore2)
RAM	512 MB (1024 MB)
Free HDD space	1 GB (2 GB)

## UNIX

Item	Requirements
Operating system	Sun Solaris 8,9,10 (x86, SPARC) IBM AIX 5.x HP-UX 11i (PA-RISC, Itanium)
Free HDD space	Up to 100 MB

## Installing a network connected machine's driver

A network connected machine is a machine connected to your computer with a network cable.

You must install the printer driver software for printing. The software includes drivers, applications, and other support programs.

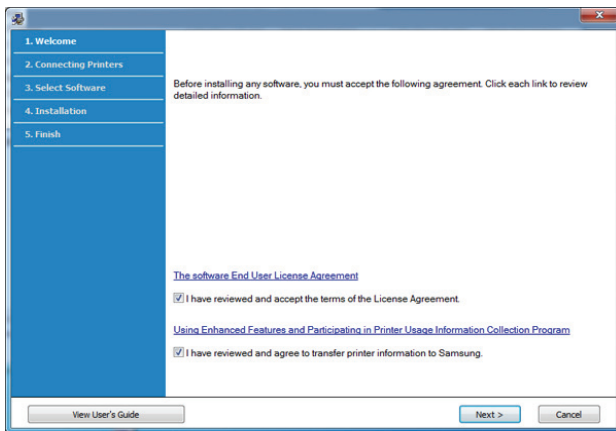
Make sure that the network setup for your machine is completed. All applications should be closed on your computer before beginning installation.

### Windows

You can install the machine software using the typical or custom method.

The following steps below are for typical installation which is recommended for most users who use the machine directly connected to your computer. All components necessary for machine operations will be installed.

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
  - The software CD should automatically run and an installation window appears.
  - If the installation window does not appear, click on **Start** and then **Run**. Type **X:\Setup.exe**, replacing "X" with the letter which represents your drive. Click **OK**.
  - If you use Windows Vista or Windows 2008 Server R2, click **Start > All programs > Accessories > Run**. Type **X:\Setup.exe** replacing "X" with the letter which represents your drive and click **OK**.
  - If the **AutoPlay** window appears in Windows Vista, Windows 7, or Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Continue** or **Yes** in the **User Account Control** windows.
3. Select **Install now**.



If necessary, select a language from the drop-down list.

- The **Advanced Installation** has **Custom Installation** option. **Custom Installation** allows you to select the machine's connection and choose individual components to install. Follow the instructions in the window.
  - **Administrator Installation** provides convenient installation methods useful for administrators (see "Administrator Installation" on page 45).
4. Read the **License Agreement**, and check **I accept the terms of the License Agreement**. Then, click **Next**.
  5. Follow the instructions in the installation window.

### Macintosh

1. Make sure that the machine is connected to your network and powered on. Also, your machine's IP address should have been set.
2. Insert the supplied software CD into your CD-ROM drive.
3. Double-click the CD-ROM icon that appears on your Macintosh desktop.
4. Double-click the **MAC\_Installer** folder.
5. Double-click the **Installer OS X** icon.
6. Enter the password and click **OK**.
7. The Samsung Installer window opens. Click **Continue**.
8. Read the license agreement and click **Continue**.
9. Click on **Agree** to agree to the license agreement.
10. Select **Easy Install** and click **Install**. **Easy Install** is recommended for most users. All components necessary for machine operations will be installed.  
If you select **Custom Install**, you can choose individual components to install.
11. The message that warns that all applications will close on your computer appears. Click **Continue**.
  - If a window asking you to select an installation type appears, select **Typical installation for a network printer** and then click **OK**.
  - If you select **Typical installation for a network printer**, the SetIP program automatically runs. If the machine has already configured network information, close the SetIP program. Go to the next step.
12. After the installation is finished, click **Restart**.
13. Open the **Applications** folder > **System Preferences** and click **Print and Fax**.
14. Click on the "+" icon; a display window will pop up.
15. Click on **IP**.
16. Select **Socket/HP Jet Direct** in **Printer Type**.
  - When printing a document containing many pages, printing performance may be enhanced by choosing **Socket** for **Printer Type** option.
17. Enter the machine's IP address in the **Printer Address** field.
18. Enter the queue name in the **Queue Name** field. If you cannot determine the queue name for your machine server, try using the default queue first.
19. If Auto Select does not work properly, select **Select a driver to use...** and your machine name in **Print Using**.  
Your machine appears on the **Printer List**, and is set as the default machine.
20. Click on **Add**.
  - If the printer driver does not work properly, uninstall the driver and reinstall it.  
Follow steps below to uninstall the driver for Macintosh.
    - a) Make sure that the machine is connected to your computer and powered on.
    - b) Insert the supplied software CD into your CD-ROM drive.
    - c) Double-click CD-ROM icon that appears on your Macintosh desktop.
    - d) Double-click the **MAC\_Installer** folder.
    - e) Double-click the **Installer OS X** icon.
    - f) Enter the password and click **OK**.
    - g) The Samsung Installer window opens. Click **Continue**.

- h) Select **Uninstall** and click **Uninstall**.
- i) When the message which warns that all applications will close on your computer appears, Click **Continue**.
- j) When the uninstall is done, click **Quit**.

## Linux

### Installing the Unified Linux Driver

1. Make sure that the machine is connected to your network and powered on. Also, your machine's IP address should have been set.
2. From the Samsung website, download the Unified Linux Driver package to your computer.
3. Right click the Unified Linux Driver package and extract the package.
4. Double-click **cdroot > autorun**.
5. The Samsung Installer window opens. Click **Continue**.
6. The **Add printer wizard** window opens. Click **Next**.
7. Select **Network printer** and click **Search** button.
8. The printer's IP address and model name appears on list field.
9. Select your machine and click **Next**.
10. Input the printer description and click **Next**.
11. When the add printer is done, click **Finish**.
12. When the install is done, click **Finish**.

### Add network printer

1. Double-click the **Unified Driver Configurator**.
2. Click **Add Printer...**
3. The **Add printer wizard** window opens. Click **Next**.
4. Select **Network printer** and click the **Search** button.
5. The printer's IP address and model name appears on list field.
6. Select your machine and click **Next**.
7. Input the printer description and **Next**
8. When the add printer is done, click **Finish**.

## UNIX

To use UNIX Printer Driver, you have to install the UNIX printer driver package first, then setup the printer. You can download the UNIX Printer Driver package from the Samsung website.

### Installing the UNIX printer driver package

Installation procedure is common for all variants of UNIX OS mentioned. (see "System requirements" on page 42).

1. From the Samsung website, download and unpack the UNIX Printer Driver package to your computer.
2. Acquire root privileges.  
**su -**
3. Copy the appropriate driver archive to the target UNIX computer.



See the administrative guide of your UNIX OS provided by the UNIX OS for details.

4. Unpack the UNIX printer driver package archive.  
For example, on IBM AIX uses the following commands.  
**cd /tmp**  
**gzip -dc /cdrom/unix/packages/aix\_power/aix\_power.tar.gz | tar -xvf -**  
The "**binaries**" folder consists of **binz**, **install**, **share** files and folders.
5. Copy the "**binaries**" folder to any local folder.

6. Change to the driver's "**binaries**" directory.

**cd aix\_power/binaries**

7. Run the install script.

**./install**

**install** is the installer script file which is used to install or uninstall the UNIX Printer Driver package.

Use "**chmod 755 install**" command to give the permission to the installer script.

8. Execute the "**./install -c**" command to verify install results.
9. Run '**installprinter**' from the command line. This will bring up the **Add Printer Wizard** window. Setup the printer in this window referring the procedure next.



On some UNIX OS, for example on Solaris 10 just added printer may not be enabled and/or may not accept jobs. In this case run the following two commands on the root terminal:

**accept <printer\_name>**

**enable <printer\_name>**

### Uninstalling the printer driver package



The uninstalling printer utility should be used to delete the printer installed in the system.

- a) Run "**uninstallprinter**" command from the terminal.  
It will open the **Uninstall Printer Wizard**.  
The installed printers are listed in the drop-down list.
- b) Select the printer to be deleted.
- c) Click **Delete** to delete the printer from the system.
- d) Execute the "**./install -d**" command to uninstall the whole package.
- e) To verify uninstall results, execute the "**./install -c**" command.

To reinstall it again, use the command "**./install**" to reinstall the binaries.

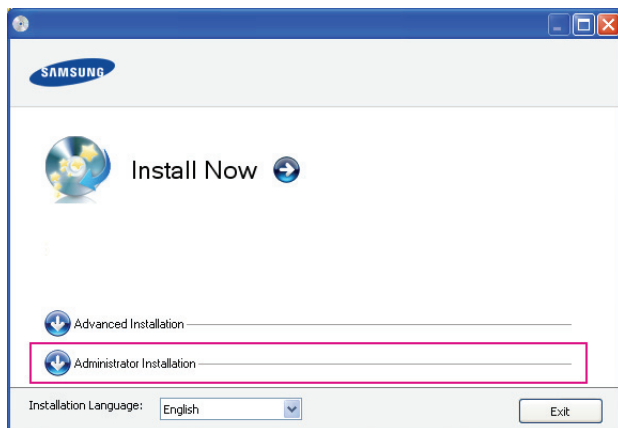
### Setting up the printer

To add the printer to your UNIX system, run '**installprinter**' from the command line. This will bring up the Add Printer Wizard window. Setup the printer in this window according to the following steps:

1. Type the name of the printer.
2. Select the appropriate printer model from model list.
3. Enter any description corresponding to the type of the printer in the **Type** field. This is optional.
4. Specify any printer description in the **Description** field. This is optional.
5. Specify printer location in the **Location** field.
6. Type the IP address or DNS name of the printer in the **Device** textbox for network-connected printers. On IBM AIX with **jetdirect Queue type** only DNS name is possible, numeric IP address is not allowed.
7. **Queue type** shows the connection as **lpd** or **jetdirect** in the corresponding list box. Additionally **usb** type is available on Sun Solaris OS.
8. Select **Copies** to set the number of copies.
9. Check the **Collate** option to receive copies already sorted.
10. Check the **Reverse Order** option to receive copies in the reverse order.
11. Check the **Make Default** option to set this printer as default.
12. Click **OK** to add the printer.

## Administrator Installation

Samsung provides convenient installation methods useful for administrators. Administrators can remotely install printer drivers to multiple client computers or use command window to install drivers at once. Administrators can also make their own installation package for distribution. Check the system requirements before installing the machine's driver (see "System requirements" on page 42).



### Remote installation

Remote Installation is provided under the **Administrator Installation** menu. It is provided for administrators to remotely install printer drivers and application software to multiple client computers. To use remote installation, you must configure at least one group. Multiple client computers can be added to a group that has the same installation configuration. Installation configuration includes device drivers or application software to be installed, ports used for printing, default printers, printer's names, sharing information, etc.




For remote installation, all client computers must be joined to a domain or a workgroup and file sharing must be enabled to be accessed by remote installer software on both server and client sides. If you cannot access the client computers, you might need to disable the **Firewall** option on the client computers.

### Domain remote installation

You need to be a member of domain administrator to use **Domain Remote Installation**.

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
  - The software CD should automatically run and an installation window appears.
  - If the installation window does not appear, click **Start** and then **Run**. Type **X:\Setup.exe**, replacing "X" with the letter which represents your drive. Click **OK**.
  - If you use Windows Vista, Windows 7, or Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type **X:\Setup.exe** replacing "X" with the letter which represents your drive and click **OK**.
  - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
  - If the **AutoPlay** window appears in Windows 7 or Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field,

and click **Yes** in the **User Account Control** windows.

3. Select **Administrator Installation > Remote Installation**.  
If necessary, select a language from the drop-down list.
4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
5. **Select Client Groups** window appears.
6. Click **New Group**.  
To use remote installation, you need at least a group. If you have already created a group, load the group you want and go to step 16.
  - **Edit Group**: You can edit groups.
  - **Load Group**: You can load groups.
  - **Delete Group**: You can delete groups.
7. **Log on** window appears. Select **Domain Remote Installation** and type in the administrator's **Domain**, **ID** and **Password**.  
 If your company has no domain network environment, you can use **Workgroup Remote Installation** (see "Workgroup Remote Installation" on page 46).
8. Click **Next**.
9. **Select Clients** window appears.
10. Type in the group name in the **Group Name** field.
11. Add the client computers to be in the group to the right side panel.  

  - You can click on ... button to search the client computers and add button to add a client computer by typing the IP address or the computer name of client.
  - You can add up to 50 client computers in a group. If you want to add more than 50 client computers, you need to create more groups.
  - If the firewall is enabled on the client computer, access may be denied.
  - The client computer's operating system should be Windows 2000 or higher.
  - C drive must be shared as C\$.
12. **Select Software and Utilities to Install** window appears.  
Select the driver(s) and application software(s) you want to install and click **Next**.
13. **Select Printer connection** window appears.  
Select the printer connection type and click **Next**.
  - If you selected **Network Connection**, **Search Network Printers** window appears, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
  - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.
14. **Confirm Group details** window appears.  
Check the group information and click **Next**.  
 **Location to save the group** shows the path of default folder which stores the created group information. The group information file will be created as "<group\_name>.RGI". You can change the path by clicking the **Change** button.
15. **Select Client Groups** window appears again.
16. Select the group(s) and click **Next** to start remote installation.  
Remote installation begins. You can see the installation status from the window.

17. When installation is completed, **Results of remote installation** window appears.

Check the result. For failed client computers, you can reinstall by clicking on the **Reinstall** button.



For failed client computers, you can check the log file which is created in the client computers.

## Workgroup Remote Installation

You can also use remote installation method with workgroups.

If your company has no domain network environment, you should use **Workgroup Remote Installation**.



If the client computer uses Windows Vista or higher, the ID should be **Administrator**.

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
  - The software CD should automatically run and an installation window appears.
  - If the installation window does not appear, click **Start** and then **Run**. Type X:\Setup.exe, replacing "X" with the letter which represents your drive. Click **OK**.
  - If you use Windows Vista, Windows 7, or Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your drive and click **OK**.
  - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe in Install or run program** field, and click **Continue** in the **User Account Control** windows.
  - If the **AutoPlay** window appears in Windows 7 or Windows 2008 Server R2, click **Run Setup.exe in Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Remote Installation**. If necessary, select a language from the drop-down list.
4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
5. **Select Client Groups** window appears.
6. Click **New Group**.

To use remote installation, you need at least a group. If you have already created a group, load the group you want and go to step 16.

  - **Edit Group**: You can edit groups.
  - **Load Group**: You can load groups.
  - **Delete Group**: You can delete groups.
7. **Log on** window appears. Select **Workgroup Remote Installation** and type in the **Workgroup, ID** and **Password**.



- For Windows XP/2000/2003, the ID should be of a member of Administrators group for operating computers and for Windows Vista/2008/7, the ID should be of the default administrator account named Administrator.
- You can also use **Domain Remote Installation** (see "Domain remote installation" on page 45).

8. Click **Next**.

9. **Select Clients** window appears.

10. Type in the group name in the **Group Name** field.

11. Add the client computers to be in the group to the right side panel.



- You can click ... button to search the client computers and add button to add the client computer by typing the IP

address or the computer name of client.

- You can add up to 50 client computers in a group. If you want to add more than 50 client computers, you need to create more groups.
- If the firewall is enabled on the client computer, access may be denied.
- The client computer's operating system should be Windows 2000 or higher.
- If you have grouped the client computers in a workgroup and you try to connect to the client computer, a pop up window asking you to enter an Administrator's ID/password of the client computer you selected will appear if you can't access through the password you set in step 7.
- C drive must be shared as C\$.

12. **Select Software and Utilities to Install** window appears.

Select the driver(s) and application software you want to install and click **Next**.

13. **Select Printer connection** window appears.

Select the printer connection type and click **Next**.

- If you selected **Network Connection**, **Search Network Printers** window appears, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
- The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.

14. **Confirm Group details** window appears.

Check the group information and click **Next**.



**Location to save the group** shows the path of default folder which stores the created group information. The group information file will be created as "<group\_name>.RGI". You can change the path by clicking the **Change** button.

15. **Select Client Groups** window appears again.

16. Select the group(s) and click **Next** to start remote installation.

Remote installation begins, you can see the installation status from the window.

17. When installation is completed, **Results of remote installation** window appears.

Check the result. For failed client computers, you can reinstall again by clicking the **Reinstall** button.



For failed client computers, you can check the log file, which is created in the client computers.

## Error log messages

Message	Meaning	Suggested solutions
Connecti on Error	Unable to bind the socket. [Port number:...]	Restart the client computer.
	Unable to listen the socket. [Port number:...]	
	Unable to connect to the client computer.	
	Client computer's socket is closed.	

Message	Meaning	Suggested solutions
<b>Setup Error</b>	Unable to access the default shared folder (C\$) in the client computer.	<ul style="list-style-type: none"><li>• Check if C drive folder is shared as C\$.</li><li>• Check if you can remotely access the client computer's C\$ folder on a network browser.</li></ul>
	Unable to copy service files.	Check if you can remotely access the client computer's C\$ folder on the network browser.
	Unable to start the service on the client computer.	Check whether <b>RMInstallService</b> program is running from <b>Services</b> . (From the Windows <b>Start</b> menu, select <b>Control Panel &gt; Administrative Tools &gt; Services</b> ). If <b>RMInstallService</b> is stopped then restart it and try remote installation again. If you can't restart <b>RMInstallService</b> , then reboot client computer and try remote installation again.
	Unable to create thread for monitoring.	Restart the client computer.
	Unable to share folder on client computer.	Check if the shared folder in the client computer can be shared with full control.
	Unable to copy Installation files.	
	Unable to execute the setup file normally.	<ul style="list-style-type: none"><li>• Check if the same model's installer is running.</li><li>• Check if the installer is waiting for a user input.</li></ul>

Message	Meaning	Suggested solutions
<b>Unable to get profile</b>	N/A	Check if the environment of client computer is supported for installation.
<b>OS not supported</b>		
<b>Internet Explorer® not supported</b>		
<b>MSXML not supported</b>		
<b>Insufficient free space</b>		
<b>Not Administrator</b>		

### Create Customized Installer

**Create Customized Installer** allows administrators to create their own installation package with the installation setting you want. You can choose the drivers or software to be installed, assigned printer, printer name, sharing options, default printer, and so on.



The created installation package can be distributed as a single self-extraction EXE package to clients through file servers or special distribution servers. You can also create an install script file for silent installation.

#### Creating a setup package

You can create a setup package from CD to a local folder. The created setup package will include only selected device drivers or applications. There are two types of setup package you can create. **Normal(setup.exe)** and **Self-Extraction Package**. **Normal(setup.exe)** will extract only selected driver or application files from CD. **Self-Extraction Package** will package like normal installation CD package as a single self-extractable setup.exe file.

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
  - The software CD should automatically run and an installation window appears.
  - If the installation window does not appear, click **Start** and then **Run**. Type X:\Setup.exe, replacing "X" with the letter which represents your drive. Click **OK**.
  - If you use Windows Vista, Windows 7, or Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your drive and click **OK**.
  - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
  - If the **AutoPlay** window appears in Windows 7 or Windows 2008

Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.



3. Select **Administrator Installation > Create Customized Installer**.  
If necessary, select a language from the drop-down list.
4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
5. **Select Package Type** window appears.  
Select **Normal(setup.exe)** or **Self-Extraction Package**.  
If you place the mouse cursor over the package type, you can see the detailed information on the bottom right side of the window.
6. **Select Software and Utilities to Install** window appears.  
Check the device drivers or application software you want to included in the setup package and click **Next**.
7. **Select Printer connection** window appears.  
Select the printer connection type and click **Next**.
  - If you selected **Network Connection**, **Search Network Printers** window appears, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
  - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly. If you can't search network printers on the network then check whether your firewall setting is disabled. If it is enabled, disable firewall temporarily and try searching again.
8. **Set Printer Drivers** window appears. Click **Next**.  
If necessary, configure printer name, sharing, shared name and default printer setting. If you changed settings then you should click **Apply** button to apply changes then click **Next**.
9. **Summary** window appears. Check the package information and click **Next** to start creating the setup package.  
You can modify the package configuration by clicking the **Back** button.  
 Check the **Install the package as silent mode**, if you want to make the installation package as a silent installation package. Silent installation installs the driver automatically by the set option without user intervention.
10. When creating the setup package is finished, **Packaging Completed** window appears.  
Check **Open package folder upon completion** if you want the created package to open automatically after it's created.
11. Click **Finish**.

## Creating a setup script file



You can generate setup configuration script file based on the CD image. It can be used with Silent installation for distributing software to multiple client computers. For example, you can upload a full CD setup files into a file server then distribute batch file or log-on script file that executes silent installation with this customized script file (ex:  
\\<file\_server>\CD\setup.exe /s /i"c:\temp\CONFIG.CI3).

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
  - The software CD should automatically run and an installation window appears.
  - If the installation window does not appear, click **Start** and then **Run**. Type X:\Setup.exe, replacing "X" with the letter which

represents your drive. Click **OK**.

- If you use Windows Vista, Windows 7, or Windows 2008 Server R2 click **Start > All programs > Accessories > Run**.  
Type X:\Setup.exe replacing "X" with the letter which represents your drive and click **OK**.
  - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
  - If the **AutoPlay** window appears in Windows 7 or Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Create Customized Installer**.  
If necessary, select a language from the drop-down list.
  4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
  5. **Select Package Type** window appears.  
Select **Generate Script**.  
If you place the mouse cursor over the package type, you can see the detailed information on the bottom right side of the window.
  6. **Select Software and Utilities to Install** window appears.  
Check the device drivers or application software you want to included in the setup package and click **Next**.
  7. **Select Printer connection** window appears.  
Select the printer connection type and click **Next**.
    - If you selected **Network Connection**, **Search Network Printers** window appears, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
    - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.
    - If you can't search network printers on the network then check whether your firewall setting is disabled. If it is enabled, disable firewall temporarily and try searching again.
    - Setup configuration script filename is set as **CONFIG.CI3** and it's not changeable.
  8. **Set Printer Drivers** window appears. Click **Next**.  
If necessary, configure printer name, sharing, shared name and default printer setting. If you changed settings then you should click **Apply** button to apply changes then click **Next**.
  9. **Summary** window appears. Check the package information and click **Next** to start creating the setup package.  
You can modify the package configuration by clicking the **Back** button.  
 Check the **Install the package as silent mode**, if you want to make the installation package as a silent installation package. Silent installation installs the driver automatically by the set option without user intervention.
  10. When creating the setup package is finished, **Packaging Completed** window appears.  
Check **Open package folder upon completion** if you want the created package to open automatically after it's created.
  11. Click **Finish**.

### Modifying a setup script file

1. Make sure that the machine is connected to the network and powered on.
2. Insert the supplied software CD into your CD-ROM drive.
  - The software CD should automatically run and an installation window appears.
  - If the installation window does not appear, click **Start** and then **Run**. Type X:\Setup.exe, replacing "X" with the letter which represents your drive. Click **OK**.
  - If you use Windows Vista, Windows 7, or Windows 2008 Server R2 click **Start > All programs > Accessories > Run**. Type X:\Setup.exe replacing "X" with the letter which represents your drive and click **OK**.
  - If the **AutoPlay** window appears in Windows Vista, click **Run Setup.exe** in **Install or run program** field, and click **Continue** in the **User Account Control** windows.
  - If the **AutoPlay** window appears in Windows 7 or Windows 2008 Server R2, click **Run Setup.exe** in **Install or run program** field, and click **Yes** in the **User Account Control** windows.
3. Select **Administrator Installation > Create Customized Installer**. If necessary, select a language from the drop-down list.
4. Read **License Agreement**, and select **I accept the terms of the License Agreement**. Then, click **Next**.
5. **Select Package Type** window appears.  
Select **Modify Script**.  
If you place the mouse cursor over the package type, you can see the detailed information on the bottom right side of the window.
6. Open the script file you want to modify(ex:CONFIG.CI3).  
 **CONFIG.CI3** script file will exist in \Setup\Script subfolder of the created setup package.
7. **Select Printer connection** window appears.  
Select the printer connection type and click **Next**.
  - If you selected **Network Connection**, **Search Network Printers** window appears, type in the IP address or host name in the information field than click **Search**. when you are finished, click **Next**.
  - The discovered printer list will show network printers on the same subnet. If you want to specify a network printer that is located over subnet then specify IP address of network printer directly.  

    - If you can't search network printers on the network then check whether your firewall setting is disabled. If it is enabled, disable firewall temporarily and try searching again.
    - Setup configuration script filename is set as **CONFIG.CI3** and it's not changeable.
8. **Set Printer Drivers** window appears. Click **Next**.  
If necessary, configure printer name, sharing, shared name and default printer setting. If you changed settings then you should click **Apply** button to apply changes then click **Next**.
9. **Summary** window appears. Check the package information and click **Next** to start creating the setup package.  
You can modify the package configuration by clicking the **Back** button.
10. When creating the setup package is finished, **Packaging Completed** window appears.  
Check **Open package folder upon completion** if you want the created package to open automatically after it's created.


11. Click **Finish**.



### Silent Installation Mode



Silent installation mode is an installation method that does not require any user intervention. Once you start the installation, the printer driver and software are automatically installed on you computer. You can start the silent installation by typing **/s** or **/S** in the command window. Silent installation can also be performed by using the command script file (see"Create Customized Installer" on page 47).

### Command-line Parameters

Following table shows commands that can be used in the command window or in making a script file (see "Creating a setup script file" on page 48).

 The following command-lines are effective and operated when a command is used with **/s** or **/S**. But **/h**, **/H** or **/?** are exceptional commands that can be operated solely.

Comm and-line	Definition	Description
/s or /S	Starts silent installation.	Installs printer drivers without prompting any UIs or user intervention.
/p"<port name>" or /P"<port name>"	 Specifies printer port. Network Port will be created by use of Standard TCP/IP Port monitor.	Printer port name can be specified as IP address, hostname, or IEEE1284 port name. For example <ul style="list-style-type: none"><li>• /p"xxx.xxx.xxx.xxx" in where, "xxx.xxx.xxx.xxx" means IP address for network printer.</li><li>• /p"USB001", /P"LPT1:", /p"hostname"</li><li>• When installing the driver silently in Korean, type in-<b>Setup.exe /s /L"0x0012"</b> or <b>Setup.exe /s /L"18"</b>.</li></ul>
/l"<Lang_code>" or /L"<Lang_code>"	 Sets language code. The default language will be decided automatically if there is no specified installation language commanded. The default language depends on your system locale information.	Decimal number and hexadecimal number can be used but hexadecimal number must have prefix with "0X". Refer to Language Codes section for available <Lang_code>. This command applies to all machine's drivers and application software if specified language is supported. All software included in the machine's drivers will be installed as the specified language. <ul style="list-style-type: none"><li>• Setup.exe /s /L"0x0012" or Setup.exe /s /L"18" ; install setup package silently with Korean.</li></ul>

Comm and-line	Definition	Description
/a"<dest_path>" or /A"<dest_path>"	Specifies destination path for installation.  The destination path should be a fully qualified path.	Since printer drivers should be installed on the OS specific location, this command applies to only application software.
/i"<script filename>" or /I"<script filename>"	Specifies customized install script file for custom operation.  The script filename should be a fully qualified filename.	Customized script file can be assigned for customized silent installation. This script file can be created or modified through provided installer customizing utility or by text editor. Note: This customized script file is prior to default installer setting in setup package but not prior to command-line parameters.
/n"<Printer name>" or /N"<Printer name>"	Specifies printer name. Printer instance shall be created as specified printer name.	With this parameter, you can add printer instances as needed.
/nd or /ND	Commands not to set the installed driver as a default printer driver.	It indicates installed printer driver will not be the default printer driver on your system if there are one or more printer drivers installed. If there is no installed printer driver on your system, then this option won't be applied because Windows OS will set the installed printer driver as a default printer driver.
/x or /X	Uses existing printer driver files to create printer instance if it is already installed.	This command provides a way to install a printer instance that uses installed printer driver files without installing an additional driver.
/up"<printer name>" or /UP"<printer name>"	Removes only specified printer instance and not the driver files.	This command provides a way to remove only specified printer instance from your system without effecting other printer drivers. It will not remove printer driver files from your system.
/d or /D	Uninstalls all device drivers and applications from your system.	This command will remove all installed device drivers and application software from your system.
/v"<share name>" or /V"<share name>"	Shares installed machine and add other available platform drivers for Point & Print.	It will install all supported Windows OS platform's printer drivers to system and share the machine with the specified <share name> for Point & Print.

Comm and-line	Definition	Description
/o or /O	Opens <b>Printers and Faxes</b> folder after installation.	This command will open <b>Printers and Faxes</b> folder after the silent installation.
/f"<log filename>" or /F"<log filename>"	Specifies log filename. The default log file is created in the system temp folder if not specified.	It will create a log file to a specified folder.
/h, /H or /?	Shows Command-line Usage.	

Language code

Code	Language
0X0009	English
0X0012	Korean
0X0804	Simplified Chinese
0X0404	Traditional Chinese
0x040c	French
0X0007	German
0X0010	Italian
0X000a	Spanish
0X0013	Dutch
0X001D	Swedish
0X0006	Danish
0X000b	Finnish
0X0014	Norwegian
0X0019	Russian
0X0005	Czech
0X000e	Hungarian
0X0008	Greek
0X0816	Standard Portuguese
0X0416	Brazilian Portuguese
0X0015	Polish
0X001F	Turkish
0X0001	Arabic
0X000D	Hebrew
0x0424	Slovenian
0X0418	Romanian
0X0402	Bulgarian

Code	Language
0X041A	Croatian
0X081A	Serbian
0X0422	Ukraine
0X041B	Slovakia
0X0421	Indonesian
0x041E	Thai
0X0429	Farsi

### Frequently Asked Question

#### Remote Installation related questions

N o.	Question	Answer
1	Client computers are not listed in the list when logging on as a domain.	Primary DNS address in all client computers should be specified as your domain server. If the client computer is turned off, turn it on.
2	“ <b>Cannot access</b> ” error message appears during workgroup remote installation.	<p>This error message appears if access was denied. You should check the settings of network access; sharing and security model for local accounts.</p> <ul style="list-style-type: none"> <li>From the Windows Start menu, click <b>Control Panel &gt; Administrative Tools &gt;Local Security Policy &gt; Local Policies &gt; Security Options &gt; Network access: Sharing and security model for local accounts</b>.</li> <li>If the setting is not <b>Classic – local users authenticate as themselves</b>, change it to <b>Classic – local users authenticate as themselves</b>.</li> </ul>
3	“ <b>Cannot access</b> ” error message appears during domain / workgroup remote installation	Check if the C drive folder is shared. C Drive folder should be shared as C\$ to access remote client computers.

#### Create Customized Installer related questions

No.	Question	Answer
1	When I try to open the <b>CONFIG.CI3</b> script file, the files doesn't open and a warning message pops up.	When the Custom utility opens the config.ci3 script file, it checks manufacture, model and script file type. Check the <MFG>,<MDL> node of the file you want to open, and if <SCRIPT_TYPE> value is 'Config'.
2	I cannot precede the next step at <b>Search Network Printers</b> dialog.	It checks if the IP address/hostname is valid or not. You can specify only the IP address/hostname which is connected via network currently. Check the connection status of the printer to specify.
3	When I execute the customized installer package, the welcome dialog appears and I need to select the options again.	If you want to install in silent mode, check the “Install the package as silent mode” check box in the <b>Summary</b> window.

# network setup

This chapter gives you step-by-step instructions for setting up the network environment before using the machine. You can set up the network environment using the **Network Setting** menu under the **Machine Setup** menu. You need to be familiar with the terms used for setting up the network environment. Refer to the glossary for terms you do not understand ("Glossary" on page 124).

**This chapter includes:**

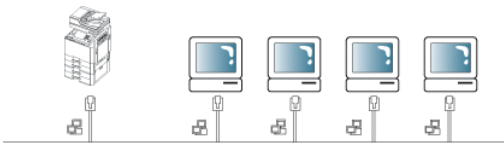
- Frequently used features
- Network environment
- Accessing network setup
- Network settings (configuring TCP/IP)
- Print settings (Ports to set for network printing)
- Protocols to set for discovering and managing the machine
- Authentication settings for servers
- Network filtering settings
- SNTP settings
- SetIP settings
- SyncThru™ Web Service
- SMTP setting
- Network security setting

## Frequently used features

- Basic settings to set ("Network settings (configuring TCP/IP)" on page 53).
- Configuring TCP/IPv4 ("TCP/IP Protocol" on page 53).
- Configuring TCP/IPv6 ("TCP/IPv6" on page 54).
- Registering certificate for SSL communication("TCP/IPv6" on page 54).

## Network environment

You can use network after connecting network cable to a corresponding port on your machine.



You need to set up the network protocols on the machine to use it as your network machine. You can set up the basic network settings through the machine's control panel.

The following table shows the network environments supported by the machine:

Item	Specification
Network interface	Ethernet 10/100/1000 Base-T
Network operating system	<ul style="list-style-type: none"><li>• Windows® 2000, Windows® XP, Windows Server® 2003, Windows Vista®, Windows® 7, Windows Server® 2008 R2</li><li>• Various Linux OS</li><li>• Mac OS X 10.5 ~ 10.6</li></ul>

Item	Specification
Network protocols	<ul style="list-style-type: none"><li>• TCP/IPv4</li><li>• DHCP, BOOTP</li><li>• DNS, WINS, Bonjour, SLP, UPnP</li><li>• Standard TCP/IP Printing (RAW), LPD/LPR, IPP, WSD Print</li><li>• SNMPv1/2/3, HTTP(S), Telnet, SMTP(S), LDAP(S), IPsec</li><li>• TCP/IPv6 (DHCP, DNS, RAW, LPR, SNMPv 1/2/3, HTTP(S), IPsec)</li></ul>

## Accessing network setup

1. Make sure that the ethernet cable is connected to your machine.
2. Press **Machine Setup > Network Settings** from the display screen.
3. Log-in as an administrator (see "Log-in" on page 11).




## Network settings (configuring TCP/IP)

When you connect your machine to a network, you must first configure the TCP/IP settings for the machine. The settings shown below are the basic settings required for using your machine as a network machine. You can set TCP/IP, DNS server, TCP/IPv6, Ethernet, and IP address allocation methods.

### TCP/IP Protocol

You can set IPv4 settings.


Press **Machine Setup > Network Settings > TCP/IP > TCP/IPv4** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > TCP/IPv4** (see "TCP/IPv4" on page 82).

### IP Setting

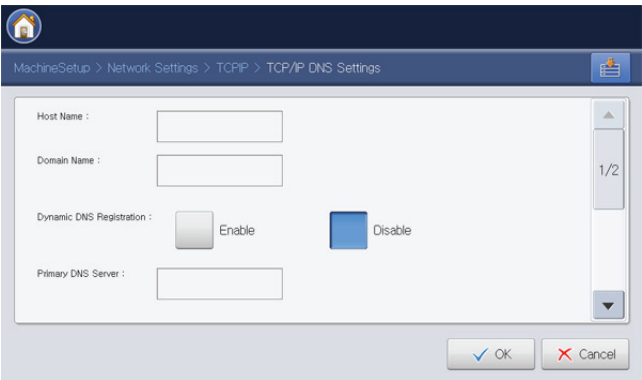
You can choose the method for allocating IP addresses. Configure the settings and click **OK** to save the settings.

- **Static:** Select to enter IP address/Subnet Mask/ Gateway Address manually.
- **BOOTP:** IP address/Subnet Mask/ Gateway Address are automatically allocated by the BOOTP Server.
- **DHCP:** IP address/Subnet Mask/ Gateway Address are automatically allocated by the DHCP Server.

 If you enable **AutoIP**, when the **BOOTP** or **DHCP** fail to allocate the IP address/Subnet Mask/ Gateway Address after 2 minutes, the machine automatically allocates a Link-Local IP address, which is the 169.254.0.0/16 set of addresses defined in RFC 3927.

### DNS Configuration

You can configure the DNS server. Configure the settings and click **OK** to save the settings.

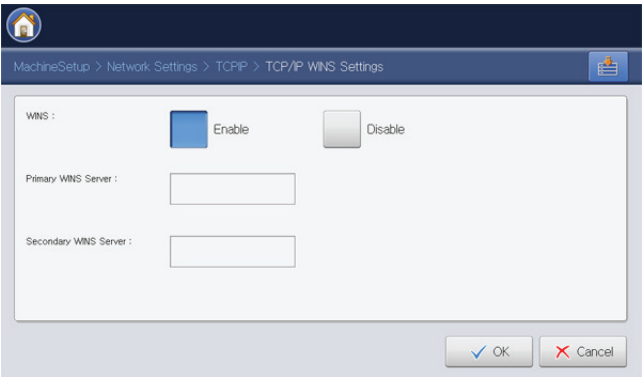


- **Host Name:** Enter the host name. You can enter up to 63 characters. Default name is "**SEC[MAC address]**".
- **Domain Name:** Enter the domain name. You can enter up to 128 characters.
- **Dynamic DNS Registration:** Select whether to enable or disable dynamic DNS registration. If this option is enabled, the machine registers its host name and domain name to configured DNS servers dynamically. Also, if this option is enabled and DHCP is selected, DHCP FQDN options are automatically disabled.
- **Primary DNS Server:** Enter the address of the DNS server you want to use primarily.

- **Secondary DNS Server:** Enter the address of the DNS server you want to use as an alternative.
- **Authentication Method:** Select the authentication method for Dynamic DNS Update. To activate this setting, **Dynamic DNS Registration** should be enabled.

### WINS (Windows Internet Name Service)

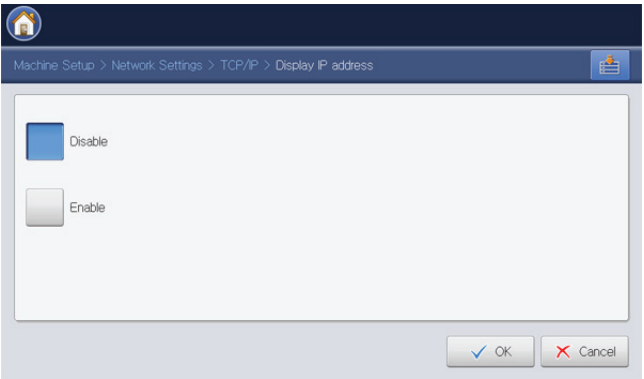
You can configure the WINS server. WINS is used in the Windows operating system. Configure the settings and click **OK** to save the settings.



- **WINS:** Select whether to enable or disable WINS.
- **Primary WINS server:** Enter the address of the WINS server you want to use primarily.
- **Secondary WINS server:** Enter the address of the WINS server you want to use as an alternative.

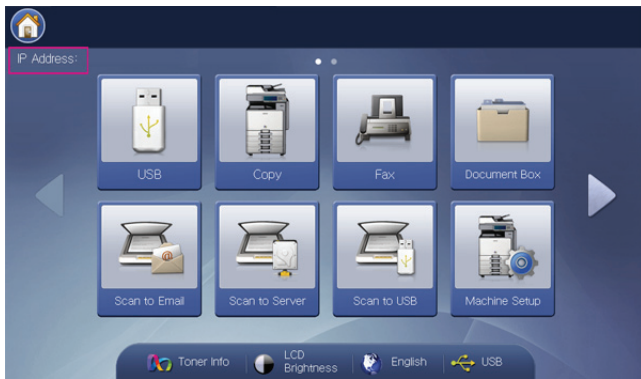
### Display IP address

You can set the machine to display the IP address on the Home screen.



- **Disable:** Select to disable this option.
- **Enable:** Select to enable this option. If you enable this option the IP

address will show on the Home screen.

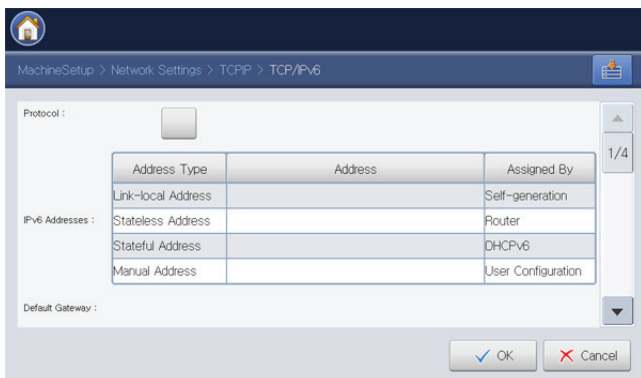


## TCP/IPv6

You can set the IPv6 settings. Configure the settings and click **OK** to save the settings.

Press **Machine Setup > Network Settings > TCP/IP > TCP/IPv6** from the display screen.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > TCP/IPv6** (see "TCP/IPv6" on page 83).



- **Protocol:** Check to enable IPv6 protocol in the system. Reboot the machine to apply the change.
- **IPv6 Addresses:** Shows the IPv6 address types.
  - **Link-local Address:** This is an IPv6 address starting with a prefix value FE80. This address has local link scope and is automatically generated.
  - **Stateless Address:** This is an IPv6 address which is formed by router advertised prefix and interface identifier. On a interface like Ethernet, interface identifier is usually derived from the Mac address of the machine. The advertised prefix depends on the router configurations.
- More than one address may be configured for the router advertisement, but only one will be displayed in the display screen.
- **Stateful Address:** This is an IPv6 address which is acquired by a DHCPv6 server.
- **Manual Address:** This is an IPv6 address which an administrator can configure manually.
- **Default Gateway:** This is an IPv6 address of default gateway. Machine

automatically detects IPv6 gateways. \

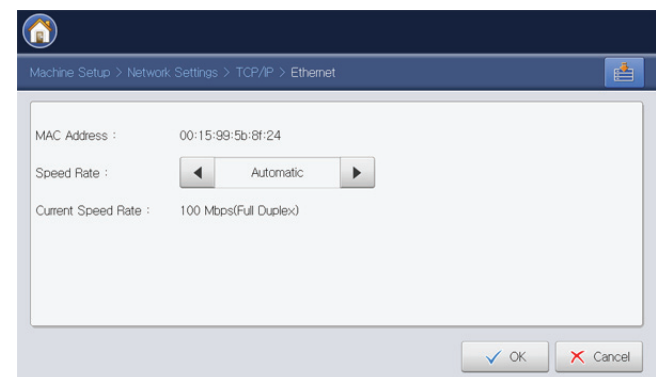
- **DHCPv6 Configuration:** Select the DHCPv6 configuration you want to use.
  - **Use DHCP as directed by a router:** DHCPv6 is enabled when a router advertises to use DHCPv6.
  - **Always Enable DHCP:** Regardless of router advertisement, use DHCPv6 to acquire an IPv6 address.
  - **Never use DHCP:** Disables DHCPv6.
- **IPv6 Manual Address:** Check to enable. You can enter the IPv6 address manually. \
- **IPv6 Host Name:** Shows the machine's host name which can be set in **TCPIP > DNS Configuration** menu (see "DNS Configuration" on page 53.)
- **IPv6 Domain Name:** Enter the domain name. You can enter up to 128 characters.
- **Primary DNSv6 Server Address:** Enter the address of the DNSv6 server you want to use primarily.
- **Secondary DNSv6 Server Address:** Enter the address of the DNSv6 server you want to use as an alternative.
- **Dynamic DNSv6 Registration:** Check to enable or disable dynamic DNSv6 registration.
- **Authentication Method:** Select the authentication method for Dynamic DNS Update. To activate this setting, **Dynamic DNS Registration** should be enabled.

## Ethernet

You can set ethernet settings. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > TCP/IP > Ethernet** from the display screen.

You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > General** (see "General" on page 82).



- **MAC Address:** Shows the Mac address of the machine.
- **Speed Rate:** Choose the speed rate of ethernet.
- **Current Speed Rate:** Shows current ethernet speed rate.


## Print settings (Ports to set for network printing)

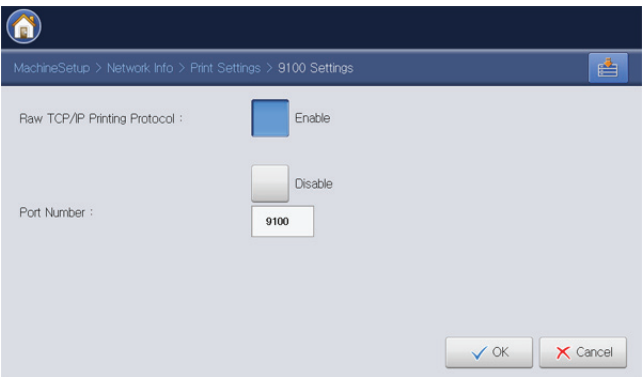
You can set the ports to use when printing. If you want to print though the network, you need to set the following ports.

### Raw TCP/IP Settings

You can configure Raw TCP/IP settings for printing. Standard port monitor, which is widely used for network connected machines, uses RAW or LPR printing protocols to send data to the machine. Raw TCP/IP works as a pathway for RAW protocols. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > Print Settings > 9100 Settings** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > Raw TCP/IP, LPR, IPP** (see "Raw TCP/IP, LPR, IPP" on page 83).




- **Raw TCP/IP Printing Protocol:** Select whether to enable or disable printing protocol.
- **Port Number:** Enter the port number of the machine for raw TCP/IP Printing. You can change this port number whenever the network environment you are using changes.

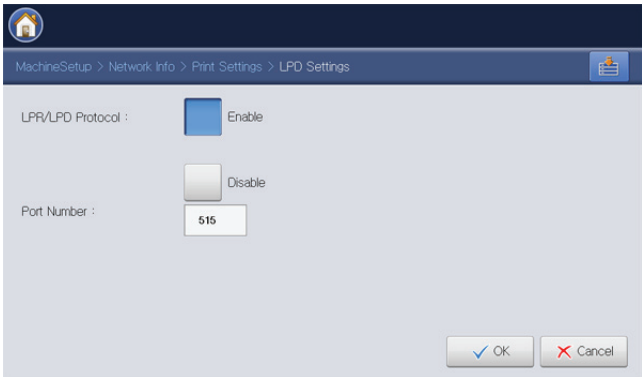
### LPR/LPD Settings

LPD (Line Printer Daemon) is a software for receiving data, which in this case, is stored on your machine. LPD allows your machine to print spooled data when it receives request from the LPR client through IP address of the your machine. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > Print Settings > LPD Settings** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > Raw TCP/IP, LPR, IPP** (see "Raw

TCP/IP, LPR, IPP" on page 83).




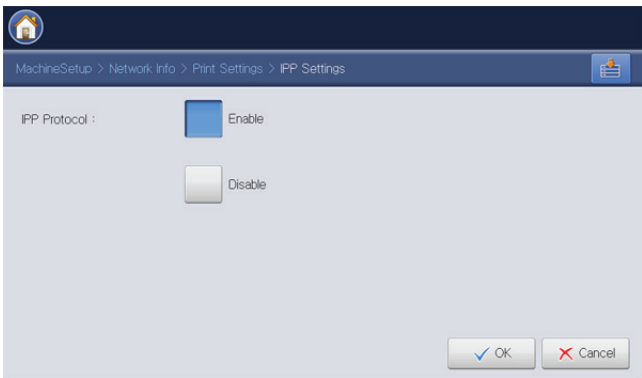
- **LPR/LPD Protocol:** Select whether to enable or disable printing protocol.
- **Port Number:** Enter the port number of the machine for LPD Printing. You can change this port number whenever the network environment you are using changes.

### IPP Settings

You can enable or disable IPP (Internet Printing Protocol) protocol. IPP is an Internet standard protocol that defines operations and attributes for printing over the HTTP protocol. Select whether to enable or disable IPP protocol and press **OK** to save the settings.

Press **Machine Setup > Network Settings > Print Settings > IPP Settings** from the display screen.


 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > Raw TCP/IP, LPR, IPP** (see "Raw TCP/IP, LPR, IPP" on page 83).

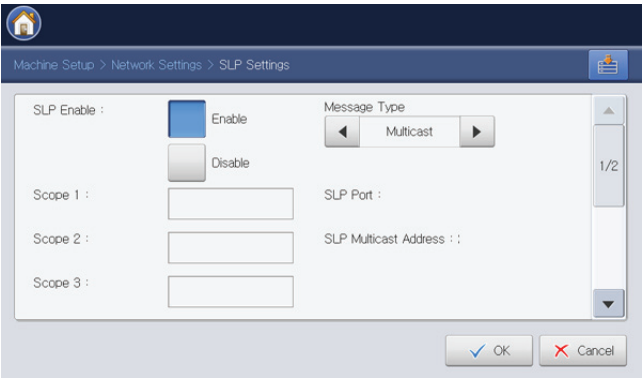



# Protocols to set for discovering and managing the machine

## SLP Settings

You can configure SLP (Service Location Protocol) settings. This protocol allows host applications to find services in a local area network without prior configuration. Configure the settings and press **OK** to save the settings. Press **Machine Setup > Network Settings > SLP Settings** from the display screen.


 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > SLP** (see "SLP" on page 83).



- **SLP Enable:** Select whether to enable or disable SLP.
  - **Scope1~3:** Enter the network scope to use; up to 3 scopes can be set. Each machine must always be in one or more scopes. You need scopes to group services that are comparable to the network neighborhood in other systems.
  - **Message Type:** Select the message type.
  - **SLP Port:** Shows the port used by SLP. You cannot change the port manually.
  - **SLP Multicast Address:** Shows the multicast address. You cannot change the address manually. SLP uses multicasting for a machine to join a network and find other machines.
  - **Multicast Radius:** Multicast radius for the multicast packets. This value will be taken in to effect only if IPv6 is disabled.
-  This is a limitation with Java Runtime environment.
- **Registration Lifetime:** Enter the lifetime of service registration when registering services with DA.

## SNMP Settings

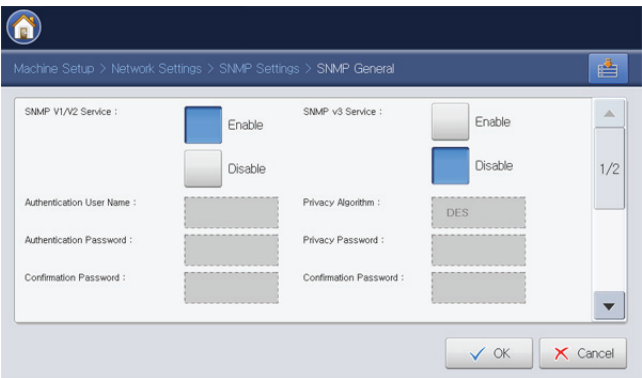
You can set SNMP (Simple Network Management Protocol). Administrator's can use SNMP to monitor and manage machines on the network. Press **Machine Setup > Network Settings > SNMP Settings** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > SNMP** (see "SNMP" on page 84).

### SNMP General

You can set general SNMP settings. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SNMP Settings > SNMP General** from the display screen.

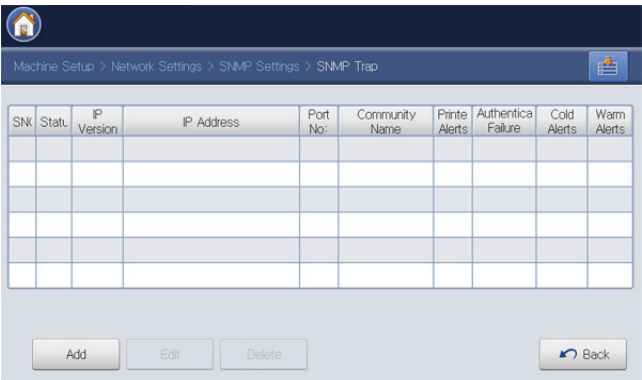


- **SNMP v1/v2/v3 Service:** Select whether to enable or disable SNMP v1/v2 or v3.
- **Authentication User Name:** Enter the user name you want to use for SNMPv3 authentication.
- **Authentication Password:** Enter the password you want to use for SNMPv3 authentication.
- **Confirmation Password:** Re-enter the password for confirmation.
- **Privacy Algorithm:** Shows the algorithm used to encrypt the SNMPv3 request/response. Only DES algorithm is supported, you can not change it manually.
- **Privacy Password:** Enter the password used to encrypt SNMPv3 request/response.
- **Confirmation Password:** Re-enter the **Privacy Password** for confirmation.
- **Authentication Algorithm:** Select the authentication method.

### SNMP Trap

You can set SNMP Trap server. With SNMP trap, configured client can get notification for alerts. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SNMP Settings > SNMP Trap** from the display screen.



- **Add:** Press this button to create a new SNMP trap server.
  - **Trap Status:** Check to enable SNMP trap.
  - **IP Version:** Select the IP version.
  - **IP Address:** Enter the IP address.
  - **Port No.:** Enter the port number.
  - **Printer Alerts:** Check to enable this option. If this option is enabled, the Trap server can get notification for all printer related

traps from the system.

- **Authentication Failure Alerts:** Check to enable this option. If you enable this option, the Trap server can get notification for authentication failure related traps from the system.
- **Cold Start Alerts:** Check to enable this option. If this option is enabled, the Trap server can get notification during hard bootup (restarting the system by turning the switch off/on).
- **Warm Start Alerts:** Check to enable this option. If this option is enabled, the Trap server can get notification during warm bootup (restarting the system without turning the switch off/on).
- **Community Name:** Enter the community name.
- **Edit:** Select the server you want to edit and press this button.
- **Delete:** Select the server you want to delete and press this button.

## SNMP Community

You can see the community status and its permissions. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SNMP Settings > SNMP Community** from the display screen.

SNO	Community Status	Community Name	Read	Write
1	true	public	true	false

Buttons: Add, Edit, Delete, Back

- **Add:** Press this button to add a new SNMP community.
  - **Community Status:** Check to enable community.
  - **Community Name:** Enter the community name.
  - **Access Permission:** Select the access permission.
- **Edit:** Select the community you want to edit and press this button.
- **Delete:** Select the community you want to delete and press this button.

## UPnP (SSDP) settings

You can set UPnP (SSDP) protocol. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > UPnP Settings** from the display screen.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click

**Settings > Network Settings > UPNP** (see "UPNP" on page 84).

Machine Setup > Network Settings > UPnP Settings

SSDP : ☒ Enable ☐ Disable

SSDP TTL : 4

Port Number : 1900

Friendly Name :

Buttons: OK, Cancel

- **SSDP:** Select whether to enable or disable SSDP (Simple Service Discovery Protocol).
- **SSDP TTL:** Enter the packet time to live. 4 is set as a default value.
- **Port Number:** Shows the port number.
- **Friendly Name:** Shows the friendly name used by SSDP. **Friendly Name** will be same as the Samsung model name (IP address) used by the SSDP protocol and is shown in Windows network when it detects a machine.

## MDNS Settings

You can set mDNS (Multicast Domain Name System) settings. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > MDNS Settings** from the display screen.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > mDNS** (see "mDNS" on page 84).

Machine Setup > Network Settings > MDNS Settings

MDNS Enable : ☒ Enable ☐ Disable

Port Number : 5353

mDNS Name :

Friendly Name :

Buttons: OK, Cancel

- **MDNS Enable:** Select whether to enable or disable mDNS.
- **Port Number:** Shows the port number used by mDNS.
- **mDNS Name:** Shows the instance name used by the services for registering via mDNS.
- **Friendly Name:** Shows the friendly name used by mDNS. **Friendly Name** will be same as the link address used by the mDNS protocol and is shown in the Windows network when it detects a machine.

## Authentication settings for servers


To send a scanned image through email or via a network server safely, you must register the account information of authorized users to your local machine or to the network server using SyncThru™ Web Service.

- If user authentication has been activated, only authorized local users or authorized users registered with the server (Kerberos, SMB, LDAP) can send scanned data to the network (email, FTP, SMB).
- For network scanning using the authentication feature, you must register the network or local authentication configuration from the machine's display screen or the SyncThru™ Web Service (see "External Authentication Server" on page 88).

### Kerberos Settings

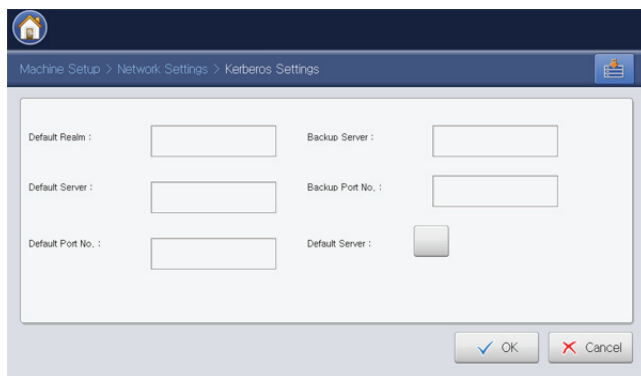
You can set kerberos server and realm settings for authentication. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > Kerberos Settings** from the display screen.

-  You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > External Authentication Server > Kerberos Server** (see "Kerberos Server" on page 88).

### Adding a Kerberos sever

1. Press **Add** to add a new Kerberos server.



- **Default Realm:** Enter the default realm.
  - **Default Server:** Enter the server address.
  - **Default Port No.:** Enter the default port number. 88 is set as a default value.
  - **Backup Server:** Enter the server address.
  - **Backup Port No.:** Enter the backup port number. 88 is set as a default value.
  - **Default Server:** Check to use this server as the default Kerberos server.
2. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Editing a Kerberos server

1. From the list, select the Kerberos server you want to edit and press **Edit**.
2. A pop-up window appears. Edit the necessary information.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.


### Deleting a Kerberos server

1. From list select the Kerberos server you want to edit and press **Delete**.
2. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### LDAP Settings

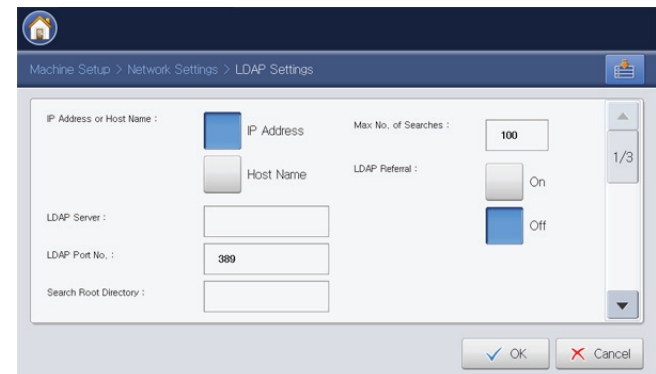
You can set LDAP (Lightweight Directory Access Protocol). LDAP is used by large accounts to access large quantities of data, including corporate address books. It can also be used for authentication. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > LDAP Settings** from the display screen.

-  You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > External Authentication Server > LDAP Server** (see "LDAP Server" on page 89).

### Adding a LDAP sever

1. Press **Add** to add a new LDAP server.



- **IP Address or Host Name:** Select whether to use an IP address or a host name.
- **LDAP Server:** Enter the server address.
- **LDAP Port No.:** Enter the server port number from 1 to 65535. 389 is set as a default value.
- **Search Root Directory:** Enter the search root directory which is the top search level of the LDAP directory tree. You can enter up to 64 characters.
- **Max No. of Searches:** You can set the maximum number of results that need to be returned during LDAP address book search.
- **LDAP Referral:** Select whether to turn on or off the **LDAP Referral**. If this option is **ON**, LDAP client will search referral server if the LDAP server has no data to reply to query and if the LDAP server has a referral server.
- **Search Timeout:** You can set the maximum search timeout for LDAP address book search.
- **Authentication method:** Select the authentication method for accessing the LDAP Server during the address book search.
  - **Anonymous:** Used to bind with null password and login ID (Password and login ID are grayed out in SWS).
  - **Simple:** Used to bind with the login ID and password in SWS.
- **Append Root to Base DN:** Select whether to enable or disable

append root to base DN.

- **Login Name:** You can enter up to 64 characters.
  - **Password:** You can enter up to 64 characters.
  - **Search Name Order:** Select the order you want. When LDAP address book search is performed it is required to map the user entered text to an LDAP attribute. The result will be shown as how you set this. If you set it to **Common Name**, the result will be listed in alphabetical order according to the **Common Name**.
  - **LDAP Configuration Test:** Press to test the LDAP server.
2. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Editing a LDAP server

1. From the list, select the LDAP server you want to edit and press **Edit**.
2. A pop-up window appears.  
Edit the necessary information
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Deleting a LDAP server

1. From list select the LDAP server you want to delete and press **Delete**.
2. A confirmation window appears. Press **OK**.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## SMB Auth Settings

You can set SMB authentication. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SMB Auth Settings** from the display screen.



You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > External Authentication Server > SMB Server** (see "SMB Server" on page 88).

### Adding a SMB sever

1. Press **Add** to add a new SMB server.

Machine Setup > Network Settings > SMB Auth Settings


Default Domain Name :	<input type="text"/>	Backup Server :	<input type="text"/>
Default Server :	<input type="text"/>	Backup Port No. :	<input type="text"/>
Default Port No. :	<input type="text"/>	Default Server :	<input type="checkbox"/>

OK Cancel

- **Default Domain Name:** Enter the domain name to be used for log-in. You can enter up to 128 characters.



You can only use **ASCII 32 - 35, 37 - 63, 65 - 123, or 125** character sets.

- **Default Server:** Enter the default server from 1 to 65535.
  - **Default Port No.:** Enter the default port number from 1 to 65535. 139 is set as a default value.
-  • Standard port number for SMB over NetBIOS is 139.  
• Standard port number SMB over TCPIP direct is 445.
- **Backup Server:** Enter the backup server from 1 to 65535.
  - **Backup Port No.:** Enter the backup port number from 1 to 65535. 139 is set as a default value.
  - **Default Server:** Press to make it a default server.
2. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Editing a SMB server

1. From list select the SMB server you want to edit and press **Edit**.
2. A pop-up window appears.  
Edit the necessary information
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

### Deleting a SMB server

1. From the list, select the SMB server you want to delete and press **Delete**.
2. A confirmation window appears. Press **OK**.
3. Press **OK** to save the change or **Back (Cancel)** to return to the previous screen.

## Network filtering settings

You can set your machine to prevent unlisted IP or MAC addresses from connecting to the machine.

### Network Filtering Settings

You can set general network filtering settings. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > Network Filtering Settings** from the display screen.



You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > IP/MAC Filtering** (see "IP/MAC Filtering" on page 87).

Machine Setup > Network Settings > Network Filtering Settings

IPv4 Filtering Enable :	<input checked="" type="checkbox"/> OFF	<input type="checkbox"/> ON	Settings
IPv6 Filtering Enable :	<input checked="" type="checkbox"/> OFF	<input type="checkbox"/> ON	Settings
MAC Filtering Enable :	<input checked="" type="checkbox"/> OFF	<input type="checkbox"/> ON	Settings

OK Cancel

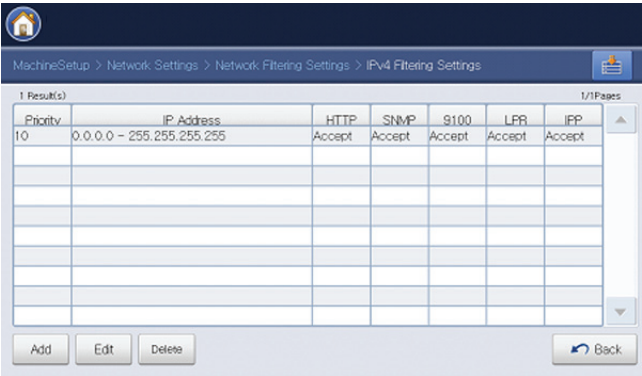
- **IPv4 Filtering Enable:** Select to enable or disable IPv4 address filtering.
- **IPv6 Filtering Enable:** Select to enable or disable IPv6 address filtering.
- **MAC Filtering Enable:** Select to enable or disable MAC filtering.

## IPv4 Filtering Settings

You can enable/disable IPv4 filtering. Data from IPv4 addresses which is not listed in the machine is denied or permitted.

Press **Machine Setup > Network Settings > Network Filtering Settings > IPv4 Filtering Settings** from the display screen.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > IP/MAC Filtering > IPv4 Filtering** (see "IPv4 Filtering" on page 87).
- You need to enable IP filtering from the **Machine Setup > Network Settings > Network Filtering Settings** to enable to use this option.



### Adding IPv4 address to the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > IPv4 Filtering Settings > Add** from the display screen.
2. Enter the following information.
  - **Priority:** Enter the priority for filtering. The smaller the number, the higher priority it has.
  - **IP Address:** Enter the IPv4 address of the host computer to deny or permit.
  - **HTTP:** Select whether to manage this protocol in filtering rule or not.
  - **SNMP:** Select whether to manage this protocol in filtering rule or not.
  - **9100:** Select whether to manage this protocol in filtering rule or not.
  - **LPR:** Select whether to manage this protocol in filtering rule or not.
  - **IPP:** Select whether to manage this protocol in filtering rule or not.
3. Press **OK**.

### Editing the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > IPv4 Filtering Settings** from the display screen.
2. Select the IPv4 address you want to edit from the list and press the **Edit** button.

3. Change the necessary information.
4. Press **OK**.

### Deleting the filtering list

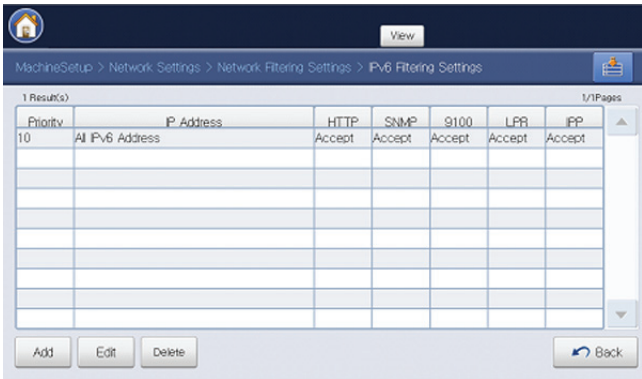
1. Press **Machine Setup > Network Settings > Network Filtering Settings > IPv4 Filtering Settings** from the display screen.
2. Select the IPv4 address you want to delete from the list and press the **Delete** button.  
The IPv4 address you deleted is removed from the list.

## IPv6 Filtering Settings

You can enable/disable IPv6 filtering. Data from IP addresses that are not listed in the machine is denied or permitted.

Press **Machine Setup > Network Settings > Network Filtering Settings > IPv6 Filtering Settings** from the display screen.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > IP/MAC Filtering > IPv6 Filtering** (see "IPv6 Filtering" on page 87).
- You need to enable IPv6 filtering in the **Network Filtering Settings** to enable to use this option.



### Adding IPv6 address to the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > IPv6 Filtering Settings > Add** from the display screen.
2. Enter the following information.
  - **Priority:** Enter the priority for filtering. The smaller the number, the higher priority it has.
  - **IP Address:** Enter the IPv6 address of the host computer to deny or permit.
  - **HTTP:** Select whether to manage this protocol in filtering rule or not.
  - **SNMP:** Select whether to manage this protocol in filtering rule or not.
  - **9100:** Select whether to manage this protocol in filtering rule or not.
  - **LPR:** Select whether to manage this protocol in filtering rule or not.
  - **IPP:** Select whether to manage this protocol in filtering rule or not.
3. Press **OK**.

### Editing the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > IPv6 Filtering Settings** from the display screen.
2. Select the IP address you want to edit from the list and press the **Edit** button.
3. Change the necessary information.
4. Press **OK**.

### Deleting the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > IPv6 Filtering Settings** from the display screen.
2. Select the IP address you want to delete from the list and press the **Delete** button.

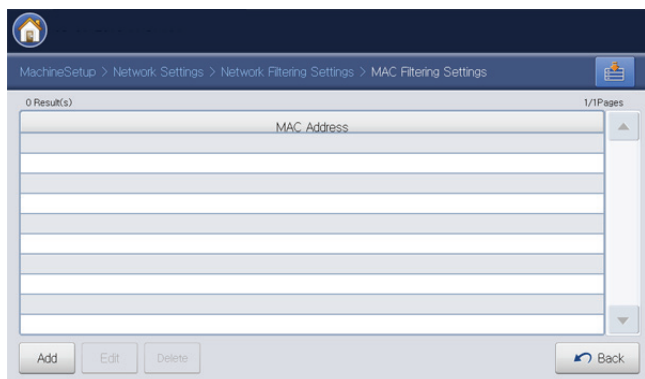
The IP address you deleted is removed from the list.

## MAC Filtering Settings

You can enable/disable MAC address filtering. Data from MAC addresses that is not listed in the machine is denied or permitted.

Press **Machine Setup > Network Settings > Network Filtering Settings > MAC Filtering Settings** from the display screen.

- You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > IP/MAC Filtering > MAC Filtering** (see "MAC Filtering" on page 88).
- You need to enable MAC filtering in the **General Settings** to enable to use this option.



### Adding MAC address to the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > MAC Filtering Settings > Add** from the display screen.
2. Enter and select the necessary information.
  - **MAC Address:** Enter the MAC address of the host computer to deny or permit.
3. Press **OK**.

### Editing the filtering list

1. Press **Machine Setup > Network Settings > Network Filtering Settings > MAC Filtering Settings** from the display screen.
2. Select the MAC address you want to edit from the list and press the **Edit** button.
3. Change the necessary information.
4. Press **OK**.

### Deleting the filtering list


1. Press **Machine Setup > Network Settings > Network Filtering Settings > MAC Filtering Settings** from the display screen.
2. Select the MAC address you want to delete from the list and press the **Delete** button.

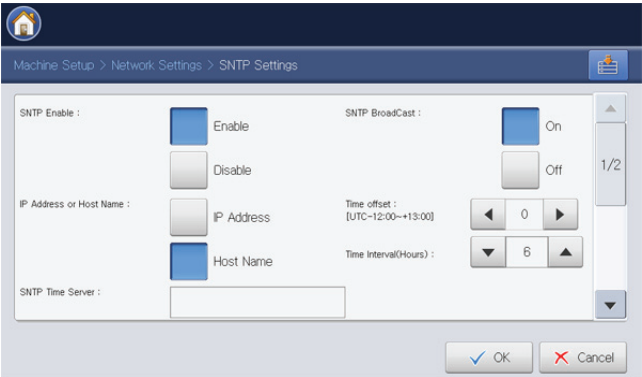
The MAC address you deleted is removed from the list.

## SNTP settings

You can set SNTP (Simple Network Time Protocol) settings. SNTP synchronizes the clocks of the computer systems through the Internet (NTP) so there would not be a time difference when exchanging data. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SNTP Settings** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > SNTP** (see "SNTP" on page 85).




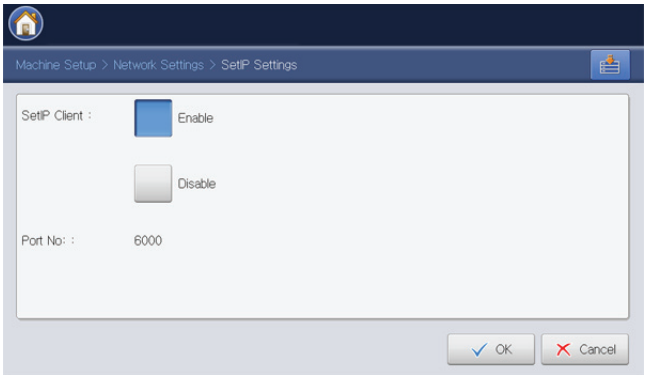
- **SNTP Enable:** Select whether to enable or disable SNTP.
- **IP Address or Host Name:** Select whether to use IP address or host name.
- **SNTP Time Server:** Enter the IP address of the public time server.
- **SNTP BroadCast:** Select whether to enable or disable SNTP broadcast. SNTP broadcast enables the MFP to synchronize to broadcast servers.
- **Time offset:** Select the time value to specify the time zone with respect to UTC/GMT. Use the left/right arrows to select the value.
- **Time Interval (Hours):** Select the time interval for SNTP application to periodically initiate the synchronization with the clock reference. Use the left/right arrows to select the value.
- **SNTP Authentication:** Select whether to enable or disable SNTP authentication. If you enable this option, authentication is required for accessing time server.
- **Key ID:** Shows the key ID for authentication. The key ID should match server key files.
- **Key Value:** Shows the key value for authentication. The key value should match server key files.
- **SNTP Port no:** Enter the time server port number. Port number 123 is usually used.

## SetIP settings

You can set SetIP settings. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SetIP Settings** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings > Network Settings > SetIP** (see "SetIP" on page 85).

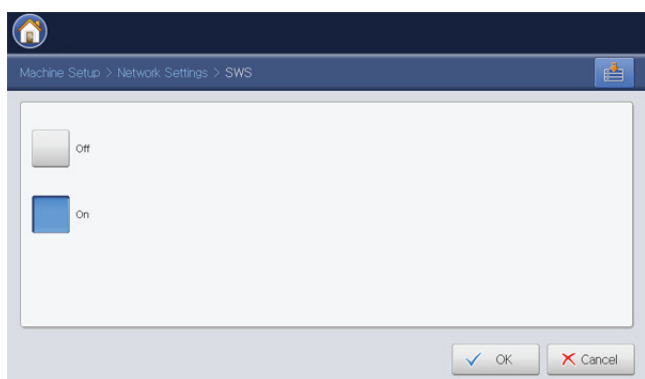


- **SetIP Client:** Select whether to enable or disable SetIP.
- **Port No:** Shows the port number used.

## SyncThru™ Web Service


You can set to use SyncThru™ Web Service or not. If you set this option to "off", users cannot access SyncThru™ Web Service. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Network Settings > SWS** from the display screen.

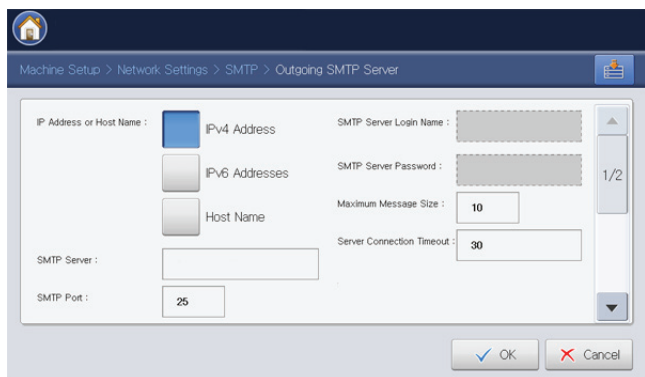


## SMTP setting

You can set up the network environment for outgoing emails. If this setting is not configured, you cannot use the scan-to-email feature. Outgoing emails will be sent through the SMTP and POP3 servers you set here.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Settings** tab > **Network Settings**. (see "Outgoing Mail Server (SMTP)" on page 85).

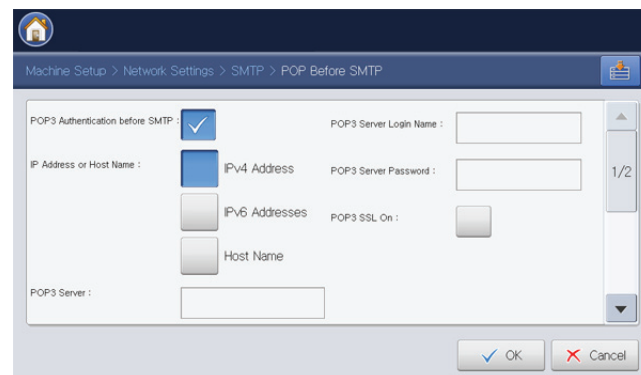
1. Press **Machine Setup > Network Settings > SMTP** from the display screen.
2. Select and set the appropriate option.
  - **Outgoing SMTP Server:** You can set SMTP server settings.



- **IP Address or Host Name:** Select whether to use an IP address(IPV4/IPV6) or a host name.
- **SMTP Server:** Enter the SMTP server address.
- **SMTP Port:** Enter the server port number from 1 to 65535. 25 is set as a default value.
- **SMTP Server Login Name:** Enter the user name used for authentication. You can enter up to 64 characters. If you do not check **SMTP Requires Authentication**, this field will be grayed out.
- **SMTP Server Password:** Enter the password for

authentication. You can enter up to 64 characters. If you do not check **SMTP Requires Authentication**, this field will be grayed out.

- **Maximum Message Size:** You can set the maximum message size (1 MB-50 MB). If the scanned document is larger than this message size, it will be split into multiple messages.
- **Server Connection Timeout:** You can set the time that system will wait before the SMTP server connection fails due to time-out. You can set the time value between 30-120 second(s). The time value should be 30 seconds or more for reliable operation over congested enterprise networks. 30 seconds is set as a default.
- **SMTP requires authentication:** Check if you want to set authentication when sending outgoing emails.
- **POP Before SMTP:** You can set the POP server settings.

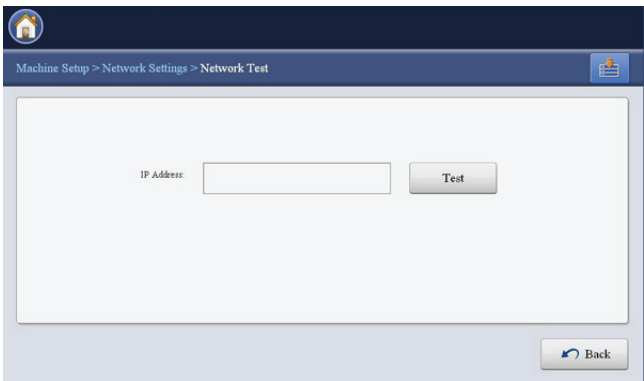


- **POP3 Authentication before SMTP:** You can set POP3 authentication to appear before SMTP client authentication usage. If you enable this option, POP3 is required by the SMTP server first. Check to enable this option.
  - **IP Address or Host Name:** Select whether to use an IP address (IPV4/IPV6) or a host name.
  - **POP3 Server:** Enter the POP3 server address.
  - **POP3 Server Login Name:** Enter the user name used for POP3. You can enter up to 64 characters.
  - **POP3 Server Password:** Enter the password for POP3. You can enter up to 64 characters.
  - **POP3 SSL On:** Check if you want to secure the email connection with SSL/TLS.
  - **POP3 Port:** Enter the server port number from 1 to 65535. 110 is set as a default value.
3. Press **OK** to save the changes or **Back (Cancel)** to return to the previous screen.

## Network Test

You can test whether or not the IPv4 address is valid and if it's connected to the network.

1. Press **Machine Setup > Network Settings > Network Test** from the display screen.



2. Enter the IPv4 address you want to test and press **Test**.  
The screen comes up with the test result.


 Only IPv4 address format is usable.

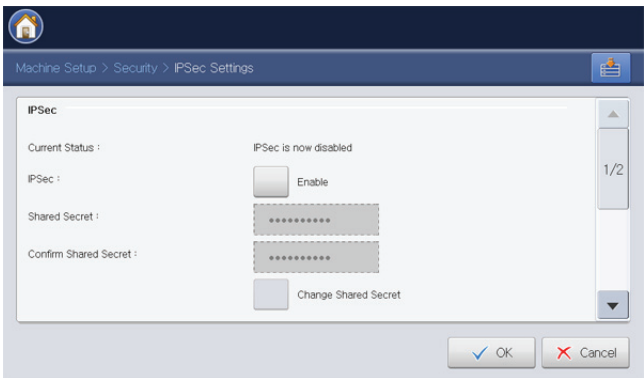
## Network security setting

### IPSec Settings

You can set IP security settings. Configure the settings and press **OK** to save the settings.

Press **Machine Setup > Security > IPSec Settings** from the display screen.

 You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Security > Network Security > IP Security** (see "IP Security" on page 87).



- **Current Status:** Shows the current status of IP security functionality.
- **IPSec:** Select to enable IP security.
- **Shared Secret:** Enter a new Pre-Shared Key for IP security communication.

 To activate this setting, **IPSec** and **Change Shared Secret** should be selected.

- **Confirm Shared Secret:** Confirm the Pre-Shared Key for IP security communication.
- **Change Shared Secret:** Select to change the **Shared Secret**.
- **Clear Connection:** Clear all previous IP security connections with client.

# syncthru™ web service

This chapter gives you step-by-step instructions for setting up the network environment through SyncThru™ Web Service.

- Internet Explorer® 6.0 or higher is the minimum requirement for SyncThru™ Web Service.
- Some menus may not appear on the display screen depending on

the settings or models. If so, it is not applicable to your machine.

- Options related to color are only available for CLX-9252 9352 series.

## This chapter includes:

- What is SyncThru™ Web Service?
- Required web browser
- Connecting to SyncThru™ Web Service
- Changing the display language
- Logging into SyncThru™ Web Service
- Features of SyncThru™ Web Service
- Layout of SyncThru™ Web Service
- Information tab
- Box tab
- Address book tab
- Settings tab
- Security tab
- Maintenance tab

## What is SyncThru™ Web Service?

SyncThru™ Web Service is one of the useful network programs provided by Samsung. SyncThru™ Web Service is a web server embedded on your network machine's server which allows you to configure the network parameters necessary for the machine to connect to various network environments and customize machine settings. With this program, both administrators and users can manage and maintain the machine easily.

If you have connected your machine to a network and set up TCP/IP network parameters correctly, you can manage the machine via SyncThru™ Web Service. Use SyncThru™ Web Service to:

- View the machine's device information and check its current status.
- Change TCP/IP parameters and set up other network parameters.
- Change the printer preference.
- Set the email notifications advising of the machine's status.
- Get support for using the machine.
- Upgrade machine software.

## Required web browser


You need one of the following web browsers to use SyncThru™ Web Service.

- Internet Explorer® 6.0 or higher
- Chrome 4.0 or higher
- FireFox 3.0 or higher
- Safari 3.0 or higher

## Connecting to SyncThru™ Web Service

### IPv4 supported web browser


1. Start a web browser, such as Internet Explorer®, that supports IPv4 addressing as a URL.  
Enter the machine's IP address (http://xxx.xxx.xxx.xxx) in the address field and press the Enter key or click **Go**.


 You can get the machine's IP address from the machine report (see "Report" on page 21).

2. Your machine's SyncThru™ Web Service website opens.

### IPv6 supported web browser

1. Start a web browser, such as Internet Explorer®, that supports IPv6 addressing as a URL.
2. Select one of the IPv6 addresses (**Stateless Address, Stateful Address, Manual Address**) from **Network Configuration Report**.

 You can get the machine's IPv6 address from the machine report (see "Report" on page 21).

3. Enter the IPv6 addresses (eg., http://[3ffe:10:88:194:213:77ff:fe82:75b]).  
 The address must be enclosed in '[]' brackets.
4. Your machine's SyncThru™ Web Service website opens.

## Changing the display language

You can change the display language.

1. Locate the language drop-down list on the upper right corner of the SyncThru™ Web Service website.

Jobs | Direct Print | Eco OFF | Site Map | Login



2. Select the language you want to use.  
Page is reloaded and the language you selected is applied.

## Logging into SyncThru™ Web Service

Before configuring options in SyncThru™ Web Service, you need to log-in as an administrator. You can still use SyncThru™ Web Service without logging in, but you will not have access to or view the **Settings** tab and the **Security** tab.

1. Click **Login** on the upper right of the SyncThru™ Web Service website.  
A log-in page appears.
2. Type in the **ID** and **Password** and select the **Domain**. Then click on **LOGIN**.

Use the same login ID, Password, Domain as when logging in from the machine (see "Log-in" on page 11.)

 If you want to create a new user or change the password, see "User profile" on page 92.

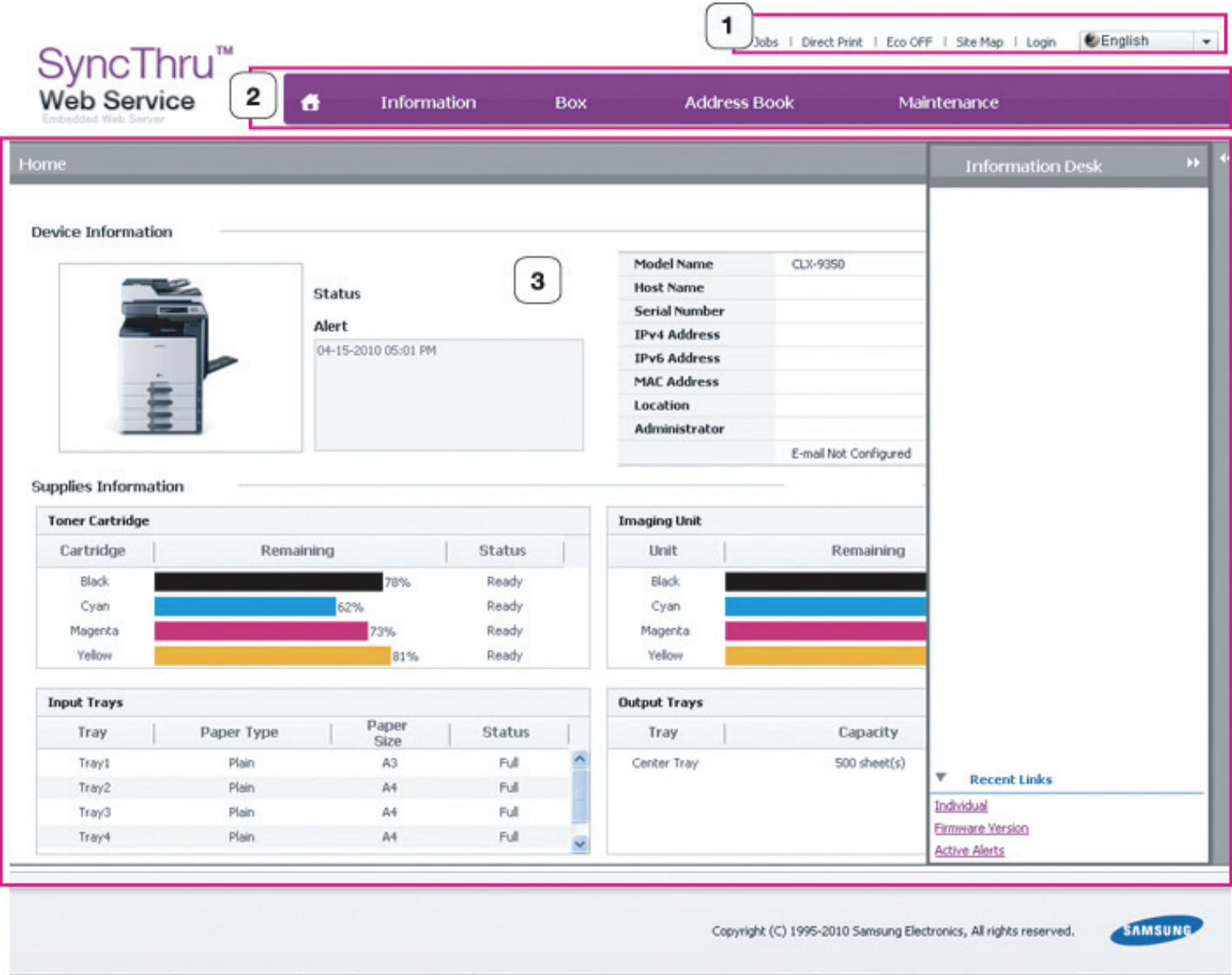
## Features of SyncThru™ Web Service


Feature	Description
Check machine status	You can check a machine's status such as remaining amount of toner, usage count, and more (see "Information tab" on page 70).
Manage address book	You can add, modify, or delete users on the address book (see "Address book tab" on page 74).
Security	SyncThru™ Web Service provides features for security (see "Security tab" on page 85).
Print reports	You can print machine reports (see "Print Information" on page 72).
Configure Settings	You can configure machine and network settings (see "Settings tab" on page 76).
Control access	You can control user access to a machine. You can assign different levels of permissions to use the machine to each user (see "User Access Control" on page 90).
Firmware Upgrade	SyncThru™ Web Service provides the functionality of remotely updating the firmware on Samsung devices (see "Application Management" on page 94).

# Layout of SyncThru™ Web Service

## Main page

This is the first page you will see when you open SyncThru™ Web Service.




1	Site navigation bar	Includes quick menus and menus useful for using the website (see "Site navigation bar overview" on page 68).
2	Menus	Includes main menus such as <b>Information</b> , <b>Box</b> , <b>Address Book</b> , <b>Settings</b> , <b>Security</b> and <b>Maintenance</b> . If you do not log-in as an administrator, some menus may not be available. For some menus, there are sub-menus.
3	Panel	(see "Page overview" on page 69.) <ul style="list-style-type: none"><li>• <b>Home</b>: Shows contents of current menu.</li><li>• <b>InformationDesk</b> : Shows list of menus you selected previously.</li></ul>  When you click on the hyperlinked contents, you can directly move to the menus where you can set the related settings.

Site navigation bar overview








The following are menus that will help you use the SyncThru™ Web Service browser. The site navigation bar is located on the upper right corner of the web browser.






1	Login ID	You can see the ID of the logged in user (If no user is logged in, this will not appear). If you click the Login ID, a window will pop-up. You can change the user information, such as the password and e-mail address.
2	Jobs	<p>You can see the information of active and completed jobs.</p> <p><b>With the Active Jobs tab, you can:</b></p> <ul style="list-style-type: none"><li>• see all the active jobs, including detailed information such as <b>Job Number</b>, <b>Job Name</b>, <b>Status</b>, <b>User</b> and <b>Job Type</b>.</li><li>• see a selected job in details by clicking the <b>Detail</b> button on the top of the list.</li><li>• delete the specific job(s) by clicking the <b>Delete</b> button on the top of the list.</li><li>• pause a specific job(s) by clicking the <b>Job Hold</b> button on the top of the list.</li><li>• resume a specific job(s) by clicking the <b>Release</b> button on the top of the list.</li><li>• change the priority of jobs by clicking the <b>Promote</b> button on the top of the list.</li><li>• search the active job. Enter the job name in the search field and click .</li></ul> <p><b>With the Completed Jobs tab, you can:</b></p> <ul style="list-style-type: none"><li>• view all the completed jobs, including detailed information such as <b>Job Number</b>, <b>Job Name</b>, <b>Status</b>, <b>User</b>, <b>Completed Time</b>, <b>Page Count</b> and <b>Job Type</b>.</li><li>• see a selected job in details by selecting the job you want to see in details and clicking the <b>Detail</b> button on the top of the list.</li></ul>
3	Direct Print	You can print a document directly from the SyncThru™ Web Service without opening the file. Find the file you want to print and set the print options, then click on <b>Print</b> . The machine starts printing.
4	Eco ON/OFF	<p>With the <b>Eco</b> menu, you can:</p> <ul style="list-style-type: none"><li>• Turn the Eco mode on and off.</li><li>• See the settings in details. Click <b>Detail &amp; Preview</b>.</li><li>• Change the settings. Click <b>Detail &amp; Preview &gt; Eco Settings</b> (see "Eco" on page 77).</li></ul>
5	Site Map	Shows the structure of menus in the SyncThru™ Web Service.
6	Login/Logout	You can log-in as an administrator to use the SyncThru™ Web Service's full function (see "Logging into SyncThru™ Web Service" on page 66).
7	Language selection	You can select the display language from the drop-down list.

Icon overview

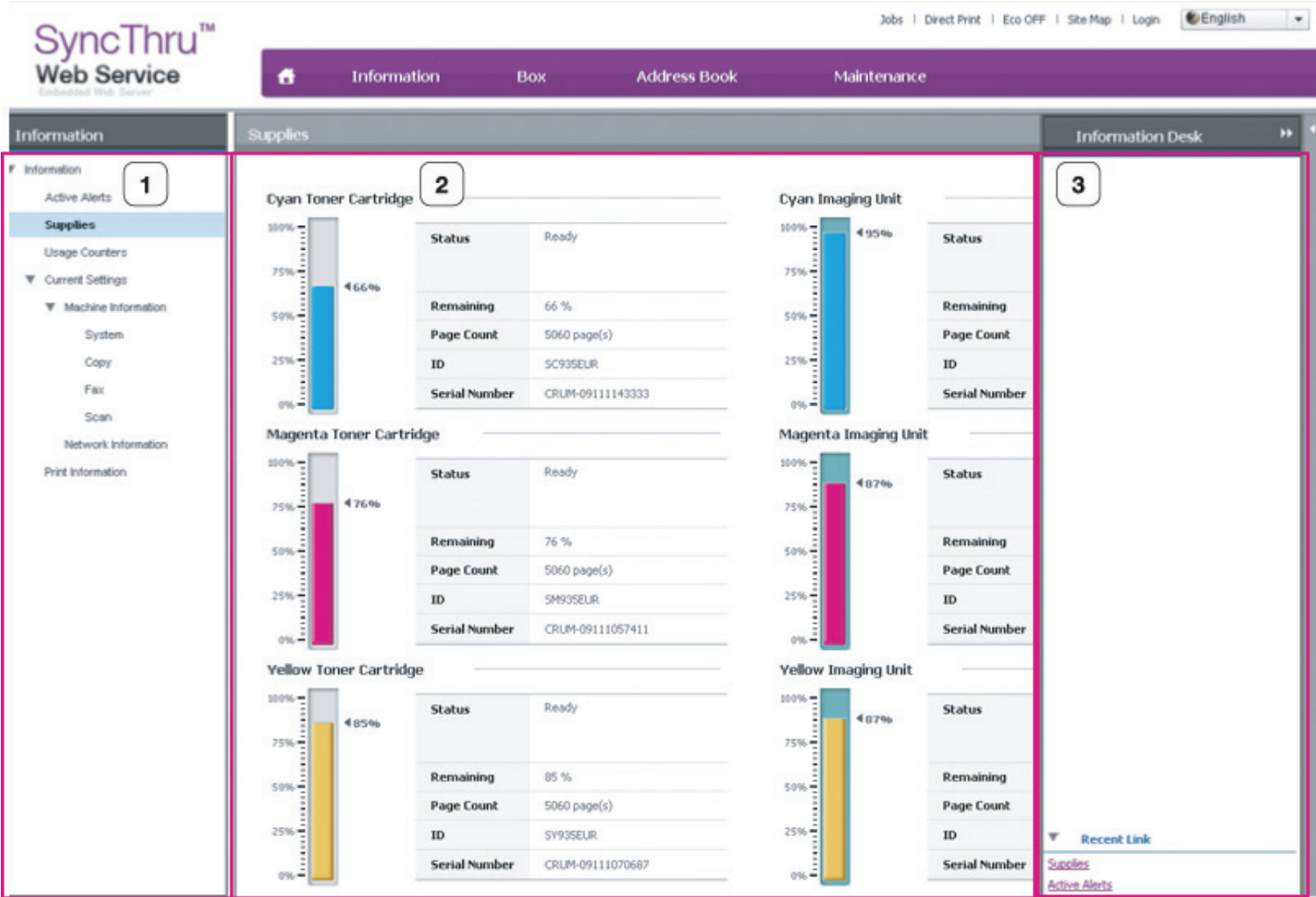
The following table shows icons used in SyncThru™ Web Service and their meanings:

Icon	Name	Description
	Home	Click to return to the main screen.
	Refresh	Refresh the information in the panel with this button.
	Close	Close the window.
	Fold:up-down	Fold the panel up or down to hide it.
	Unfold:up-down	Unfold the panel up or down to show it again.
	Fold:side-side	Fold the panel from side-to-side.
	Unfold:side-side	Unfold the panel from side-to-side.

Icon	Name	Description
	Calendar	Calendar pops up.
	Information	Shows additional information. Place the mouse cursor over the question mark.
	Warning	Warns users with the consequences of the job before proceeding with the job.

## Page overview

The following page is an example of how SyncThru™ Web Service looks. Refer to the table below to understand each panel's functions.



1	Menu tree	Shows menu tree of currently selected main menu.
2	Main pane	Shows contents of currently selected menu.
3	Information Desk/ Edit & Preview	Shows links or detailed settings for menus that are related to currently selected menu. The purpose of this panel changes depending on the menu selected. <b>Recent Links</b> shows list of menus you selected previously.

## Information tab

This tab gives you general information about your machine. You can check things, such as the machine's status, supplies' status, count information, network information, and more. You can also print reports, such as configuration page.

### Active Alerts

You can check the current alerts in the machine. Use this information to troubleshoot machine errors.

From the SyncThru™ Web Service, select the **Information** tab > **Active Alerts**.

You can view all the alerts in details by clicking the **Expand All** button. Click on the **Collapse All** button to close the alert list.

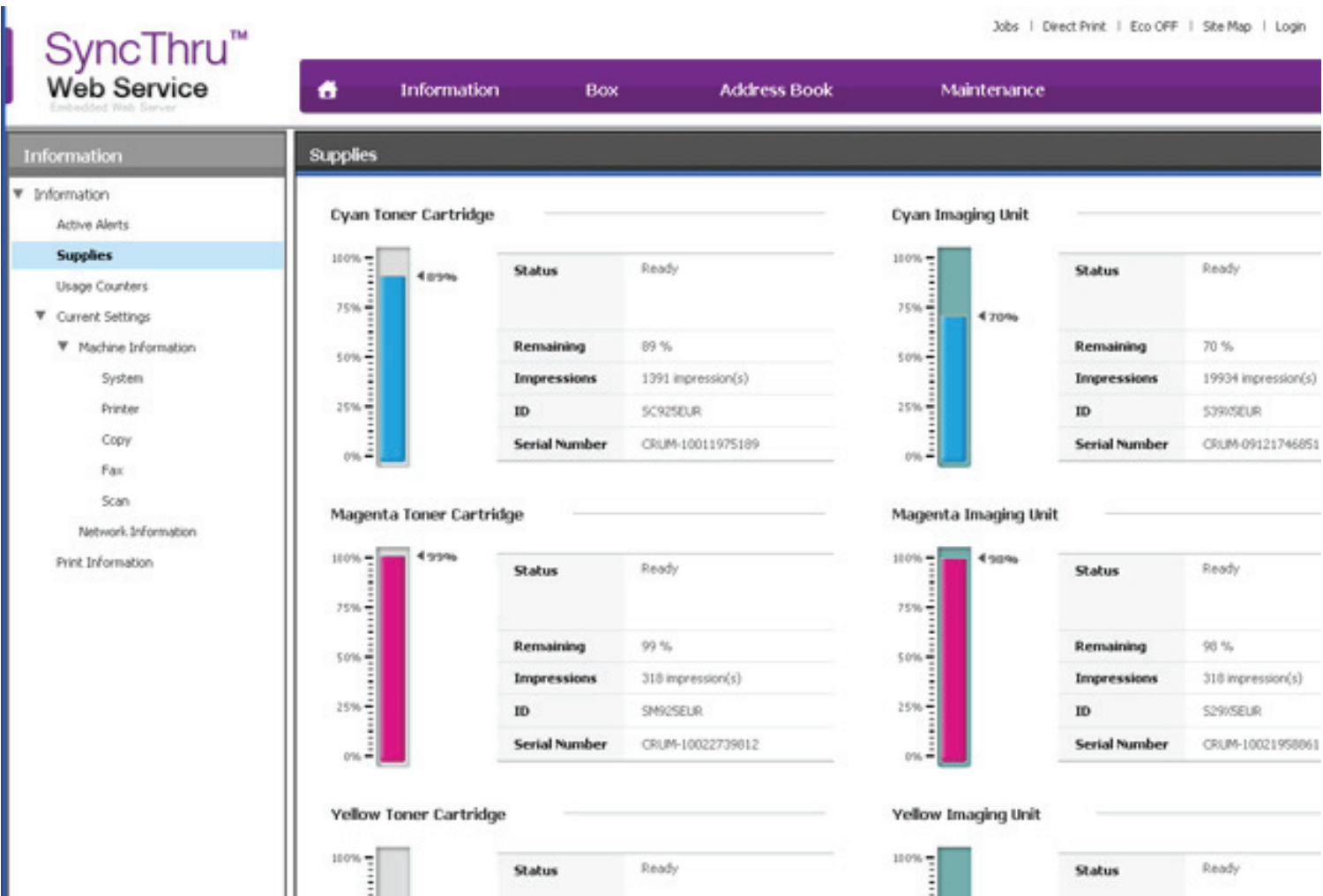
- **Severity:** Shows the severity of the alert.
- **Status Code:** Shows the machine alert status code. This code is for service representatives; this code to the service person when calling for service.
- **Description:** Shows the description of the alert.
- **Skill Level:** Shows the level of skill required to fix the problem.

### Supplies

You can check the supplies' information. For toner cartridges and imaging units, supplies' status is displayed with a visual graph showing you the amount of each supply left. Page counts are also available which can help you predict when to change the supplies.

This feature is also available from the machine (see "Supplies Life" on page 21).

From the SyncThru™ Web Service, select the **Information** tab > **Supplies**.



Provided information is:

- **Status:** Shows the status of the supply.
- **Remaining:** Shows the percentage remaining of the supply.

- **Impressions:** Shows the count of impressions.
- **ID:** Shows the model ID for supplies. User's can use this information to buy the supply.
- **Serial Number:** Shows the serial number of the supply.

Usage Counters

You can check the billing information and usage counter of the machine. This feature is also available from the machine (see "Device" on page 11, "User (administrator only)" on page 11).

From the SyncThru™ Web Service, select the **Information** tab > **Usage Counters**.

SyncThru™  
Web Service  
Embedded Web Server

Jobs | Direct Print | Eco OFF | Site Map | Login | English

Information

Box

Address Book

Maintenance

Information

Information

- Active Alerts
- Supplies
- Usage Counters
- Current Settings
  - Machine Information
    - System
    - Copy
    - Fax
    - Scan
    - Network Information
    - Print Information

Usage Counters

Billing Information

Machine Serial Number : 20TPB1ESA00034H

Counters

Total Usage	Print	Copy	Fax Print	Report	Total
Mono Simplex	168	27	0	33	228
Duplex	285	85	0	0	370
Color Simplex	1025	26	0	6	1057
Duplex	3417	625	0	0	4042
Total Impressions	4895	763	0	39	5697

Large Page Usage	Print	Copy	Fax Print	Report	Total
Mono Simplex	2	1	0	0	3
Duplex	0	0	0	0	0
Color Simplex	169	2	0	1	172
Duplex	606	6	0	0	612
Total Impressions	777	9	0	1	787

Fax Send Usage(PSTN)	Impressions
Embedded Fax Sent	0

Send Usage	Send To Email	Send To SMB	Send To FTP	Send To WebDav	Send To USB	Send To Others	Total
Impressions	0	0	0	0	27	5	32

- **Billing Information:** Shows the billing information such as machine's serial number.
- **Counters:** Shows the usage counter information by job types.

## Current Settings

Shows the current settings of the machine and network.

From the SyncThru™ Web Service, select the **Information** tab > **Current Settings**.

### Machine Information

Shows the current machine settings. The settings are divided into four different categories. Use these pages as a reference for configuring the machine.

#### System

Shows the system related machine settings such as general settings and detailed tray settings.

##### The Setup tab shows

Current system settings such as **Date & Time**, **Language**, **Power Save**, **Low Power Save**, **System Timeout**, **Held Job TimeOut**, **Toner Save**, and **Altitude Adjustment**.

##### The Input Trays tab shows

Current tray settings such as **Paper Size**, **Paper Type**, and **Tray Settings** for each tray.

##### The Sound/Volume tab shows

Current **Button & Notice Sound**, and **Fax sound**.

#### Printer

Shows printing related settings.

##### The Change Default tab shows

Default paper settings for printing.

##### The Layout tab shows

Default layout related settings for printing.

##### The PCL tab shows

Default PCL related settings for printing.

##### The PostScript tab shows

Default setting for PostScript error.

#### Copy

Shows copy related settings.

##### The Copy tab shows

Current copy settings such as **Default Option Settings**, **Output**, **UCR**, **Saturation**, and other settings.

#### Fax

Shows fax related settings.

##### The General tab shows

Current default fax settings such as **Resolution**, **Darkness**, **Original Type**, **Color Mode**, and **Adjust Background**.

##### The Line # tab shows

The fax information of the connected machine such as the **Machine ID** & **Fax Number**, and the sending/receiving information of the connected line.

##### The Received Fax Printing tab shows

Settings for printing a received fax and the paper source to use.

#### Scan

Shows scan related settings.

##### The Change Default tab shows

Default settings for scan to email and scan to server settings.

##### The Scan to E-mail tab shows

General and advanced settings for scan to e-mail feature.

##### The Scan to FTP tab shows

Scan to FTP settings such as **FTP Protocol**, and **Server Connection Timeout**.

##### The Scan to SMB tab shows

Scan to SMB settings such as **SMB Protocol**, and **Server Connection Timeout**.

##### The Scan to WEBDAV tab shows

Scan to WEBDAV settings such as **WEBDAV Protocol**, and **Server Connection Timeout**.

### Network Information

Shows the current network settings. Use this page as a reference and change the necessary settings needed for using the network.

#### The General tab shows

General network information such as **Host Name**, **Location**, **Contact** information, and Ethernet information such as **Speed Rate**, **Actual Speed Rate**, **Mac Address**.

#### The TCP/IPv4 tab shows

TCP/IPv4 related settings.

#### The TCP/IPv6 tab shows

TCP/IPv6 related settings.

#### The Protocols tab shows

Protocols settings such as Raw TCP/IP Printing, LPR/LPD, IPP, SLP, SSDP, and SNMP.

## Print Information

You can print all the reports provided by your machine. You can use these reports to help you maintain your machine. This feature is also available in the machine (see "Report" on page 21).

From the SyncThru™ Web Service, select the **Information** tab > **Print Information**.

### Printing a report

1. From the SyncThru™ Web Service, select the **Information** tab > **Print Information**.
2. Select the category of the report you want to print from among **System Report**, **Fax Report**, **Scan Report**, and **Font Report**.

You can unfold the category by clicking ►. List of reports appears.




3. Select the report you want to print and click on the **Print** button.

## Box tab

You can save PC-printed, faxed, scanned, or copied documents in the box and print the saved documents later.

This feature is also available in the machine. Refer to the *User's Guide* on the User's Guide CD or (see "Box Setting (administrator only)" on page 29).

When saving the document in the box, you can choose the box to save the scanned document from the below. Types of boxes provided may differ depending on the model you are using.

- **Common Box**  : This box is provided by default. Received faxes are stored in this box. You cannot delete this box.
- **Public Box**  : This box can be created by a user.
- **Secured Box**  : This box is created by a user. You can set the password for accessing this box.



If you do not know the password for the secure box, you will not be able to delete/edit/view the box.

## Creating a box



You need to log-in as an administrator to manage the box (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Box** tab > **User Box**.
2. Click the **Add Box** button above the list.  
A pop-up window appears.
3. Enter the **General** information.
  - **Box No.** : Shows the box number. An available number is assigned automatically: you cannot change this number manually.
  - **Box Name** : Enter the box name you want.
  - **Favorite** : If you want to set this box as a favorite box, select **Favorite** 1-3. Select **None**, if you do not want to set this box as a favorite box.
  - **Auto Document Delete**: Set the time for data to be stored in the box. After the setting time, the stored data get automatically deleted.

If you want the box to be a secured box, check the **Secured Box** and enter the password to be used for accessing the box.

4. Click **Apply**.



- Click the **Cancel** button if you want to cancel creating the box.
- The **Undo** button clears all the values set so far.

## Deleting a box



You need to log-in as an administrator to manage the box (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Box** tab > **User Box**.
2. Select the box you want to delete and click the **Delete Box** button above the list.
3. When confirmation message appears, click **OK**.  
The list is reloaded and the box you deleted is removed from the list.

## Editing a box



You need to log-in as an administrator to manage the box (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Box** tab > **User Box**.
2. Select the box you want to edit and click the **Edit Box** button above the list.  
A pop-up window appears.
3. Edit the information.
4. Click **Apply**.



- Click the **Cancel** button if you want to cancel editing the box.
- The **Undo** button clears all the values set so far.

## Browsing files

You can browse which files are in the box without opening each box.



You need to log-in as an administrator to manage the box (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Box** tab > **User Box**.
2. Select the box you want to browse and click the **Browse Files** button above the list.  
If the box is a secured box, you need to type in the password to browse

files in the box.

The page is reloaded with the list of files in the box.



If you check the **Preview** box in the **Preview** pane, you can preview the stored file in the box.

3. If you want to edit, delete or download the file to PC, select one of the files and choose one of the following buttons:
  - **Edit**: Edit the selected file.
  - **Delete**: Delete the selected file.
  - **Previous**: Return to the previous page.
  - **Task drop-down list**: Select **Download To PC** from this list to download the selected file to the computer.
4. Click **Apply**.



- Click the **Cancel** button if you want to cancel editing the box.
- The **Undo** button clears all the values set so far.

## Searching a box

Type in the key word in the   field and click .

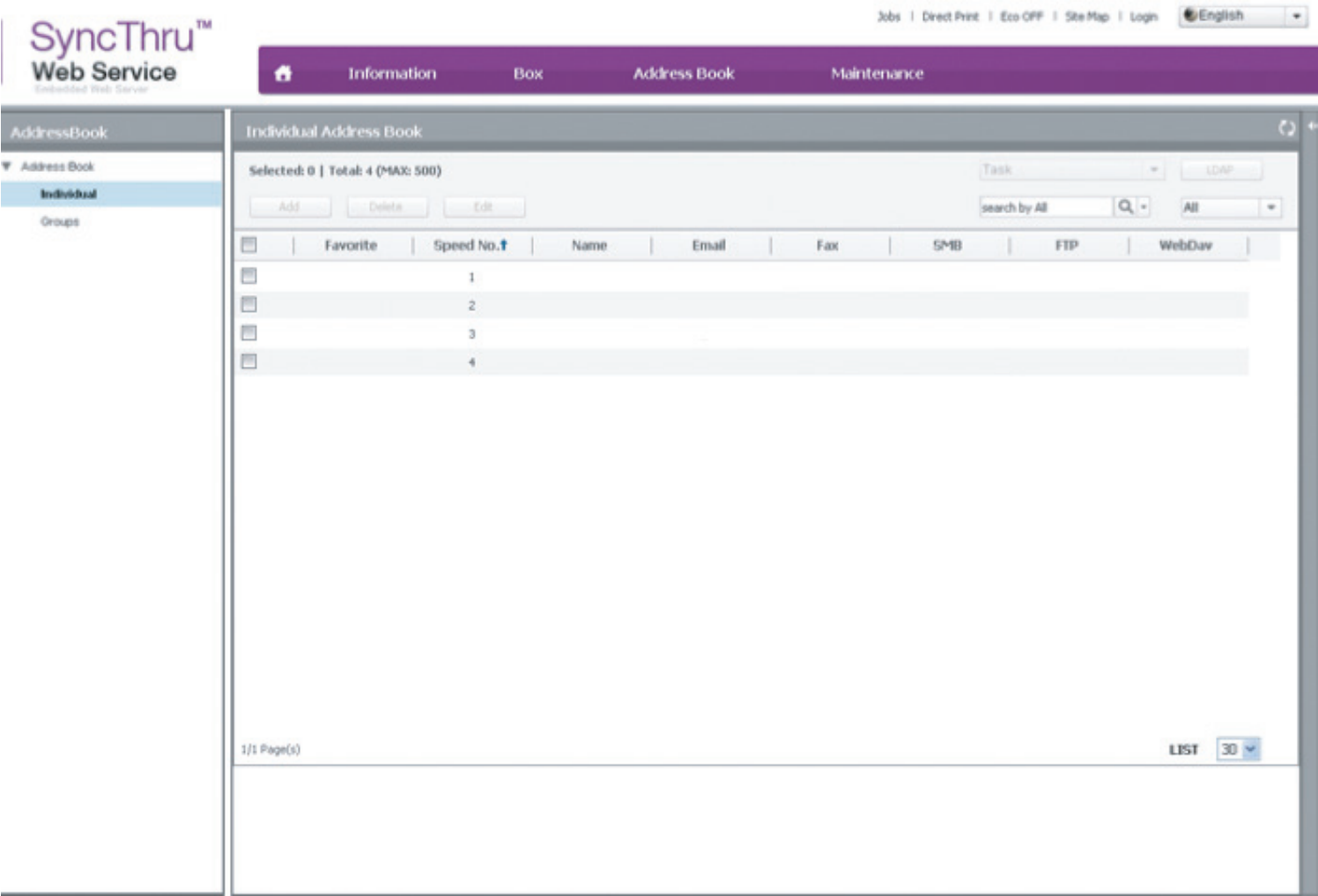
# Address book tab

You can manage the address book. The address stored here can be used for the fax and scan features. This feature is also available from the machine (see "Address Book" on page 28).

## Individual

You can manage individual entries in the address book. You can add, edit, or delete entries. The address book has many categories which can be used for searching and sorting the necessary address. You can also import or export user data files from/to another device in .csv file format. Up to 500 individual address book entries can be stored.

From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.



## Adding an individual address book entry



You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).


1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.
2. Click the **Add** button above the list.  
A pop-up window appears.
3. Enter the **General** information.



- For the name field, you can enter up to 64 characters (Name field is not mandatory).
- Speed number should be between 1 and 500. The speed number cannot be repeated.
- Check **Favorite** to appoint the address as a commonly used address. When searching addresses, you can sort favorite addresses only.

4. Enter the **E-mail** address.


5. Enter the **Fax** number.
6. Select the server(s) you are using among **SMB**, **FTP**, and **WebDAV** and enter the necessary server information. Click the **Test** button to test the server.

 IPv6 address is supported for SMB.

7. Click **Apply**.


 The **Undo** button clears all the values set so far.

### Deleting an individual address book entry

-  • You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).
- If the address book is shared with the user profile, it cannot be deleted.

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.
2. Check the checkbox(es) of the entry you want to delete from the list and click the **Delete** button above the list.
3. When confirmation message appears, click **OK**.


### Editing an individual address book entry

 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.
2. Click the **Edit** button above the list.  
A pop-up window appears.
3. Change the value as you want.
4. Click **Apply**.

 The **Undo** button clears all the values set so far.

### Searching an individual address book entry


 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.
2. Enter the key word for your search and from the drop down list select the category to narrow your search.

3. Click the  button.

The search result appears on the list.

### Importing an individual address book entry

 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

You can download the address book in **.csv** file format and update it.


1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.
2. Select **Import** from the **Task** drop down list. A pop-up window appears.
3. Select the way to find the location for address book to be imported using the radio button.
  - **URL:** Enter the URL for where the address book is located.
  - **Desktop:** Click the **Browse** button to find the path for where the address book is located.

4. Click on **OK**.

A pop-up message showing the result appear. If you have failed try again.

### Exporting an individual address book entry


You can export the address book as **.csv** file and save it on the computer.

 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).


1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual**.
2. Select **Export** from the **Task** drop down list. A pop-up window appears.
3. Click on the **Export** button. A pop-up window appears.
4. Select the option you want and click the **Export** button.
5. The address book entry is saved as a **.csv** format. You can save or open the address book entry.

### Importing the address book from the LDAP server.

You can connect to the LDAP server through the network and import all the entries from the LDAP server.

 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Individual** > **LDAP** button.  
A pop-up window appears.
2. Enter the necessary information and click **Apply**.
  - **Search Root Directory:** Enter the domain name.
  - **Login ID:** Enter the login ID you set for LDAP server (see "LDAP Server" on page 89).
  - **Password:** Enter the password you set for LDAP server (see "LDAP Server" on page 89).
  - **Search Filter:** Enter the search filter defined in RFC 2254. For example, if you type "**(email=john\*)**", the machine will search for the email address that starts with **john**.
  - **Search:** Click this button to start searching for the address that fits your condition. The search result will appear in the table below.


 The **Undo** button clears all the values set so far.

### Groups

You can manage group address books. You can view, add, edit, or delete groups.


From the SyncThru™ Web Service, select the **Address Book** tab > **Groups**.

### Adding a group address book


 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Groups**.
2. Click the **Add Group** button above the list.  
A pop-up window appears.
3. Enter the group information.  
If you want to add individual address book entries to the group


address book, check **Add individual(s) after this group is created**. You can add individuals to the group right away with a pop-up window.

 For the group name field, you can enter up to 25 characters.

4. Click **Apply**.


 The **Undo** button clears all the values set so far.

### Deleting a group


-  • If the address book is shared with the user profile, it cannot be deleted.
- You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Groups**.
2. Check the checkbox(es) of the group(s) you want to delete from the list and click the **Delete Group** button above the list.
3. Click **OK** when confirmation window pops up.


### Editing a group


 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).


1. From the SyncThru™ Web Service, select the **Address Book** tab > **Groups**.
2. Check the checkbox(es) of the entry you want to delete from the list and click the **Edit Group** button above the list. A pop-up window appears.
3. Change the value as you want.
4. Click **Apply**.

 The **Undo** button clears all the values set so far.

### Viewing a group in details / Adding individuals to a group / Deleting individuals from a group

 You need to log-in as an administrator to manage the address book (see "Logging into SyncThru™ Web Service" on page 66).

1. From the SyncThru™ Web Service, select the **Address Book** tab > **Groups**.
2. Select the group you want to see in details.
3. Click the **Group Details** button. A pop-up window appears.
4. You can view the individuals in the group.
5. If you want to add individual(s) to the group, select the individual(s) from the left list and click the  button.
6. If you want to delete individual(s) from the group, select the individual(s) from the list and click the **Delete** button.
7. Click **Apply**.

 The **Undo** button clears all the values set so far.

## Settings tab

Settings tab has two sub menus, **Machine Settings** and **Network Settings**. You cannot view or access this tab if you do not log-in as an administrator (see "Logging into SyncThru™ Web Service" on page 66).

### Machine Settings


You can set machine related settings. Settings are divided into five big categories: **System**, **Printer**, **Copy**, **Fax**, and **Scan**.

From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings**.


#### System

You can set general system related settings as below. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "General Settings" on page 12).


- **Date Format:** Allows you to select the format for displaying date.
- **Time Format:** Allows you to select the format for displaying time between 12hr and 24hr.
- **Date & Time:** Allows you to set the time and date.

 When you set the date and time, it will also be applied to the features that display or use date and time.


- **Time Offset:** Allows you to set the time offset.

 Example for selecting the time offset: If your local time is 4 hours faster than **UTC**, select **+4**.

- **Standard Paper Size:** Allows you to set the default paper size to use in the trays.
- **Language:** Allows you to change the language that appears on the machine's display screen.
- **Power Save:** Allows you to reduce energy consumption. If you set this option, the machine goes into power saving mode when not in use.


 The machine conserves more power in the **Power Save** option than in **Low Power Save** mode.

- **Low Power Save:** Allows you to reduce energy consumption. If you set this option, some parts of the machine automatically goes into low power save mode.

 **Low Power Save** option conserves less power than **Power Save** option.

- **System Timeout:** Allows you to set the time for system timeout. **System Timeout** is the time the machine waits before returning to the Copy menu if there is no input for a set time period. The maximum time you can set is 10 minutes.
- **Held Job Timeout:** Allows you to set the time for held job timeout. **Held Job Timeout** is a time the machine holds a job for a specific time period before canceling when error occurs while printing and there is no signal from the computer.
- **Altitude Adjustment:** Allows you to choose the altitude in which your machine is placed in. Print quality is affected by atmospheric pressure. The atmospheric pressure is determined by the height of the machine above sea level. This feature lets you adjust the altitude in a height district. The higher the altitude, the higher the adjustment, the highest being **High 3**.
- **Contention Management:** Allows you to select the priority of processing jobs. When copy and print jobs are sent to the machine

at the same time, you can set the job processing order.

- **Priority:** Set the priority by numbering the job between 1-16 using the up/down arrows. Higher number has a priority.
- **First In, First Out:** The machine proceeds with the jobs in the requested order.
- **Supplies Management:** Allows you to set options for supplies reorder notification.
  -  **Low Alert Level:** Select the remaining percentage for which you want to receive notification. For example, if you set this value to 10% for imaging unit, and the average imaging unit yield is 20,000 pages, when about 2,000 pages (10% of 20,000 pages) are left, a notification will be sent.
- **Power Button Operation (SCX- 8230 8240 Series only):** Allows you to select the modes for turning the power off. When you turn the machine's power off using the **Power** button, there are three modes you can choose to put the machine into: **Sleep**, **Hibernate**, or **Shut down**. The mode you choose here will be applied to the machine when the user presses the **Power** button to turn the power off.
  - **Sleep:** The system revival time is shorter, but the amount of saved electricity is less.
  - **Hibernate:** The electricity is completely cut-off. However, it will take more time to revive the system than the **Sleep** mode.
  - **Shut down:** The electricity and the system is completely shut down. It will take a few minutes to revive the system.

## Eco

You can enable the Eco mode and change the custom eco settings. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Eco Settings (administrator only)" on page 31).

### Turning the Eco mode

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **System** > **Eco** > **Setting**.
2. On the main pane, select one of the options; **On**, **Off**, and **On-Forced** for **Eco Mode (Device Default)**.
  - **Off:** Select to turn the Eco mode off.
  - **On:** Select to turn the Eco mode on.
  - **On-Forced:** Select to turn the Eco mode on with password. If a user wants to turn the Eco mode on/off, the user needs to enter the password you set here.

 If you selected **On** or **On-Forced**, check the setting you want to use; **Factory Default** or **Custom Settings**

3. Click **Apply**.

### Changing the Custom Settings

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **System** > **Eco** > **Setting**.
2. From the **Eco Features Configuration**, check **Custom Settings**.

 You cannot change the settings for **Factory Default** option.

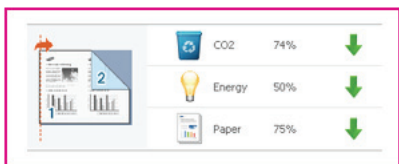
3. Click **Edit & Preview Simulator**.
4. Check the current settings from the **Edit & Preview Simulator** window and change the settings.
5. Click on **Apply**.

When you apply the changes, you can preview the result of reduced emission of carbon dioxide, used electricity, and the amount of saved paper in accordance with the settings you selected. The results are calculated on the basis that the total number of printed

pages is one hundred without a blank page when the eco mode is disabled.

Copy Settings


Duplex:	1->2 Sided
Original Binding:	
Output Binding:	Book
N-Up:	2Up
Color Mode:	BAW



Summary of Eco Settings:

- CO2: 74% (Decrease icon)
- Energy: 50% (Decrease icon)
- Paper: 75% (Decrease icon)

- Referred to the calculation coefficient for CO2, energy, and paper from IEA, the index of Ministry of Internal Affairs and Communication of Japan, and [www.remanufacturing.org.uk](http://www.remanufacturing.org.uk). Each model has a different index.
- The power consumption in printing mode refers to the average printing power consumption in this machine.
- The actual saved or reduced amount may differ depending on the operating system used, computing performance, application software, connection method, media type, media size, job complexity, and etc.

 The **Undo** button clears all the values set so far.

## Input Trays

You can set paper size, type for each tray and other tray related settings. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Tray settings" on page 30).

- **Paper Size:** Select the paper size to use for each tray.
- **Paper Type:** Select the paper type to use for each tray.
- **Tray Confirmation Message:** Select to activate a tray confirmation message which asks whether or not to set the paper size and type for the just opened tray.
- **Tray Settings**
  - **Auto Tray Switch:** Check the box to set this option to on. If this option is on, the machine automatically switches to the tray with paper. For example, if Tray1 is empty, the machine automatically prints using the paper in the Tray 2 and so on.
  - **Auto Continue:** Check the box to set this option to on. If this option is on, the machine continues printing on a larger available paper when the tray is empty or there is a mismatch between the machine driver and the paper in the tray.
  - **Paper Substitution:** You can set the machine to substitute paper when the paper requested paper for a print job is not available. For example, if the requested ledger sized paper is not available in the tray, this machine substitutes A3 for the requested paper.
  - **Tray Priority:** You can set the priority among trays. Paper in the tray with the highest priority will be used first. Select the tray to be used first from the drop-down list.

## Sound/Volume

You can set the volume for button sounds, notice alarms, and the sound that occurs during a fax job. Select the volume for each sound from the drop-down list. If you want to mute the sound, check the checkbox. Click on the **Apply** button in the upper right corner of the page. This feature is also available from the machine (see "Sound" on page 15).

Select the volume from the drop-down list and check **Mute**, if you want to mute the sound.

- **Button & Notice Sound:** You can set the sound volume for when

pressing the button and notice alarm.

- **Fax Sound:** You can set the sound occurring during a fax job.



For speaker volume, you can check **Sounds Only in Communication** to turn the speaker on when transmitting a fax.

## Color (CLX-9252 9352 Series only)

Allows you to adjust the color so the printouts are sharper and clearer.

This feature is also available from the machine (see "Color (administrator only; CLX-9252 9352 Series only)" on page 13)

- **Auto Color Registration**
  - **Auto Color Registration:** The machine virtually prints certain patterned image to calibrate the color printing position. This feature enhances the colored image sharper and clearer, which means the machine prints the colored image on the paper more like the one in the monitor. If you want to execute **Auto Color Registration** right away, click the **Execute Now** button.
  - **Full Auto Color Registration :** .Select to perform full auto color registration.
- **Auto Color Tone Adjustment:** Allows you to automatically adjust color tone for the best possible color print quality.
  - **Normal:** Automatically adjusts the color tone. Takes more time than **Quick**, but the result is better.
  - **Quick:** Quickly adjusts the color tone. Takes less time than **Normal**.
  - **Full:** Changes the color table to adjust the color tone.
- **Color Simulator:** Allows you to choose the color. If you are not satisfied with the current printout color, you can choose the color simulation to suit your needs.
  - **Default :** Returns to the default color setting.
  - **A~D:** Choose the color setting you want. Each simulation has a different color setting.
  - **Custom:** If you want other color setting than the above, contact the service provider and ask for custom setting.
- **Density Adjustment:** Allows you to adjust color density for print and copy job.
  - **Print Density:** Adjust the print density.
  - **Copy Density:** Adjust the copy density.

## Home Window Customization

You can choose and install the background image to use for the Home window. This feature is also available from the machine (see "Home Window Background (administrator only)" on page 20).

### Adding a back ground image

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Home Window Customization**.
2. Click on the **Add** button.  
A pop-up window appears.
3. Enter the necessary information and find the image using the **Browse** buttons.
4. Click on **Apply**.

### Deleting a back ground image

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Home Window Customization**.
2. Select the image you want to delete and click **Delete**.  
A pop-up window appears.
3. A confirmation message appears, click **OK**.

The list is reloaded and the image you deleted is removed from the list.

## Printer

You can set copy related settings such as darkness or adjust the background. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Print Settings" on page 36).

From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Printer**.



The **Undo** button clears all the values set so far.

You can set copy related default settings. For more information about the options, refer to the setting this option from the machine (see "Print Settings" on page 36).

## Change Default

You can set the basic settings for printing. For more information about these options, refer to section on the setting this option from the machine (see "Print Settings" on page 36).

- **Default Paper:** Select the default paper to use. The paper you choose here will be used for printing directly from the machine. For example, if you choose the paper as A4 and print a report, the report will be printed on A4.

## Layout

You can set paper layout related settings. For more information about the options, refer to the setting this option from the machine (see "Print Settings" on page 36).

- **Orientation:** Select the paper orientation.
- **Duplex:** Select the paper orientation for duplex mode.
- **Duplex Top Margin:** Select the top margin for duplex mode.
- **Duplex Left Margin:** Select the left margin for duplex mode.
- **Simplex Top Margin:** Select the top margin for simplex mode.
- **Simplex Left Margin:** Select the left margin for simplex mode.
- **Copies:** Select the number of copies you want to print.

## PCL

You can set PCL font related settings.

- **Lines:** Select to determine the number of text lines to be printed on each page. The machine determines the vertical line space between each line.
- **Pitch:** Select the font pitch. Pitch is the number of fixed-space characters in a horizontal inch of type.
- **Point Size:** Select to change the point size which is the height of a character. One point is about 1/72 of an inch.
- **Wide A4:** Select to set the word count to allow in a line of A4.
- **Courier:** Select the courier font to use.

## PostScript

You can set PostScript related settings.

- **PostScript Error:** Check to print an error report when an error occurs during PostScript printing.

## Font and Macro Download

You can download fonts and macro to the machine.

1. Select the tab you want.
2. Click the **Add** button.  
A pop-up window appears.
3. Find the font/macro/form using the **Browse** button.

4. Click **Apply**.

The result appears on the window.

5. Click **Close**.



The list shows the fonts and macros installed on the machine. If you want to upload the fonts and macros to the desktop, select the fonts and macros and click on **Upload to Desktop**. If you want to delete the fonts and macros, select the fonts and macros and click **Delete**.

## Copy

You can set copy related settings such as darkness or adjusting the background. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine.

From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Copy**.



The **Undo** button clears all the values set so far.

## Change Default

You can set copy related default settings. For more information about the options, refer to the setting this option from the machine (see "Copy Settings" on page 22).

- **Paper Supply:** Select the default tray to use when copying.
- **Duplex:** Select the duplex option.
- **Reduce/Enlarge:** Select the size of the original to be copied to. For example, if the original is A4 and you want it to be copied on the Letter sized paper, select **(94%)A4 -> LTR**.
- **Original Type:** Select the type of the original you are copying. This will give you a better copy output.
- **Text/Photo:** Select the type of the text and photo.
- **Darkness:** Select the darkness of the copy output.
- **Sharpness:** Select the sharpness of the copy output.
- **Edge Erase:** Select the options to erase edges when copying.
- **Adjust Background:** Select options to reduce dark backgrounds or paper patterns as in newspaper originals.

## Output

You can set copy output related settings. For more information about the options, refer to the setting this option from the machine (see "Copy Settings" on page 22).

- **Sort:** Select how to sort the output.
- **Offset:** Select **On**, if you do not want the printout sets to be in one stack. The machine places printout sets slightly offset from one another.
- **Output Tray:** Check the selected tray to be used as the output tray.
- **Staple:** Select the staple options for the output. If you choose **1 Staple** or **2 Staple**, the **Position** option appears and you can choose the orientation of the staple.
- **Punch:** Select the punch options for the output. If you choose **2 Holes**, **3 Holes**, or **4 Holes**, the **Position** option appears and you can choose the orientation of the punch hole.

## Color (CLX-9252 9352 Series only)

You can set copy color related settings. For more information about the options, refer to the setting this option from the machine (see "Copy Settings" on page 22).

- **UCR:** Select to adjust the color of cyan, magenta, yellow, or black in dark area. For example, some black colors include cyan, magenta, yellow, so the level of black or C,M,Y (cyan, magenta, yellow) can be adjusted for such texts and images in black. This effect can enhance

the readability and reduce toner usage.

- **Fine Density:** Select to increase or decreases the image density on relatively bright or dark areas of an image. By regulating the amount of CMYK 9(cyan, magenta, yellow, black) toner, you can use this option to emphasize area of an image, or you can improve the image quality. You can also enhance text readability by using this option.
- **Color Shift:** Select to gradually change the selected color in the original image to the next color on the left or right. This options can emphasize an area on an image, or it can express your color preference.
- **Color Balance:** Select to adjust the color balance as you prefer. This adjustment changes the overall mixture of the colors in an image. You can use this effect to create your own personal color preference, or to match company branding. For example, if you want your printouts to have more cyan, set a higher number for **Cyan**. The set value will be reflected in the printouts.
- **Saturation:** Select to adjust the level of saturation of the colors in the image. You can use this adjustment to make images more vibrant. The more gray there is in a color, the less saturated it is. The less gray in a color, the more saturated it is. So, a fully saturated color is the purest version of that color. Select a color(s), and adjust the level of saturation using the drop-down list.

## Fax

You can set fax related settings such as fax number or redial times. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Fax Settings" on page 25).

From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Fax**.



The **Undo** button clears all the values set so far.

## General

You can set general fax related settings. For more information about the options, refer to the setting this option from the machine (see "Fax Settings" on page 25).

## Common tab

- **ChangeDefault:** Change the default fax settings.
  - **Resolution:** Select the fax resolution value.
  - **Darkness:** Select the degree of darkness of fax outputs.
  - **Original Type:** Select the type of the original you are faxing. This will enhance the fax quality based on the type of the original document being faxed.
  - **Color Mode (CLX-9252 9352 Series only):** Select the color options of fax outputs.
  - **Adjust Background:** Set the option to enhance or erase the background of the original to get more clean scan result.
- **Sending:** Set the options for sending fax.
  - **Prefix Dial:** set this option **On** to set the prefix dial.
  - **Fax Send Report:** set this option **On** to print a confirmation report showing whether a transmission was successful, how many pages were sent, and more.
- **Receiving:** Set the options for receiving fax.
  - **Receive Start Code:** Set this option **On** to receive fax using the external phone. Enter the code between 0-9. If you set this option, you can receive fax using the external phone. If the external phone is connected to the machine, when the phone rings and it is fax, users can just press \*\*receive start code\*\* to receive the code without going to the machine.

## Line number tab

You can set settings for each line.

- **Machine ID & Fax Number:** Set the machine ID and fax number which will be printed at the top of each page.
- **Sending**
  - **Error Correction Mode:** Check this option for the machine to correct the error. It helps with poor line quality and ensures any faxes you send are properly transmitted to any other ECM-equipped fax machines. Sending a fax using ECM may take more time.
  - **Dial Type:** Select the dial type. Some countries may not support this option. Contact your local telephone company for Dial Type setting information.
  - **Toll Save:** Check to send a fax in the toll save time for saving money.
    - **Start Time:** Set the toll save start time. If the **Toll Save** option is checked, the machine will start sending the fax when it is the time you set here.
    - **End Time:** Set the toll save end time. If the **Toll Save** option is checked, the machine will stop sending the fax when it is the time you set here.
  - **Redial Times:** Select the redial time from the drop-down list. Selecting 0 means that the machine will not redial.
  - **Redial Term:** Select the terms for redialing from the drop-down list.
- **Receiving**
  - **Ring to Answer:** Set the number of times the machine rings before answering an incoming call.
  - **Receive Mode:** Select the receive mode. If you select **Answering Machine/Fax**, you can receive a fax while the line is being used by the answering machine.
  - **Secure Receive:** You can set the machine to keep the received faxes in memory so that unauthorized people cannot access them when you are absent. This option restricts printing of received faxes when the machine is unattended.
    - **Start Time:** Set the secure receive start time. If the **Secure Receive** option is on, the machine will start applying the secure receive function when it is the time you set here.
    - **End Time:** Set the secure receive end time. If the **Secure Receive** option is on, the machine will stop applying the secure receive when it is the time you set here.
    - **Print fax in secure receive mode:** Select to print faxes in the memory. A four-digit **Passcode** is used when you want to print out received faxes in memory.

## Received Fax Printing

You can set received fax printing related settings. For more information about the options, refer to the setting this option from the machine (see "Fax Settings" on page 25).

- **Received Fax Printing:** Set the general fax settings.
  - **Duplex:** Select to print received fax data on both sides of paper.
  - **Output Tray:** Shows the tray set to be used for the output tray.
  - **Auto Reduction:** Set to automatically reduce an incoming page. When receiving a fax containing pages as long as or longer than the paper loaded in the paper tray, the machine can reduce the size of the original to fit the size of the paper loaded in the machine.  
If you do not enable this option, the machine cannot reduce the original to fit onto one page. The original will be divided and

printed in actual size on two or more pages.

- **Discard Size:** Enter the reduce size for **reduction**. The machine minuses the specified segment set as the discard size. If you have selected **Auto Reduction**, this option is enabled.
- **Mark 1st Page:** Check to mark the first page of the fax.
- **Receive Header:** Check to automatically print the page number, date and time of fax reception at the bottom of each page.
- **Color Printing (CLX-9252 9352 Series only):** Check to print received fax in color.
- **Paper Source:** If the tray is set to **On**, you can use the tray for printing the received fax. If the tray is set to **Off**, you cannot use the tray for printing the received fax.

## Junk Fax Setup

You can set the machine to not accept faxes sent from remote stations if their numbers are stored in the memory as spam or junk fax numbers. You can enter up to 10 junk fax numbers.

- **Junk Fax:** Select to filter the junk faxes. You need to click **Apply** and save the setting before adding a junk fax number.

### Adding a junk fax number

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Fax** > **Junk Fax Setup**.
2. Click on the **Add** button.  
A pop-up window appears.
3. Enter the junk fax number. You can also load the number stored for the Caller ID feature by clicking the **Caller ID** button.
4. Click **Apply**.

### Deleting a junk fax number

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Fax** > **Junk Fax Setup**.
2. Select the number you want to delete and click **Delete**.  
A pop-up window appears.
3. A confirmation message appears, click **OK**.  
The list is reloaded and the number you deleted is removed from the list.

## Mailbox Setup

You can set the options for managing the mailbox.

- **Document Policy:** You can set when to delete the documents stored in the Mailbox.
  - **Delete On Poll:** The fax data will be deleted after it has been transmitted.
  - **Delete On Print:** The fax data will be deleted after it has been printed.
- **Mailbox Configuration:** You can create, edit, or delete a Mailbox.

## Fax Forward

You can set the fax forward related settings to enable the user to forward received or sent faxes to other destinations such as Fax, Email, Server (SMB, FTP, and WebDev), and Box. Fax forwarding to several destinations is also possible.

- **Settings button:** Set the default information for the **Fax Forward to Email**.

### Adding a fax forwarding setting

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Fax** > **Fax Forward**.
2. Click on the **Add** button.

A pop-up window appears.

3. Enter the necessary information.

- **General**
  - **Forward Type:** Select what kind of fax to forward.
  - **Line:** Select the fax line to use.
  - **Default Attachment Type:** Select the default file type for the fax attachment.
  - **Print Local Copy:** Check to print the forwarded fax as a copy.
- **Fax Forward to**
  - **Fax Forward to:** Select the destination to forward the fax.
  - **Address:** Enter the recipient's address. You can load the address from the address book by clicking the **Loading Address Book**. If you select FTP, SMB, WebDAV, or Box for the destination, you can manually enter the information by clicking the **Direct Input**.
  - **Document Name:** Enter the document name to be used for saving the forwarded fax.

4. Click **Apply**.

**Deleting a fax forwarding setting**

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Fax** > **Fax Forward**.
2. Select the setting you want to delete and click **Delete**.  
A pop-up window appears.
3. A confirmation message appears, click **OK**.  
The list is reloaded and the setting you deleted is removed from the list.

**Editing a fax forwarding setting**

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Fax** > **Fax Forward**.
2. Select the setting you want to edit and click **Edit**.  
A pop-up window appears.
3. Change the value as you want.
4. Click **Apply**.

**Caller ID**

You can set caller ID related settings. This feature is also available from the machine (see "Fax Settings" on page 25).

- **Caller ID:** Check to parse sender's caller ID. If you enable this option, you can store each caller's fax in the box classified by the caller ID.
- **Save To Box:** You can save the fax in the box classified by the caller ID. **Caller ID** needs to be enable to use this option. The list below shows the list of boxes classified by the caller ID. If you want to edit or delete the box, check the box and click **Edit** or **Delete**.

**Scan**

You can set scan related settings. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Application Setting" on page 22).

From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **Scan**.

 The **Undo** button clears all the values set so far.

**Change Default**


You can set default options for **Scan To Email**, **Scan To Server**, and **Scan To USB**. Set the values and click the **Apply** button on the upper right corner of the page. For more information about the options, refer to

the setting this option from the machine (see "Scan to Email Settings" on page 26, "Scan to Server Settings" on page 27, or "Scan to USB Settings" on page 29).

- **Scan to Email:** set default options for **Scan to Email**.
- **Scan to Server:** set default options for **Scan to Server**.
- **Scan to USB:** set default options for **Scan to USB**.

**Scan to Email**

You can set general, advanced and outgoing email server settings for scan to email feature. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Scan to Email Settings" on page 26).


 If outgoing email server is not configured, click the link under **Outgoing Mail Server (SMTP)** and configure the outgoing email server first (see "Outgoing Mail Server (SMTP)" on page 85).

- **General:** Set the general scan to email settings.
  - **Scan to E-mail:** Check to enable scan to email feature.
  - **Default [From:] Address:** Enter the default address to appear in the From Address field.
  - **Default Subject:** Enter the default subject to appear in the Subject field.
  - **Default Message:** Enter the message to appear in the from Message field. Check **Use default message on Scan To E-mail** if you want to use the default message when sending emails.
- **Advanced:** Set the advanced scan to email settings.
  - **Edit [From:] Address:** Select whether to allow users to change the **From Address** field.
  - **Auto Send to Self:** Select whether to enable auto send to self feature, which is sending a copy of email to oneself.
  - **Print Confirmation Sheet:** Select when to print the print confirmation sheet.
- **Outgoing Mail Server (SMTP):** Check the outgoing email server settings. You can click the status to change the configuration.

**Scan to Server**

You can enable or disable servers. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Scan to Server Settings" on page 27).

- **Scan to FTP:** Set the general scan to FTP settings.
  - **FTP Protocol:** Check to enable FTP.
  - **Server Connection Timeout:** You can set the time that the system will wait before the server connection fails due to timeout. You can set the time value between 1-300 second(s). The time value should be 30 seconds or more for reliable operation over congested enterprise networks.
- **Scan to SMB:** Set the general scan to SMB settings.
  - **SMB Protocol:** Check to enable send to SMB feature.
  - **Server Connection Timeout:** You can set the time that system will wait before the server connection fails due to timeout. You can set the time value between 1-300 second(s). The time value should be 30 seconds or more for reliable operation over congested enterprise networks.

 If the **Scan to SMB** option does not work properly, check the personal firewall settings of the server and disable the settings related to blocking the access of shared folders.

- **Scan to WEBDAV:** Set the general scan to WEBDAV settings.
  - **WEBDAV Protocol:** Check to enable send to WEBDAV feature.
  - **Server Connection Timeout:** You can set the time that system

will wait before the server connection fails due to timeout. You can set the time value between 1-300 second(s). The time value should be 30 seconds or more for reliable operation over congested enterprise networks.

## Scan Security

You can set Scan related security settings.

- **Digital Signature in PDF**
  - **Certificate for Digital Signature in PDF:** You can select the certificate to use. For installing the digital certificates, refer to "Digital Certificate" on page 86.
  - **Digital Signature in PDF:** Check to enable the digital signature in PDF files. This will only be available for scan to server, SMB, and FTP.

## E-mail Notification

When an error occurs or the consumables are running out, the machine sends a notification to the administrator via e-mail. You can set whether to use this feature or not. You can also select which alerts to receive and when.

From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **E-mail Notification**.

- **General**
  - **E-mail Notification:** Check to receive e-mail notification when there is an alert.
- **Recipients & Conditions:** You can view the list of alerts and add/delete/edit current alerts.

### Adding an alert

1. From the SyncThru™ Web Service, select the **Settings** tab > **Machine Settings** > **E-mail Notification**.
2. Click on the **Add** button under **Recipients & Conditions**. A pop-up window appears.
3. Enter the recipients' contact information under **Recipients**.
4. Select the alerts for which you want to receive notification from under **Notifications**.



For consumable related alerts, you can set the remaining percentage for which you want to receive notification; click on **Setting**. For example, if you set this value to 10% for the imaging unit, and the average imaging unit yield is 20,000 pages, when about 2,000 pages (10% of 20,000 pages) are left, a notification will be sent.

5. Click the **Apply**.

## Network Settings

You can set up the network environment to use your machine as a network machine. Set the values and click on the **Apply** button on the upper right corner of the page. You can also set the settings from the machine. Refer to the network setup chapter (see "Network setup" on page 52).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings**.


### General

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **General**.

You can set general machine information to use in the network and set ethernet settings. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Ethernet" on page 54).



The **Undo** button clears all the values set so far.

- **General:** Set the general network settings.
  - **Host Name:** Enter the host name of your machine.
  - **Location:** Enter the location of your machine.
  - **Contact:** Enter the name of the person in charge of the machine. **Administrator** is set as a default.
- **Ethernet:** Set the general ethernet settings.
  - **Ethernet Speed:** Choose the speed rate of the ethernet.
    -  **Automatic** is recommended for all network environments.
  - **Actual Speed Rate:** Shows the actual speed of the ethernet.
  - **MAC Address:** Shows the MAC address of your machine.


## TCP/IPv4

You can set IPv4 settings. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "TCP/IP Protocol" on page 53).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **IPv4**.



The **Undo** button clears all the values set so far.

- **General:** Set the general IPv4 settings.
    - **Assign an IP Address:** Select the method for assigning an IP address.
      - **Manually:** Select to enter IP address/Subnet Mask/ Gateway Address manually.
      - **Automatically:** IP address/Subnet Mask/ Gateway Address are automatically allocated by BOOTP/DHCP Server.
-  • If you check **Auto IP**, when the BOOTP or DHCP fail to allocate IP address/Subnet Mask/ Gateway Address after 2 minutes, the machine automatically allocates a Link-Local IP address, which is the 169.254.0.0/16 set of addresses defined in RFC 3927.

The **Undo** button clears all the values set so far.

- **Domain Name:** Set the DNS server settings.
  - **Host Name:** Shows the host name. You can change the name in **Settings** tab > **Network Settings** > **General** (see "General" on page 82).
  - **Domain Name:** Enter the domain name. You can enter up to 128 characters.
  - **Primary DNS Server:** Enter the address of the DNS server you want to use primarily.
  - **Secondary DNS Server:** Enter the address of the DNS server you want to use as an alternative.
  - **Dynamic DNS Registration:** Check to enable dynamic DNS registration. If this option is enabled, machine registers its host name and domain name to configured DNS servers dynamically. Also, if this option is enabled and DHCP is selected, DHCP FQDN options is automatically disabled.
  - **Authentication Method:** Select the authentication method. **Dynamic DNS Registration** needs to be checked to set this option.
- **WINS:** Set the WINS server settings.
  - **WINS Protocol:** Check to enable WINS server.
  - **Primary WINS Server:** Enter the address of the WINS server you want to use primarily.
  - **Secondary WINS Server:** Enter the address of the WINS server


you want to use as an alternative.

## TCP/IPv6

You can set IPv6 settings. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "TCP/IPv6" on page 54).


From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **TCP/IPv6**.

 The **Undo** button clears all the values set so far.


- **General:** Set the general IPv6 settings.
  - **IPv6 Protocol:** Check to enable IPv6 protocol.  
 Reboot the machine to apply the change.
  - **Manual Address:** Check to enter **Address/Prefix** manually.
- **The Assigned IPv6 Addresses:** Shows the assigned IPv6 addresses.
- **Dynamic Host Configuration Protocol version 6 (DHCPv6)**
  - **DHCPv6 Configuration:** Select the DHCPv6 Configuration method.
    - **Use DHCP as directed by a router:** DHCPv6 is enabled when a router advertises to use DHCPv6.
    - **Always Enable DHCP:** Regardless of router advertisement, use DHCPv6 to acquire an IPv6 address.
    - **Never use DHCP:** Disables DHCPv6.
- **Domain Name System version 6 (DNSv6)**
  - **Host Name:** Shows the machine's host name.
  - **IPv6 Domain Name:** Enter the domain name. You can enter up to 128 characters.
  - **Primary DNSv6 Server Address:** Enter the address of the DNSv6 server you want to use primarily.
  - **Secondary DNSv6 Server Address:** Enter the address of the DNSv6 server you want to use as an alternative.
  - **Dynamic DNSv6 Registration:** Check to enable or disable dynamic DNSv6 registration.

## Raw TCP/IP, LPR, IPP

You can set TCP/IP, LPR and IPP protocols for network printing. For

more information on each protocol place the mouse cursor over  (see "Print settings (Ports to set for network printing)" on page 55). Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Raw TCP/IP Settings" on page 55, "LPR/LPD Settings" on page 55 or "IPP Settings" on page 55).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **Raw TCP/IP, LPR, IPP**.

 The **Undo** button clears all the values set so far.

- **Raw TCP/IP Printing**
  - **Raw TCP/IP:** Check to enable Raw TCP/IP.
  - **Port Number:** Enter the port number of the machine for raw TCP/IP Printing. You can change this port number whenever the network environment you are using changes.
- **LPR/LPD**
  - **LPR/LPD:** Check to enable LPR/LPD.
  - **Port Number:** Enter the port number of the machine for LPD Printing. You can change this port number whenever the network environment you are using changes.

- **Internet Printing Protocol (IPP)**

- **IPP:** Check to enable IPP.
- **Printer Name:** Enter the printer name.
- **Printer URI:** Shows the printer URI.



Click on the **Advanced** button to enter more information.

## Proxy Settings

You can set proxy settings and enable authentication to connect to licence server through http proxy server. These proxy settings are provided currently only if the administrator wants to update an XOA application's license online through proxy server.



This option will be available when an XOA application's license needs to be updated.

- **Proxy Settings**

- **Use Proxy:** Check to enable proxy settings.
- **HTTP Proxy Server Address:** Enter the HTTP proxy server address to use.
- **HTTP Proxy Server Port Number:** Enter the HTTP proxy server port number to use.

- **Proxy Authentication Settings**

- **Enable:** Check to enable proxy server authentication.
- **User ID:** Enter the user ID for proxy server authentication.
- **Password:** Enter the password for proxy server authentication.

## SLP

You can set SLP for searching the device on the network. You can also set the settings from the machine. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "SLP Settings" on page 56).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SLP**.



The **Undo** button clears all the values set so far.

- **SLP Protocol:** Check to enable SLP protocol.
- **Port Number:** Shows the port number.
- **Scope 1~3:** Enter the network scope to use, up to 3 scopes can be set. Each machine must always be in one or more scopes. You need scopes to group services that are comparable to the network neighborhood in other systems.
- **Message Type:** Select the message type.
- **Multicast Radius:** Multicast radius for the multicast packets. This value will be taken in to effect only if IPv6 is disabled.



This is a limitation with Java Runtime environment.

- **Registration Lifetime:** Enter the life time of service registration when registering services with DA.
- **Multicast Address:** Shows the multicast address.

## WSD

If you are using Windows Vista® or later as an operating system, you can set WSD (Web Service for Device) for searching the device on the network. You can also print from the searched device. Set the values and click the **Apply** button on the upper right corner of the page.

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **WSD**.




The **Undo** button clears all the values set so far.

- **WSD Protocol:** Check to enable WSD protocol.

- **Port Number:** Shows the port number.

## UPNP

You can set UPnP for discovering the network services. You can also set the settings from the machine. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "UPnP (SSDP) settings" on page 57). From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **UPNP**.


 The **Undo** button clears all the values set so far.

- **SSDP Protocol:** Check to enable SSDP protocol.
- **Port Number:** Shows the port number.
- **SSDP TTL:** Enter the packet time to live. Four is set as a default value.
- **Friendly Name:** Shows the friendly name used by SSDP. The Friendly name will be shown in Windows network when it detects a machine.

## mDNS

You can set mDNS settings. You can also set the settings from the machine. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "mDNS Settings" on page 57).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **mDNS**.


 The **Undo** button clears all the values set so far.

- **mDNS Protocol:** Check to enable mDNS protocol.
- **Port Number:** Shows the port number used by mDNS.
- **mDNS Name:** Shows the instance name used by the services for registering via mDNS.
- **Friendly Name:** Shows the friendly name used by mDNS. The Friendly name will be same as the link address used by the mDNS protocol and is shown in the Windows network when it detects the machine.

## SNMP

You can set **SNMP related** settings. You can also set the settings from the machine (see "SNMP Settings" on page 56).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP**.

 The **Undo** button clears all the values set so far.

### SNMPv1/v2

You can set **SNMPv1/v2** settings. You can also set the settings from the machine. Set the values and click on the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "SNMP Settings" on page 56).

- **General**
  - **SNMPv1/v2 Protocol:** Check to enable SNMPv1/v2 protocol.
- **Community Name:** (see "SNMP Community" on page 57).

#### Adding the SNMP Community

1. From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP** > **SNMPv1/v2** > **Community Name**.
2. Click the **Add** button.  
A pop-up window appears.
3. Enter the necessary information.
4. Click **Apply**.

### Deleting the SNMP Community

1. From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP** > **SNMPv1/v2** > **Community Name**.
2. Check the checkbox of the name(s) you want to delete from the list and click the **Delete** button above the list.
3. A confirmation window appears. Click on **Yes**.

### Editing the SNMP Community

1. From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP** > **SNMPv1/v2** > **Community Name**.
  2. Check the checkbox of the name(s) you want to edit from the list and click the **Edit** button above the list.
  3. Change the necessary information.
  4. Click **Apply**.
- **SNMP Traps:** (see "SNMP Trap" on page 56).

### Adding the SNMP traps

1. From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP** > **SNMPv1/v2** > **SNMP Traps**.
2. Click the **Add** button.
3. A pop-up window appears.
4. Enter the necessary information.
5. Click **Apply**.

### Deleting the SNMP traps

1. From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP** > **SNMPv1/v2** > **SNMP Traps**.
2. Check the checkbox of the name(s) you want to delete from the list and click the **Delete** button above the list.
3. A confirmation window appears. Click on **Yes**.

### Editing the SNMP traps

1. From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNMP** > **SNMPv1/v2** > **SNMP Traps**.
2. Check the checkbox of the name(s) you want to edit from the list and click the **Edit** button above the list.
3. Change the necessary information.
4. Click **Apply**.

## SNMPv3

You can set **SNMPv3 settings**. You can also set the settings from the machine. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "SNMP Settings" on page 56).

 The **Undo** button clears all the values set so far.

- **General**
  - **SNMPv3 Protocol:** Check to enable SNMPv3 protocol.
- **Authentication**
  - **User Name:** Check to enable SNMPv3 protocol.
  - **Authentication Password:** Enter the password you want to use for read-and-write authentication.
  - **Confirm Password:** Re-enter the password for confirmation.
  - **Authentication Algorithm:** Select authentication method.
- **Privacy**
  - **Privacy Password:** Enter the password used to encrypt SNMPv3 request/response.
  - **Confirm Password:** Re-enter the **Privacy Password** for confirmation.
  - **Privacy Algorithm:** Shows the algorithm used to encrypt the SNMPv3 request/response. Only DES algorithm is supported,

you can not change it manually.

## Outgoing Mail Server (SMTP)

You can set server settings for outgoing emails. If this setting is not configured, you cannot use scan to email feature. Outgoing emails will be sent through SMTP server you set here. This feature is also available from the machine (see "SMTP setting" on page 63)

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **Outgoing Mail Server (SMTP)**.


 The **Undo** button clears all the values set so far.

- **Simple Mail Transfer Protocol (SMTP)**
  - **SMTP Server:** Enter the SMTP server address.
  - **Port Number:** Enter the server port number from 1 to 65535. 25 is set as a default value.
- **SMTP Login Information**
  - **SMTP Requires Authentication:** Check if you want to set authentication when sending outgoing emails.
  - **Login ID:** Enter the log-in ID used for authentication. You can enter up to 64 characters.
  - **Password:** Enter the password for authentication. You can enter up to 64 characters.
  - **Confirm Password:** Re-enter the password for confirmation.
- **POP3 Authentication**
  - **SMTP Requires POP3 Before SMTP Authentication:** You can set POP3 authentication to appear before SMTP client authentication usage. If you enable this option, POP3 is required by the SMTP server first. Check to enable this option.
  - **POP3 Server:** Enter the POP3 server address.
  - **Port Number:** Enter the server port number from 1 to 65535. 110 is set as a default value.
  - **Login ID:** Enter the log-in ID used for POP3. You can enter up to 64 characters.
  - **Password:** Enter the password for POP3. You can enter up to 64 characters.
  - **Confirm Password:** Re-enter the password for confirmation.
- **Advanced**
  - **Secure E-mail Connection with SSL/TLS:** Check to enable this option if your SMTP server supports SSL/TLS. When you are sending an e-mail from the machine, your e-mail will be encrypted. TLS/SSL will make a secure channel between the machine and the SMTP server.
  - **Server Connection Timeout:** You can set the time that system will wait before the SMTP server connection fails due to timeout. You can set the time value between 30~120 second(s). The time value should be 30 seconds or more for reliable operation over congested enterprise networks. Thirty seconds are set as a default.
  - **Maximum Message Size:** You can set the maximum message size. If the scanned document is larger than this message size, it will be split into multiple messages.
- **SMTP Setting Verification**
  - **Test:** Click to test if the server works properly.

## SetIP

You can set SetIP settings. You can also set the settings from the machine. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "SetIP settings" on page 62)

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SetIP**.


 The **Undo** button clears all the values set so far.

- **SetIP Protocol:** Check to enable SetIP protocol.
- **Port Number:** Shows the port number used.


## SNTP

You can set SNTP settings. You can also set the settings from the machine. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "SNTP settings" on page 62).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **SNTP**.

 The **Undo** button clears all the values set so far.

- **SNTP Protocol:** Check to enable SNTP protocol.
- **Server Address:** Enter the IP address of the public time server.
- **Port Number:** Enter the time server port number. Port number 123 is usually used.
- **Broadcast:** Check to enable SNTP broadcast. SNTP broadcast enables the MFP to synchronize to broadcast servers.
- **Time Offset:** Select the time value to specify the time zone with respect to UTC.


 Example for selecting the time offset: If your local time is 4 hours faster than **UTC**, select **4**.

- **Poll Interval:** Select the time interval for SNTP application to periodically initiate the synchronization with the clock reference. Use drop-down list to select the value.
- **SNTP Authentication:** Check to enable SNTP authentication.
  - **Key ID:** Shows the key ID for authentication. The key ID should match server key files.
  - **Key Value:** Shows the key value for authentication. The key value should match server key files.

## HTTP (SyncThru Web Service)

You can allow or block users from accessing the SyncThru™ Web Service. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "SMTP setting" on page 63).

From the SyncThru™ Web Service, select the **Settings** tab > **Network Settings** > **HTTP (SyncThru Web Service)**.

 The **Undo** button clears all the values set so far.

- **HTTP (SyncThru Web Service):** Check to allow user to access SyncThru™ Web Service.
- **Port Number:** Shows the server port number.

## Security tab

The security tab has four sub-menus, **System Security**, **Network Security**, **User Access Control** and **System Log**. You cannot access this tab if you do not log-in as an administrator (see "Menu overview" on page 6).

### System Security

From the SyncThru™ Web Service, select the **Security** tab > **System Security**. Set the values and click the **Apply** button on the upper right corner of the page.

 The **Undo** button clears all the values set so far.

## System Administrator

From the SyncThru™ Web Service, select the **Security** tab > **System Security** > **System Administrator**.

Enter the system administrator's information. The machine sends email notification to the email address set here. This feature is also available from the machine (see "Customer support" on page 34).

## Security Summary


From the SyncThru™ Web Service, select the **Security** tab > **System Security** > **Security Summary**.

Shows summary of security related settings. You can see the settings you set in the **Network Security** and **User Access Control** in here.

## System Reboot

From the SyncThru™ Web Service, select the **Security** tab > **System Security** > **System Reboot**.


You can reboot your machine. Click the **Restart Now** button to reboot.

 If you reboot the machine, all the current jobs will be deleted. Close jobs before rebooting.

## Feature Management

From the SyncThru™ Web Service, select the **Security** tab > **System Security** > **Feature Management**.

You can enable/disable network features. Check the features you want to enable and click **Apply**.


 If you want to connect through **Secure HTTP** (HTTPS), check both HTTP and HTTPS. If you only check HTTPS protocol, you cannot connect through secure HTTPS.

## Network Security

From the SyncThru™ Web Service, select the **Security** tab > **Network Security**.

### Digital Certificate

You can manage digital certificates. A digital certificate is an electronic certificate that verifies the secure association between communication nodes. You need to add the certificate for SSL communication. This feature is also available from the machine (see "Certificate Manager" on page 37).

-  • You can view all the certificates in detail by clicking the **Expand All** button and close them by clicking the **Collapse All** button.
- To have safe communication between the SyncThru™ Web Service and the machine, add a certificate beforehand and check **Secure HTTP** to use the machine in a safe and secure environment.

### Adding a certificate

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **DigitalCertificate**.
2. Click the **Add** button.  
A pop-up window appears.
3. Choose one of the following installation methods and add a certificate
  - **Create a Self-Signed Device Certificate**

1. From the **Install/Create Device Certificate or CSR**, select **Create a Self-Signed Device Certificate** and click **Next**.
  2. Refer to the section on creating a new certificate and enter the necessary values (see "Certificate Manager" on page 37).
  3. Click **Next** and check the information, then click **Close**.
  4. Check the created certificate from the list.
- **Install CA Signed Device Certificate**
    1. From the **Install/Create Device Certificate or CSR**, select **Install CA Signed Device Certificate** and click **Next**.
    2. Enter the certificate's **Friendly Name**, **Private Password**, and **Confirm Password**.
    3. Select the CA signed certificate using the **Browse** button.
    4. Click **Next** and check the information.
    5. Check the created certificate in the list.
  - **Create Certificate Signing Request (CSR)**
    1. From the **Install/Create Device Certificate or CSR**, select **Create Certificate Signing Request (CSR)** and click **Next**.
    2. Refer to the section on creating a new certificate and enter the necessary values (see "Certificate Manager" on page 37).
    3. Copy the Certificate Signing Request information and acquire the certificate from the certification server.
      - **How to acquire the certificate from the certification server:**
        - a. Open a web browser in the certification server and connect to **http://certification server's IP address/certsrv/**.
        - b. Select **request a certificate**.
        - c. Select **advanced certificate request**.
        - d. Select **submit a certificate request by using a base-64-encoded CMC or PKC ....**
        - e. Paste the copied **Certificate Signing Request information saved request** and select **submit**.
        - f. Acquire the certificate from the **download certificate**.
    4. Find and upload the acquired certificate to by using the **Browse** button and the **Upload Certificate** button.
  - **Install new Root Certificate**
    1. From the **Install new Root Certificate**, select **Install new Root Certificate** and click **Next**.
    2. Enter the certificate's **Friendly Name** and find the root certificate using the **Browse** button.
    3. Click **Next**, when there is no error, the installation success window appears.

### Deleting a certificate

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **DigitalCertificate**.
2. Check the checkbox of the certificate(s) you want to delete from the list and click the **Delete** button above the list.
3. The list is reloaded and the certificate you deleted is removed from the list.

### Editing a certificate


1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **DigitalCertificate**.
2. Check the checkbox of the certificate you want to edit from the list and click the **Edit** button above the list.

A pop-up window appears.

3. Edit the necessary information.
4. Click **Apply**.

## Secure Connection

You can enable or disable secure connection to use more enhanced secure network channel. For secure communication, using the **Secure Connection** feature is recommended. Check the server you want and click the **Apply** button on the upper right corner of the page.

- **Certificate For Secure Connection:** Among the certificates stored in the machine, you can select the certificate to use for secure connection.
- **Secure HTTP** (see "HTTPS Settings" on page 38).
  - **HTTPS:** Check to enable HTTPS. To apply the changes, you need to reboot the machine.
- **Secure HTTP**
  - **SMTSPS:** Check to enable SMTSPS.

## SNMPv3

(see "SNMPv3" on page 84).

## IP Security

You can set IP security settings. Check the server you want and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "IPSec Settings" on page 64).

From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP Security**.

 The **Undo** button clears all the values set so far.

- **IPSec**
  - **Current Status:** Shows if IP security is enabled or disabled.
  - **IPSec:** Check to enable IP security.
  - **Shared Secret:** Enter a new Pre-Shared Key for IP security communication.
  - **Confirm Shared Secret:** Confirm the Pre-Shared Key for IP security communication. Check the **Change Shared Secret** to change the shared secret.
- **IPSec Connection Control**
  - **Clear Connection:** Clears all previous IP security connections with client.
- **IPSec Advanced Settings**
  - **Advanced:** Click this button to configure IKE Settings and IPSec Policy.

## IP/MAC Filtering

You can set filtering options for IP and MAC addresses. Set the values and click the **Apply** button on the upper right corner of the page. If the administrator does not add a filtering rule for IPv4, IPv6, and MAC addresses, nothing is filtered. If the administrator has added a filtering rule, filtering will be applied to the entered IPv4, IPv6, and MAC addresses.

From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering**.

 The **Undo** button clears all the values set so far.

## IPv4 Filtering

You can enable/disable IPv4 filtering as well as manage filtering rules. This feature is also available from the machine (see "IPv4 Filtering Settings" on page 60).

From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv4 Filtering**.

- **IPv4 Filtering:** Check to enable IPv4 filtering.

### Adding a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv4 Filtering**.
2. Click the **Add** button.

A pop-up window appears.
3. Enter the necessary information (see "IPv4 Filtering Settings" on page 60).
4. Click **Apply**.

### Deleting a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv4 Filtering**.
2. Check the checkbox of the rule(s) you want to delete from the list and click the **Delete** button above the list.
3. Click **OK** when confirmation window pops up.

### Editing a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv4 Filtering**.
2. Check the checkbox of the rule you want to edit from the list and click the **Edit** button above the list.
3. Change the necessary information.
4. Click **Apply**.

## IPv6 Filtering

You can enable/disable IPv6 filtering as well as manage filtering rules. This feature is also available from the machine (see "IPv6 Filtering Settings" on page 60).

From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv6 Filtering**.

- **IPv6 Filtering:** Check to enable IPv6 filtering.

### Adding a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv6 Filtering**.
2. Click the **Add** button.

A pop-up window appears.
3. Enter the necessary information (see "IPv6 Filtering Settings" on page 60).
4. Click **Apply**.

### Deleting a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv6 Filtering**.
2. Check the checkbox of the rule(s) you want to delete from the list and click the **Delete** button above the list.
3. Click **OK** when confirmation window pops up.

### Editing a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **IPv6 Filtering**.
2. Check the checkbox of the rule you want to edit from the list and click the **Edit** button above the list.
3. Change the necessary information.
4. Click **Apply**.

### MAC Filtering

You can enable/disable Mac filtering as well as manage filtering rules. This feature is also available from the machine (see "MAC Filtering Settings" on page 61).

From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **MAC Filtering**.

- **MAC Filtering:** Check to enable MAC address filtering.

### Adding a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **MAC Filtering**.
2. Click the **Add** button.  
A pop-up window appears.
3. Enter the necessary information (see "MAC Filtering Settings" on page 61).
4. Click **Apply**.

### Deleting a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **MAC Filtering**.
2. Check the checkbox of the rule(s) you want to delete from the list and click the **Delete** button above the list.
3. Click **OK** when confirmation window pops up.

### Editing a filtering rule

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **IP/MAC Filtering** > **MAC Filtering**.
2. Check the checkbox of the rule you want to edit from the list and click the **Edit** button above the list.
3. Change the necessary information.
4. Click **Apply**.

## External Authentication Server

Set the servers for authentication. Set the values and click the **Apply** button on the upper right corner of the page. This feature is also available from the machine (see "Authentication settings for servers" on page 58).

From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server**.

 The **Undo** button clears all the values set so far.

### Kerberos Sever

You can set Kerberos server settings. This feature is also available from the machine (see "Kerberos Settings" on page 58).

### Adding a Kerberos server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **Kerberos Server**.
2. Click the **Add** button.  
A pop-up window appears.
3. Enter the necessary information.

- **Required Information**

- **Realm:** Enter the default realm.
- **Server Address:** Enter the default server address.
- **Port Number:** Enter the default port number. 88 is set as a default value.
- **Make to Default Server:** Check to set the server as the default server.

- **Additional Information**

- **Backup Server:** Enter the back up server address.
- **Port Number:** Enter the backup port number. 88 is set as a default value.

4. Click **Apply**.

### Deleting a Kerberos server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **Kerberos Server**.
2. From the Kerberos server list, check the server(s) you want to delete.
3. Click the **Delete** button.
4. A confirmation message appears, click **Yes**.

### Editing a Kerberos server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **Kerberos Server**.
2. From the Kerberos server list, check the server(s) you want to edit.  
A pop-up window appears.
3. Change the necessary information.
4. Click **Apply**.

### Testing a Kerberos server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **Kerberos Server**.
2. From the Kerberos server list, check the server you want to test.



The server to be tested should be selected from the list of servers that were added by using the adding a server feature.

3. Click the **Test** button.

### SMB Server

You can set SMB server settings. This feature is also available from the machine (see "SMB Auth Settings" on page 59).

### Adding a SMB server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **SMB Server**.
2. Click the **Add** button.  
A pop-up window appears.
3. Enter the necessary information.
  - **Required Information**
    - **Domain:** Enter the domain name to be used for log-in. You can enter up to 128 characters. You can only use **ASCII 32 - 35, 37 - 63, 65 - 123, or 125** character sets.
    - **Server Address:** Enter the default server.
    - **Port Number:** Enter the default port number from 1 to 65535. 139 is set as a default value.

- Standard port number for SMB over NetBIOS is 139.
- Standard port number SMB over TCPIP direct is 445.
- **Make to Default Server:** Select to make it a default server.
- **Additional Information**
  - **Backup Server:** Enter the backup server.
  - **Port Number:** Enter the backup port number from 1 to 65535. 139 is set as a default value.

4. Click **Apply**.


### Deleting a SMB server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **SMB Server**.
2. From the SMB server list, check the server(s) you want to delete.
3. Click the **Delete** button.
4. A confirmation message appears, click **Yes**.

### Editing a SMB server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **SMB Server**.
2. From the SMB server list, check the server(s) you want to edit and click **Edit**.  
A pop-up window appears.
3. Change the necessary information.
4. Click **Apply**.

### Testing a SMB server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **SMB Server**.
2. From the SMB server list, check the server you want to test.  
 The server to be tested should be selected from the list of servers that were added by using the adding a server feature.
3. Click the **Test** button.

### LDAP Server

You can set LDAP server settings. This feature is also available from the machine (see "LDAP Settings" on page 58).

### Adding a LDAP server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **LDAP Server**.
2. Click the **Add** button.  
A pop-up window appears.
3. Enter the necessary information.
  - **LDAP Server**
    - **LDAP Server:** Enter the server address.
    - **Port Number:** Enter the server port number from 1 to 65535. 389 is set as a default value.
    - **Match User's Login ID to the following LDAP attribute:** Select the attribute.
  - **LDAP User Search**
    - **Search Root Directory:** Enter search root directory which is the top search level of the LDAP directory tree. You can enter up to 64 characters.
    - **Authentication methods:** Select the authentication method

for accessing the LDAP Server during the address book search.

- **Anonymous:** Select to allow users without logging in.
- **Simple:** Select to set the password for logging in. If you select **Simple**, enter the following information.
  - **Login Name:** You can enter up to 64 characters.
  - **Password:** You can enter up to 64 characters.
  - **Confirm Password:** Re-enter the password for confirmation.
  - **Append Root to Base DN:** Select whether to enable or disable append root to base DN.
- **Max No. of Searches:** You can set the maximum number of results that need to be returned during LDAP address book search.
- **Search Timeout:** You can set the maximum search timeout for LDAP address book search.
- **LDAP Referral:** Select whether to turn on or off the **LDAP Referral**. If this option is **ON**, LDAP client will search referral server if the LDAP server has no data to reply to query and if the LDAP server has a referral server.
- **Search By:** Select the category you want to use for searching.
- **LDAPS:** Check to enable LDAPS.
- **LDAP Configuration Test**
  - **LDAP Configuration Test:** Click this button to test if the server works properly.

4. Click **Apply**.

### Deleting a LDAP server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **LDAP Server**.
2. From the LDAP server list, check the server(s) you want to delete.
3. Click the **Delete** button.
4. A confirmation message appears, click **Yes**.

### Editing a LDAP server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **LDAP Server**.
2. From the LDAP server list, check the server(s) you want to edit and click **Edit**.  
A pop-up window appears.
3. Change the necessary information.
4. Click **Apply**.

### Testing a LDAP server

1. From the SyncThru™ Web Service, select the **Security** tab > **Network Security** > **External Authentication Server** > **LDAP Server**.
2. From the LDAP server list, check the server you want to test.
3. Click the **Test** button.

## 802.1x

You can enable 802.1x authentication, which is a port-based authentication. If this authentication is enabled, the machine is not allowed to access through the protected side of the network until the machine is authorized. Use this feature to protect your network. This feature is also available from the machine (see "802.1x" on page 41).

## 802.1x Security

- **802.1x Security:** Check to enable this feature.
- **Authentication Algorithm:** Select the authentication algorithm to use.
  - **EAP-MD5:** Offers minimal security. The MD5 hash function is vulnerable to dictionary attacks, and does not support key generation.
  - **PEAPv0/EAP-MS-CHAPv2:** Recommended for users who only intend to use Microsoft desktop clients and servers. For other users, it is not recommended.
  - **EAP-MS-CHAPv2:** MS-CHAPv2 provides two-way authentication between peers by combining a peer Challenge message with the Response packet and an authenticator Response message on the Success packet.
  - **TLS:** This is used to provide secure communication over the Internet between a client and server.
- **Credentials:** Enter the **User Name**, **Password**, and **Confirm Password** to use for the authentication.
- **Server Validation:** select/unselect the certificate to use for validation. This option appears when you select **PEAPv0/EAP-MS-CHAPv2** or **TLS**.

## User Access Control

You can restrict users from accessing the machine or application. You can also give specific permission for user to only use certain feature of the machine. For example, you can allow user A to only use print feature. In this case, user A will not be able to scan, copy or fax with the machine. Set the values and click the **Apply** button on the upper right corner of the page.

From the SyncThru™ Web Service, select the **Security** tab > **User Access Control**.

 The **Undo** button clears all the values set so far.

### Authentication (Activating access control)

From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authentication**.

You can choose the authentication method for user authentication. Select a mode and click on the **Options** button. This feature is also available from the machine (see "Authentication" on page 40).

- **Mode**
  - **Basic Authentication:** Activate basic authentication. Users are asked to login when they select options that are only available to administrators. Those options are marked with "a" or "(administrator only)" in this guide.
  - **Device Authentication:** Activate device authentication. Device authentication requests user to login before using the device. Users cannot use any application without login. Press the **Edit Application** button and select the feature to enable/disable authentication.
  - **Application Authentication:** Activate application authentication. An administrator can choose the application(s) to require user to login to use. Users cannot use the selected application(s) without logging-in. Press the **Edit Application** button and select the application(s) to enable/disable authentication.
- **Application State**
  - **Edit Application:** Select the feature/application you want to enable/disable authentication. This option is available only for **Device Authentication** and **Application Authentication**.
- **AA Method:** Select the authentication method from the list.

- **Options** button
  - **Log in Identification:** Select the options for logging in.
    - **Login Identification:** Select the login identification between **Local Authentication** and **Remote Authentication**. If you select **Local Authentication**,
    - **Options:** Select what to require for the user to login.
    - **Password Expiration Period:** Select whether to set an expiration period for the password.
    - **Password Policy:** Select the password policy. If you enable the **Apply strong password**, the password should be at least 8 characters long and it should be a combination of letters, numbers, and special characters (except for <, >, ", \).
    - If you select **Remote Authentication**,
    - **Options:** Select the server to use for authentication.
  - **Log in Restriction:** Select what to do when users keep fail to log-in. Select **Enable** to enable this feature and set the sub-options. For example, if you set **Minutes** to 3, **No. of attempt** to 3, and **Lock period** to 5, users can try to log-in 3 times in 3 minutes and if they fail, they cannot try to log-in for 5 minutes.
    - **Minutes [1~59]:** Select the length of time the for which a user can try to log-in
    - **No. of attempt [1~99]:** Select the number of attempts the user can try to log-in.
    - **Lock period [1~59]:** Select the length of time to restrict users from attempting to log-in.
  - **Log out Policy:** Select when to log users out.
    - **Force to log out:** Select to automatically log users out when a job is completed.
    - **No log out:** Select to allow users to log-out manually.
    - **Log out reminder:** Select to show users a log-out request message when a job is completed.
    - **Log out Time :** Select the time for automatic log-out. When there are no jobs in process or no input for the selected time, the system logs out automatically logs out.
- **LoginPage** button: Press **LoginPage**. Select the login page to use for the LCD screen (**LUI Login Page**) on the machine and SyncThru™ Web Service (**SWS Login Page**).

## Authorization (Giving rights)

You can give permissions to a user to only use certain features of the machine.

 The **Undo** button clears all the values set so far.

### Role Management


You can give different rights to different users. For example, you can allow user A to use all the machine's functions while giving user B only the right to print.

The pre-defined roles: **ADMIN**, **GENERAL\_USER**, **GUEST**, **LIMITED\_RESOURCE\_USER**, **RESTRICTED\_INFO\_USER** cannot be deleted or edited.

- **ADMIN:** has a **Read & Write** rights for all the features.
- **GENERAL\_USER**
  - **Available features:** **Color Print/Copy** (CLX-9252 9352 Series only), **Mono Print/Copy** (SCX-8230 8240 Series only), **Simplex/Duplex Print/Copy**, **Copy**, **Fax**, **Print**, **Mobile Storage Read Access**, **Mobile Storage Write Access**, **Scan**, **Send Destination**, and **Convert to match authorization**.
  - **Read-only:** **Admin Setting**, **Manage AddressBook**, and **Manage Document Box**.


- **GUEST**
  - **Available features:** Mono Print/Copy, Duplex Print/Copy, Copy, Fax, and Print.
  - **Locked:** Mobile Storage Read Access, Mobile Storage Write Access, Scan, and Send Destination.
  - **Read-only:** Admin Setting, Manage AddressBook, Manage Document Box, and Convert to match authorization.
- **LIMITED\_RESOURCE\_USER**
  - **Available features:** Mono Print/Copy, Duplex Print/Copy, Copy, Fax, Print, Mobile Storage Read Access, Mobile Storage Write Access, Scan, Send Destination, and Convert to match authorization.
  - **Read-only:** Admin Setting, Manage AddressBook, and Manage Document Box.
- **RESTRICTED\_INFO\_USER**
  - **Available features:** Color Print/Copy (CLX-9252 9352 Series only), Mono Print/Copy (SCX-8230 8240 Series only), Simplex/Duplex Print/Copy, Copy, Fax, Print, Scan, Send Destination, and Convert to match authorization.
  - **Locked:** Mobile Storage Read Access, and Mobile Storage Write Access.
  - **Read-only:** Admin Setting, Manage AddressBook, and Manage Document Box.

### Adding a user role

 The role you created here can be selected as a role for a group when creating the group profile (See "Adding a user/group profile" on page 92).

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **Role management**.
2. Click the **Add** button.  
A pop-up window appears.
3. Select or unlock the rights you want to give.

- **Name:** Enter the name of the user.
- **Admin Setting:** Select which right to give for accessing the admin setting menus.


 For users other than the administrator, give **Read only** rights.

- **Color Print/Copy:** Select which right to give for color/mono printing and copying.
- **Copy:** Select whether to give the right for the copy function.
- **Duplex Print/Copy:** Select whether to give right for duplex printing or both simplex & duplex printing.
- **Fax:** Select whether to give the right for the fax function.
- **Manage AddressBook:** Select which right to give for managing the address book.
- **Manage Document Box:** Select which right to give for managing the document box.
- **Print:** Select whether to give the right for the print function.
- **Mobile Storage Read Access:** Select whether to give the right for USB direct print and all applications reading mobile storage.
- **Scan:** Select whether to give right for scan function.
- **Send Destination:** Select which right to give for choosing destination when using Scan to Email/Server/Box features. If you select **Registered**, users can only send to destinations saved in the address book. If you select **Unregistered**, users can send to any destination.

- **Mobile Storage Write Access:** Select whether to give the right for Scan/Box-to-USB and all applications to store mobile storage.
- **Unauthorized Job:** Select what to do when the users submit jobs that they do not have the right to perform. If you select **Cancel**, the submitted job will be cancelled. If you select **Convert to match auth.**, the job user submits will be convert to the match the right the user has. For example, if the user without a color print right submits a color print job, the machine automatically converts color print job to a mono print job.


4. Click **Apply**.

### Deleting a user role

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **Role management**.
2. Check the checkbox of the role you want to delete from the list and click the **Delete** button above the list.
  -  The pre-defined roles **ADMIN**, **GENERAL\_USER**, **GUEST**, **LIMITED\_RESOURCE\_USER**, **RESTRICTED\_INFO\_USER** cannot be deleted or edited.
  - A user role assigned to a user cannot be deleted.
3. Click **OK** when confirmation window pops up.  
The list is reloaded and the role you deleted is removed from the list.

### Editing a user role

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **Role management**.
2. Check the checkbox of the role you want to edit from the list and click the **Edit** button above the list.  
A pop-up window appears.



 The pre-defined roles **ADMIN**, **GENERAL\_USER**, **GUEST**, **LIMITED\_RESOURCE\_USER**, **RESTRICTED\_INFO\_USER** cannot be deleted or edited.

3. Edit the necessary information.
4. Click **Apply**.

### Viewing the user role in details

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **Role management**.
2. Check the checkbox of the role you want to view from the list and click the **Detail** button above the list.  
A pop-up window appears.
3. View the user role in details.
4. Click **Close**.

### Searching the user role

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **Role management**.
2. Enter the role name in the   field and click .

### External User Role

You can give access right to users managed by an external server.

### Adding an external user role

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **External User Role**.
2. Click the **Add** button.

A pop-up window appears.

3. Enter the necessary information.
  - **Login ID:** User name provided by external server.
  - **Domain:** The domain name of Windows server or realm name of the Kerberos server.
  - **Role:** Select the role defined in **Role Management** page (**Security** tab > **User Access Control** > **Authority** > **Role management**, select the role and click on the **Detail** button).
4. Click **Apply**.

#### Deleting an external user role

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **External User Role**.
2. Check the checkbox of the role you want to delete from the list and click the **Delete** button above the list.
3. Click **OK** when confirmation window pops up.  
The list is reloaded and the role you deleted is removed from the list.

#### Editing an external user role

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Authority** > **External User Role**.
2. Check the checkbox of the role you want to edit from the list and click the **Edit** button above the list.  
A pop-up window appears.
3. Edit the necessary information.
4. Click **Apply**.

#### User profile


You can store user information on the machine's hard drive. You can use this feature to manage the users using the machine. You can also group the users and manage them as a group. You can add up to 1,000 entries. User identified by user ID and password are allowed to modify their password. They are allowed to view all of their profile information. When it comes to the role, users are allowed to see only the role they belong to but not its permissions. This feature is also available from the machine (see "User Profile" on page 40).

From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **User Profile**.


#### Individual/Group

Select **Individual** or **Group** from the drop-down list on the upper right corner.


#### Adding a user/group profile

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **User Profile** > **Individual** or **Group**.
2. Click the **Add** button.  
A pop-up window appears.
3. Enter the necessary information (see "User Profile" on page 40).
  -  • If you group a user in a group with ADMIN rights, the user will be able to use the same ADMIN rights.
  - The password should be at least 8 characters long and it should be a combination of letters, numbers, and special characters (except for <, >, ", \).
4. Click **Apply**.

#### Deleting a user/group profile

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **User Profile** > **Individual** or **Group**.
2. Check the checkbox of the role you want to delete from the list and click the **Delete** button above the list.
  -  • There should be at least one person or a group with ADMIN rights, and it cannot be deleted.
  - A group assigned to a user cannot be deleted.
3. Click **OK** when confirmation window pops up.  
The list is reloaded and the profile you deleted is removed from the list.

#### Editing a user/group profile

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **User Profile** > **Individual** or **Group**.
2. Check the checkbox of the role you want to edit from the list and click the **Edit** button above the list.  
A pop-up window appears.
3. Edit the necessary information.
  -  If you group a user in a group with ADMIN rights, the user will be able to use the same ADMIN rights.
4. Click **Apply**.


#### Viewing group configuration in details

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **User Profile** > **Group**.
2. Check the checkbox of the role you want to view from the list and click the **Group Details** button above the list.  
A pop-up window appears.
3. Click **Close** to close the window.

#### Accounting

You can manage accounts. Set the values and click the **Apply** button on the upper-right corner of the page.

From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Accounting**.

-  • accounting feature is available to local users only.
- The **Undo** button clears all the values set so far.

#### Management

You can select the account method for the job accounting feature.

- **Mode**
  - **Accounting Mode:** Check to enable the job accounting feature.
  - **Provider:** Select which provider to use for job accounting. The **Pre-Installed (Local Authentication)** is a basic job account feature stored in the machine.
- **Policy:** You can set the policy for resetting the job account.
  - **Reset Usage:** Select the period for resetting the job account. If you select **Manual Reset**, the **Reset Usage Now** button appears, click the button to reset the usage count immediately.
- **Usage History:** You can manage the accounting data.
  - **Export History Data:** Click the **Export** button to export the job accounting data as a .csv file . You can save the data to your computer.
  - **Clear History Data:** Click the **Clear** button to clear all job accounting data.

## Quota

You can set the usage limits (quota) for each user to use each feature (e.g.: black copy, color copy).

### Assigning a quota to a group

If you assign a quota to a group, all the users in that group will have the same quota.

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Accounting** > **Quota**.
2. Select the **Group** tab.
3. From the list select a group for which you want to set the quota and click the **Assign Quota** button above the list.  
A pop-up window appears.
4. Select the quota for each feature. If you want to assign unlimited quota, check the box under **Unlimited**.
5. Click **Apply**.

### Allowing a group to use over its limit

You can allow a group to use over its limited quota.

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Accounting** > **Quota**.
2. Select the **Group** tab.
3. Select the group(s) that you want to allow to go over the set limit(s) and click the **Allow Over-Limit** button.  
A pop-up window appears.
4. Check **Allow Over-Limit**.
5. Click **Apply**.

### Viewing a quota assigned to an individual

You can view the assigned limit for each individual.

1. From the SyncThru™ Web Service, select the **Security** tab > **User Access Control** > **Accounting** > **Quota**.
2. Select the **Individual** tab.
3. From the list select an individual you want to view the quota and click the **View Usage** button above the list.  
A pop-up window appears.
4. Check the set limit.
5. Click **Close**.



Individual members of a group will each have the quota that is assigned to the group.

## System Log

You can keep logs of events that have happened in the machine. The administrator can record and manage the machine usage information by keeping the system log files. The system log files are stored on the machine's HDD (hard disk drive), and when it is full, it will erase old data. Export and save the important audit data separately using the exporting feature. Set the values and click on the **Apply** button on the upper right corner of the page.

From the SyncThru™ Web Service, select the **Security** tab > **System Log**.



The **Undo** button clears all the values set so far.

### Log configuration

You can enable or disable keeping logs. You can also backup log files by periods and transfer to a repository server.

- **Log Configuration**
  - **Job Log:** Check to keep job logs.
  - **Security Event Log:** Check to keep security event logs (user

authentication, view/delete log data).

- **Operation Log:** Check to keep operation logs like system boot up.
- **Log Backup**
  - **Log Backup:** Check to backup the log files.
  - **Schedule:** Check the period to backup.
  - **Time:** Check the time period to backup.
  - **Protocol:** Select the server to store the backup files.
  - **Server Address:** Enter the server address.
  - **Port Number:** Enter the port number.
  - **Login Name:** Enter the login name to use for logging into the server. If you want to allow anyone to access the server, check **Anonymous**.
  - **Password:** Enter the password.
  - **Confirm Password:** Re-enter the password for confirmation.
  - **Domain:** Enter the domain name. Depending on the protocol you select, this field may not be available.
  - **Path:** Enter the path for saving the log backup file.
  - **Manual backup:** Backup immediately with the current settings. If you backup manually, the settings will not be saved.

## Log Viewer

You can view, delete, and search log files.

### Viewing the log file

1. From the SyncThru™ Web Service, select the **Security** tab > **System Log** > **Log Viewer**.
2. Click the log file or click the **Expand All** button.
3. Click the **Collapse All** button to close the log file.


### Deleting the log file

1. From the SyncThru™ Web Service, select the **Security** tab > **System Log** > **Log Viewer**.
2. Check the checkbox(es) of the log file(s) you want to delete and click the **Delete** button.
3. A confirmation message appears, click **OK**.

### Searching the log file

1. From the SyncThru™ Web Service, select the **Security** tab > **System Log** > **Log Viewer**.
2. Enter the keyword in the  , and select the category from the drop-down list next to it.  
The list is reloaded.

### Exporting the log file

1. From the SyncThru™ Web Service, select the **Security** tab > **System Log** > **Log Viewer**.
2. Check the checkbox(es) of the log file(s) to export and select **Export** from the **Task** drop-down list.  
A pop-up window appears.
3. Select the destination of the file you want and click **Export**.  
 The file will be saved as in .csv format
4. Save the file.
5. Click **Close**.

## Maintenance tab

This tab allows you to maintain your machine by upgrading firmware, managing applications, and setting contact information for sending emails. You can also connect to the Samsung website or download manuals and drivers by selecting the **Link** menu.

### Firmware Version


You can check the firmware version used in the machine. Check the version and update it if necessary. This feature is also available from the machine (see "Machine Details" on page 12).

#### Checking the firmware version.

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Firmware Version**.
2. Check the firmware version.  
If necessary, update the firmware (see "Updating firmware" on page 97).

### Application Management

You can add or delete applications/license. If you add an application, you need to activate the license of the installed application. Some applications may not have a license. This feature is also available from the machine (see "Application Management (administrator only)" on page 34)

 Some models may not support this feature.

#### Application


You can add or delete applications.

##### Adding an application

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **Application**.
2. Click the **Add** button.  
A pop-up window appears.
3. Find the application file by entering the URL or by using the **Browse** button.
4. Click **OK**.

##### Deleting an application

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **Application**.
2. From the list, select the application(s) you want to delete and click **Delete**.
3. A confirmation message appear, click **OK**.  
The list is reloaded and the application you deleted is removed from the list.

 When you delete an application, if the license is not activated, it will be deleted as well.

##### Viewing an application in details

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **Application**.
2. From the list, select the application you want to view in details and press **Detail**.
3. View the application's information in details.
4. Press **Close** to return to the previous screen.

### Enabling/Disabling an application

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **Application**.
2. From the list, select the application(s) you want to delete and click **Setting**.
3. A window where you can choose to enable/disable appears. Select the option you want.
4. Press **OK**.

### License

You can manage licenses.

 When you add/delete an application, a license is added/deleted as well.

#### Viewing a license

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **License**.
2. From the list, select the license you want to see in details and click **Detail**.  
A pop-up window appears. Check the information.

#### Activating a license

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **License**.
2. From the list, select the license you want to activate and click **Activate**.  
A pop-up window appears.
3. Enter the necessary information such as license number, activation key, and more.
4. Click **OK/Apply**.

#### Returning a license

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **License**.
2. From the list, select the license you want to return and click **Return**.
3. A confirmation message appears, click **OK**.


#### License Server (Remote Authentication)

You can remotely authenticate the license by entering the address of the authentication server.


1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **License**.
2. From the list, select the license you want to authenticate and click on **License Server**.  
A pop-up window appears.
3. Enter the server address for remote authentication.
4. A confirmation message appears, click **OK**.

### Backup/Restore

You can backup the machine's configurations and restore the configuration when there is a problem with the machine. The saved (backed up) files can also be used to configure other machines.

 The backup and restore feature works well on the machines with the same main firmware versions. Between the machines with a different firmware version this feature might not work well.

## Backing up the configuration

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Backup/Restore** > **Backup**.
2. Select the categories to back up and press the **Backup** button.  
A pop-up window appears.  
 The categories which appear on the page are the configurations you can save as a backup file.
3. Save the backup file with the file name you want and to the destination you want.
4. A pop-up message will appear with the job result.  
If the file is successfully saved, click **OK**.  
If the file has failed to be saved, click **OK** and try again.

## Restoring the configuration

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Backup/Restore** > **Restore**.
2. Using the **Browse** button, locate the backup file.
3. Click **Next**.
4. Select the categories to restore and press the **Restore** button.  
The restoring process begins.
5. A pop-up message will appear with the job result.  
If the configuration is successfully restored, the machine will automatically reboot.  
If restoring the configuration has failed, you can try again or reboot the machine.

## Contact Information

You can view contact information. To change the information, (see "Customer support" on page 34).

## Link

You can view links to useful websites where you can:

- view product information and get support (samsung website).
- download manuals and drivers.
- order consumable supplies.
- register your machine on-line.

# maintenance

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This chapter provides information for maintaining your machine.

## This chapter includes:

- Printing machine reports
- Monitoring the supplies life
- Setting supplies reorder notification
- Replacing & redistributing supplies
- Ordering supplies & accessories
- Finding the serial number
- Updating firmware
- Clearing memory
- Cleaning the machine
- Tips for storing the machine, supplies, and paper
- Tips for moving the machine
- Printing a demo page

## Printing machine reports

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You can print various machine reports containing information to help you maintain your machine.

### From the machine

(See "Report" on page 21).

### From the SyncThru™ Web Service

(See "Print Information" on page 72)

## Monitoring the supplies life


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Check remaining life of the supplies and prepare the supplies in advance.

You can also print the supplies life report. Select **Consumable Report** in the **Report** feature (see "Report" on page 21, "Print Information" on page 72).

### From the machine


1. Press **Machine Setup > Supplies Life** from the display screen.
2. Check the usage account.

 We recommend you prepare new supplies or those that you have used over 90% of their average yield (see "Replacing & redistributing supplies" on page 96).

3. Press **Back** to return to the previous page.

### From the SyncThru™ Web Service

1. From the SyncThru™ Web Service, select the **Information** tab > **Supplies**.
2. Check the remaining percentage.

 We recommend you prepare new supplies if the remaining percentage is less than 15% (see "Replacing & redistributing supplies" on page 96).

## Setting supplies reorder notification

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Set the supplies reorder notification to receive notification emails and prepare supplies in advance.

See "Supplies Management (administrator only)" on page 19.

## Replacing & redistributing supplies

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### Replacing the toner cartridge

When the toner cartridge is totally empty

- The status LED turns red on and the display screen shows the error message of replacing toner.
- The machine stops printing and incoming faxes are saved in memory. However, when the color toner cartridges are empty, but there is toner left in the black toner cartridge, you can still print black-and-white print jobs (The submitted job must be in black and white).
- Check the type of the toner cartridge for your machine. Refer to the *Supplies & Accessories* guide.

At this stage, the toner cartridge needs to be replaced. Be sure to prepare new toner cartridges in advance (see "Ordering supplies & accessories" on page 97).

Refer to the *User's Guide* for how to replace the toner cartridge.

### Replacing the imaging unit

When the imaging unit is totally empty

- The status LED turns red on and the display screen shows the error message of replacing imaging unit.
- Check the type of the imaging unit for your machine. Refer to the *Supplies & Accessories* guide.

At this stage, the imaging unit needs to be replaced. Be sure to prepare a new imaging unit in advance (see "Ordering supplies & accessories" on page 97).

Refer to the *User's Guide* for how to replace the imaging unit.

### Replacing the waste toner container

At the end of the printing process, the machine brushes off unfixed toner dusts into the waste toner container. If the waste toner container is full, it might cause printing quality problems.

When the waste toner container is full, replacing waste toner container related message appears.

Check the types of the waste toner container for your machine. Refer to the *Supplies & Accessories* guide.

Refer to the *User's Guide* for how to replace the waste toner container.

### Redistributing toner

When the toner cartridge is near the end of its life:

- White streaks or light printing occurs.

- Toner low related message appears on the display.
- The **Status** LED blinks red.

If this happens, you can temporarily improve print quality by redistributing the remaining toner in the cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner.


Refer to the *User's Guide* for how to redistributing the toner.

## Ordering supplies & accessories

To order Samsung-authorized supplies, accessories and maintenance parts, contact your local Samsung dealer or the retailer where you purchased your machine. You can also visit [www.samsung.com/supplies](http://www.samsung.com/supplies), select your country/region, and obtain information on calling for service. For more information, refer to the *Supplies & Accessories* guide.

## Finding the serial number

You might need to know the serial number of your machine when calling for a service. To check the serial number of your machine, follow the steps below.

 The serial number is written on the beginning of all the machine reports.

1. From the SyncThru™ Web Service, select the **Information** tab > **Usage Counters**.
2. Check the serial number.


## Updating firmware

Samsung occasionally updates firmware to improve the machine's functions. Upgrade the firmware to use your machine to its full potential. You can download the latest firmware from the Samsung website ([www.samsung.com/printer](http://www.samsung.com/printer)) or through SyncThru™ Web Service.

### From the machine

You need prepare a USB stick with the latest firmware stored before following the below steps.

1. Press **Machine Setup** > **Application Management** from the display screen.
2. Log-in as an administrator (see "Log-in" on page 11).  
The list of installed applications will appear.
3. Connect the USB stick (with the downloaded firmware stored) to the machine.  
When the USB stick is detected, the **Install** button will be enabled.
4. Click the **Install** button.
5. Select the **Firmware PAR** file and press **OK**.

 If the PAR file is not valid, an error message will appear. Check the file and try again.

6. A verification message appears. Read the agreement and check I **accept the terms of the all License Agreement** and press **OK**.  
Firmware installation begins.
7. When the installation is finished, restart the machine.

### From the SyncThru™ Web Service

You need to download the latest firmware to your computer before following the below steps.

1. From the SyncThru™ Web Service, select the **Maintenance** tab > **Application Management** > **Application**.
2. Click the **Add** button.  
A pop-up window appears.
3. Open the firmware file by browsing and click **OK**.
4. A verification message appears. Read the agreement and check I **accept the terms of the License Agreement** and click **OK**.  
Firmware installation begins.
5. When the installation is finished, restart the machine.

## Clearing memory

There are few ways to clear memory to ensure the memory capacity of your machine. Select one of the ways below.

### Clearing stored documents

Check the stored documents before clearing machine memory.

1. Press **Document Box** from the display screen.
2. Select the document box where the document you want to erase is stored and press **Enter**.
3. Select the document you want to erase from the list and press **Delete**.

 You can view the document before deleting it. Select the document and press **Preview**.


### Clearing fax memory

When the fax memory is full, you can erase stored fax memory. There are two ways to erase the fax memory, follow the steps below:

#### Clearing fax memory by printing a fax job

Print received fax(es). Fax memory will automatically be erased.

#### Clearing fax memory without printing a fax job

 If you clear fax memory without checking the fax job by printing it first, you might erase jobs that you do not want to. Be careful not to erase important documents.

1. From the control panel, press the **Job Status** button.
2. Select the **Current Job** tab from the display screen.
3. Select the job(s) you want to erase than press **Delete**.  
If you want to erase all the jobs, press **Delete All**.

To erase only fax jobs on the list, select fax jobs with in the **Job Type** list and click **Delete**.

## Cleaning the machine

If printing quality problems occur or if you use your machine in a dusty environment, you need to clean your machine regularly to keep the best printing condition and use your machine longer.

**⚠ Read the following precautions before cleaning the machine: any damages due to user's mis-handling is not covered by the warranty:**

- Turn the machine's power off and unplug all the power cords.
- Do not disassemble the machine without following the instructions in this guide.
- Do not clean the machine with cleaning materials containing large amounts of alcohol, solvent, or other strong substances. They can discolor or distort the cabinet.
- Do not use a vacuum cleaner to clean the toner dust, we recommend you use a cloth or tissue dampened with water to clean it. If you use a vacuum cleaner, toner blows into the air and might be harmful to you.
- When using a dampened cloth, be careful not to drip any water into the machine: it might cause an electric shock.
- For more safety issues, refer to the safety information chapter in the *User's Guide*.

### Cleaning the outside

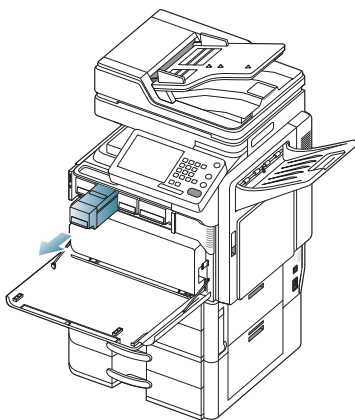
Clean the machine cabinet with a soft, lint-free cloth. Dampen the cloth slightly with water, but be careful not to let any water drip onto or into the machine.

### Cleaning the inside

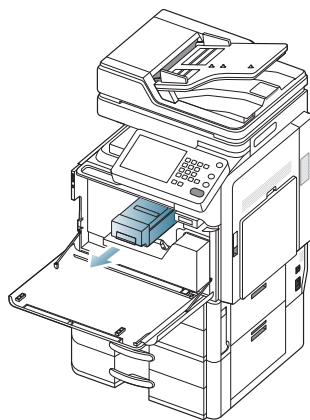
During the printing process, paper, toner, and dust particles can accumulate inside the machine. These accumulations can cause print quality problems, such as toner specks or smearing. Cleaning the inside of the machine clears and reduces printing quality problems.

#### Toner cartridge area

1. Turn the machine off and unplug the power cord. Wait for the machine to cool down.
2. Open the front cover and pull the toner cartridge out.

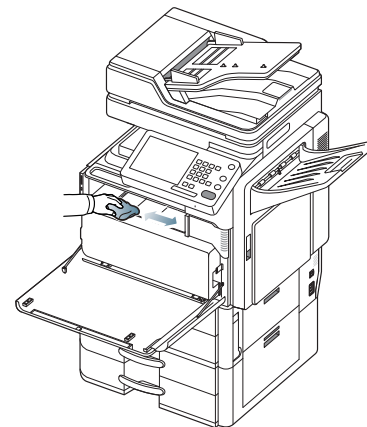


CLX-9252 9352 Series

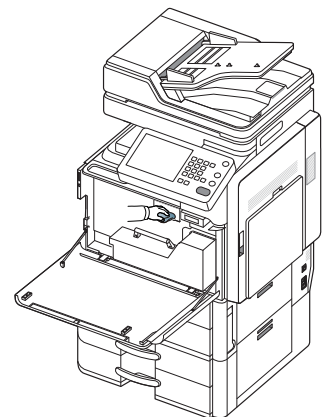


SCX-8230 8240 Series

3. With a dry, lint-free cloth, wipe away any dust and spilled toner from the toner cartridge area.



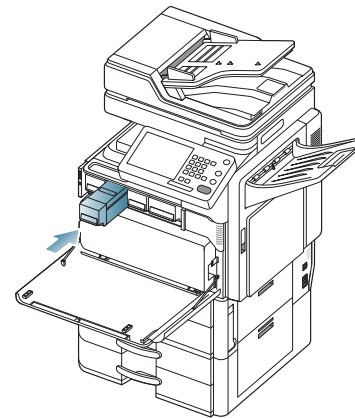
CLX-9252 9352 Series



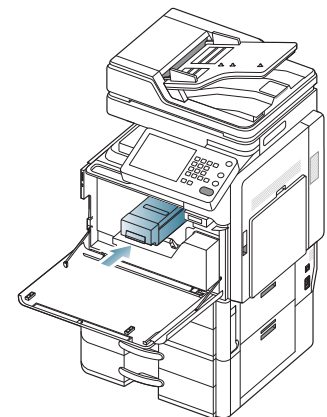
SCX-8230 8240 Series

**⚠** While cleaning the inside of the machine, be careful not to damage the transfer roller or any other inside parts. Do not use solvents such as benzene or thinner to clean. Printing quality problems can occur and cause damage to the machine.

4. Reinsert the toner cartridges. Hold the toner cartridge and align it with the corresponding slot inside the machine. Insert it back into its slot until it locks in place.

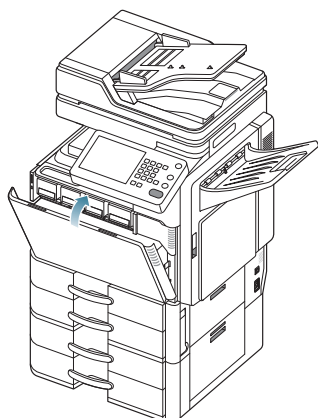


CLX-9252 9352 Series

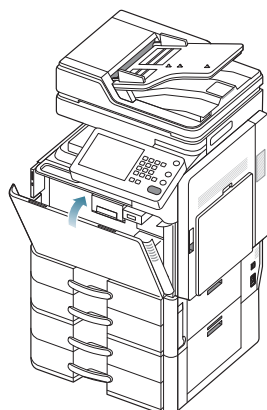


SCX-8230 8240 Series

5. Close the front door. Ensure that the cover is securely closed.



CLX-9252 9352 Series



SCX-8230 8240 Series



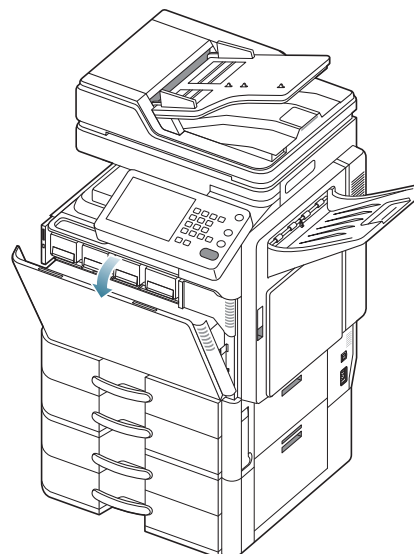
If the front door is not completely closed, the machine will not operate.

6. Plug in the power cord and turn the machine on. 8230 8240

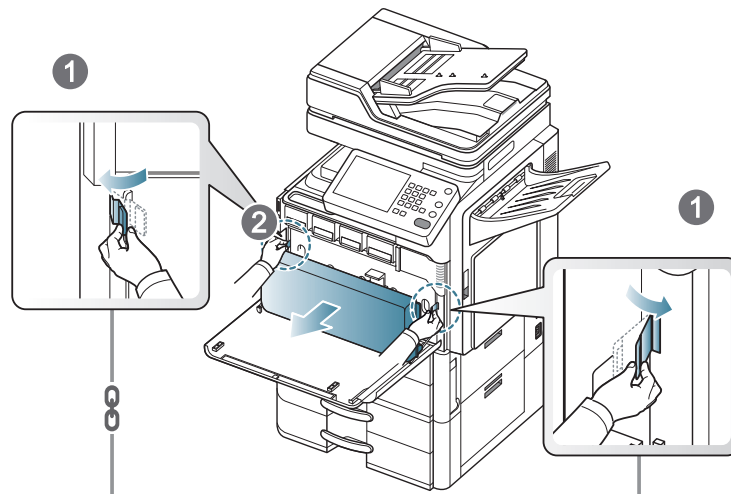
## Cleaning the imaging unit area

### CLX-9252 9352 Series

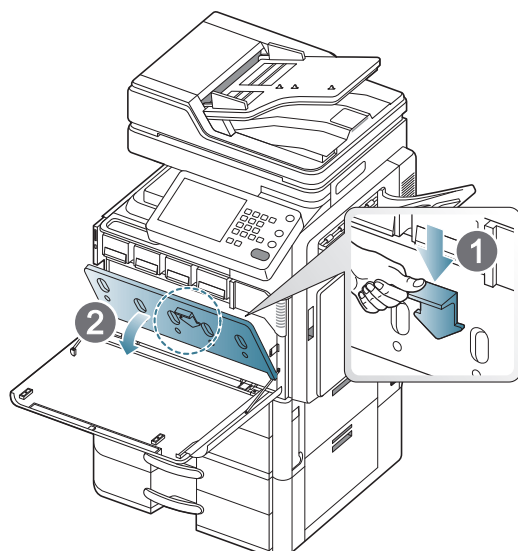
1. Open the front door.



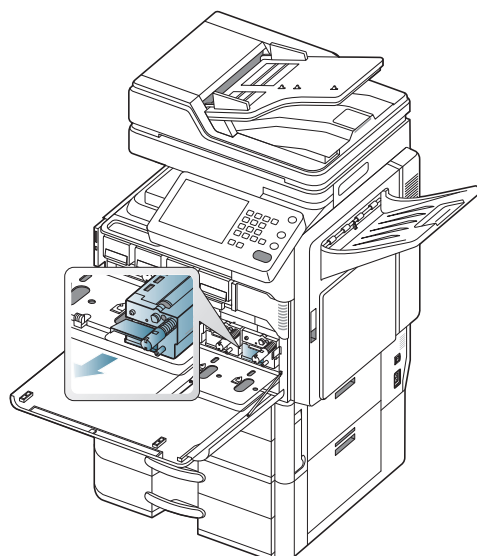
2. Remove the waste toner container.



3. Squeeze and push down the lever and open the inner cover.

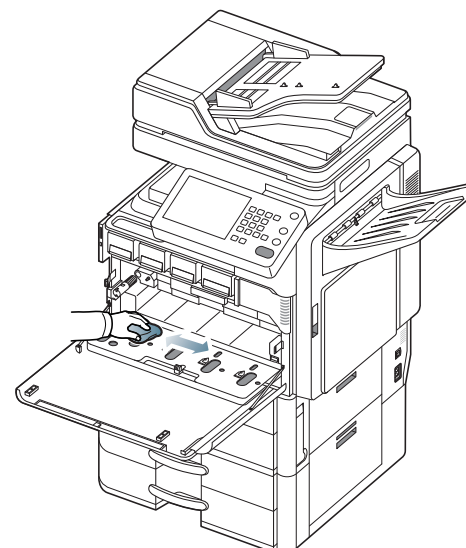


4. Pull the imaging units out from the machine.

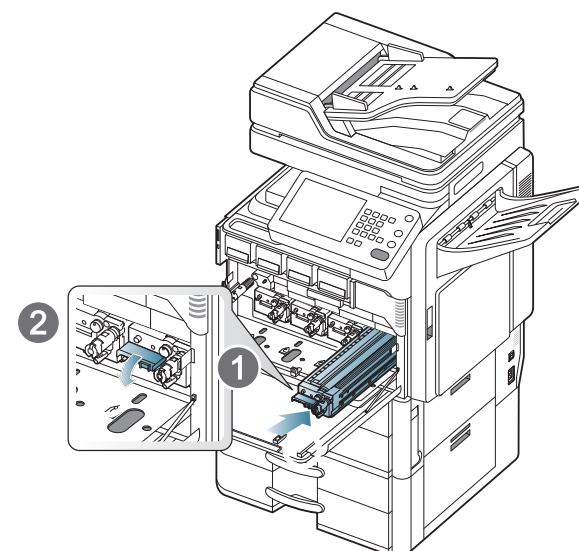


- To prevent damage to the imaging unit, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green surface underside of the imaging unit.

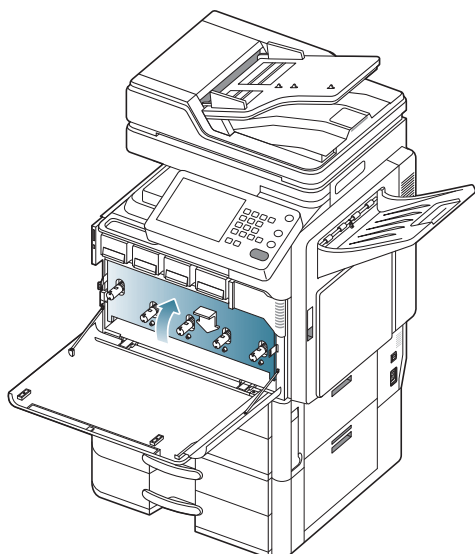
5. With a dry, lint-free cloth, wipe away any dust and spilled toner from the imaging unit area.



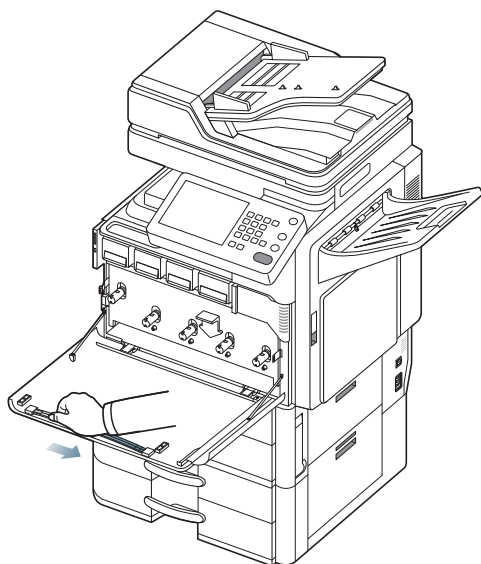
6. Reinsert the imaging units. Labels inside the machine identify each imaging unit's position. Hold the handles on the new imaging unit and push the imaging unit until it locks into place.



7. Close the inner cover.

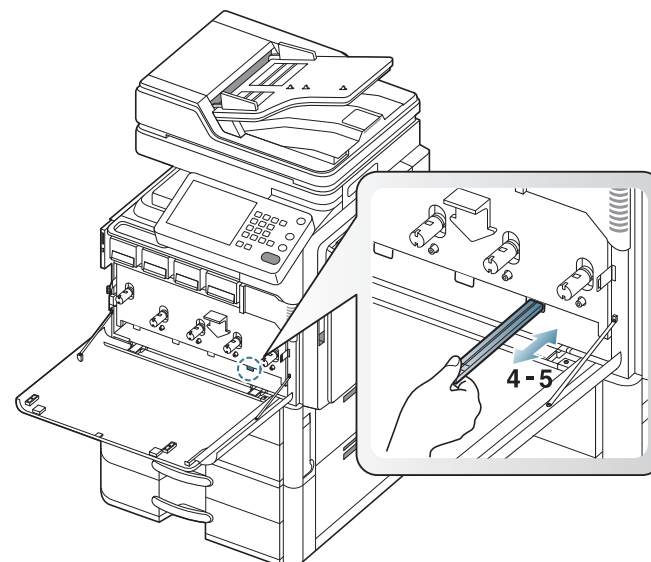


8. Take out the LSU window cleaning stick.



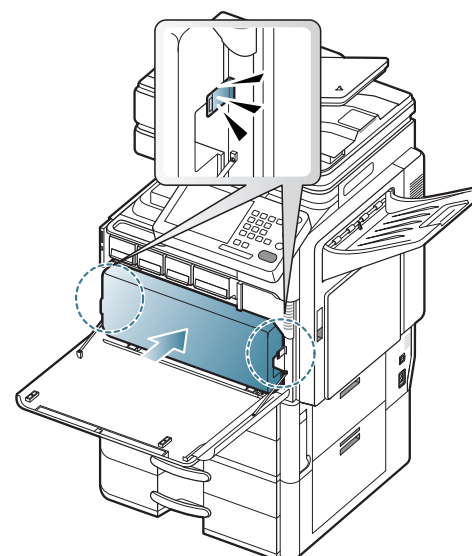
9. Locate the LSU window cleaning hole and insert the LSU window cleaning stick.  
Slowly push and pull the LSU window cleaning stick 4 or 5 times to

clean the LSU window.



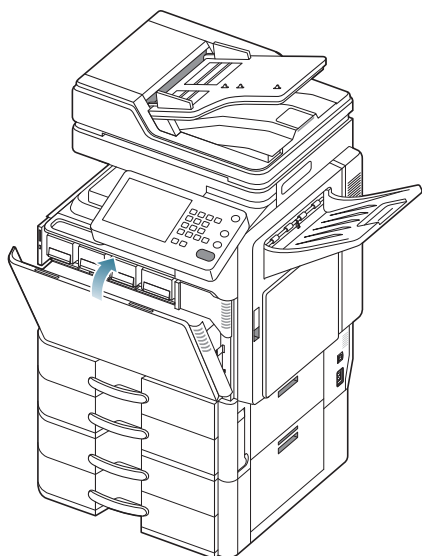
10. Repeat the step 9 for all 4 LSU window holes.

11. Insert the waste toner container.



12. Insert the LSU window cleaning stick back into its place.

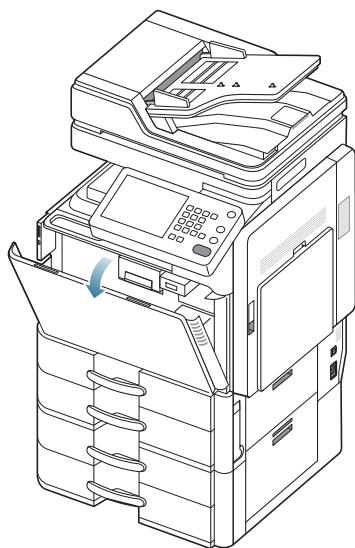
13. Close the front cover. Ensure that the cover is securely closed.



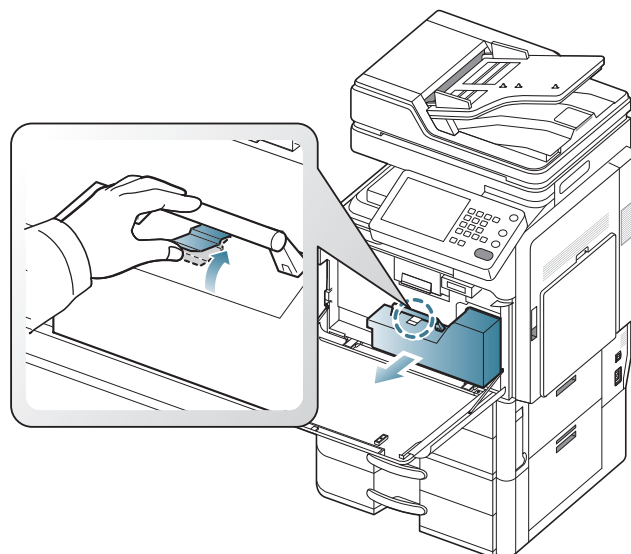
If the front cover is not completely closed, the machine will not operate.

### SCX-8230 8240 Series

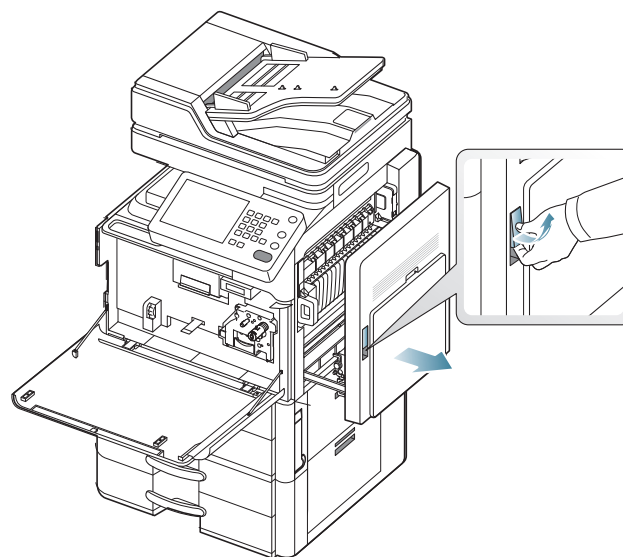
1. Open the front door.



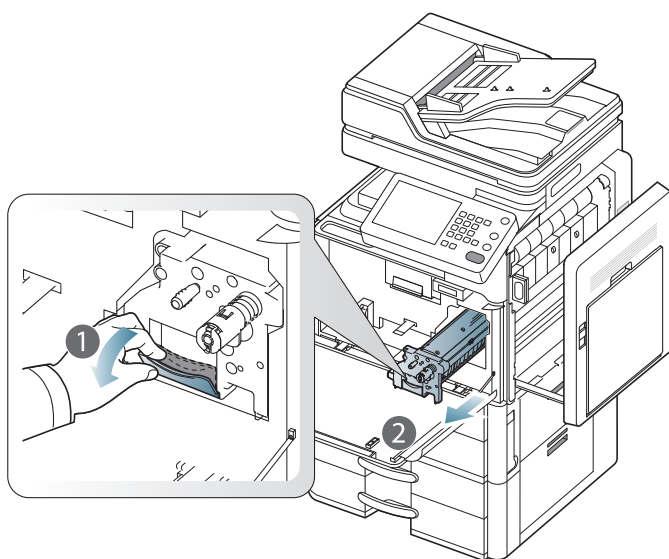
2. Lift the locking lever upward. Then remove the waste toner container.



3. Open the right door.

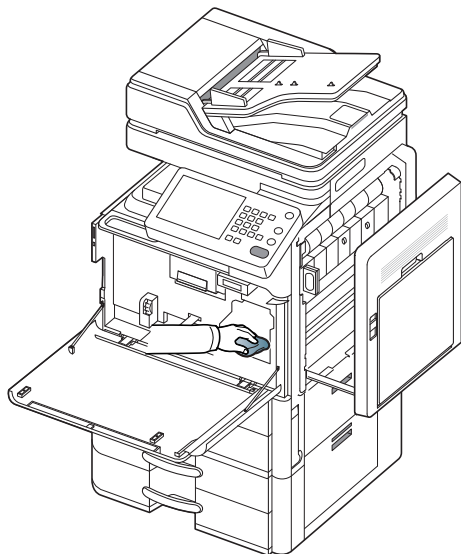


4. Pull the imaging unit out from the machine.

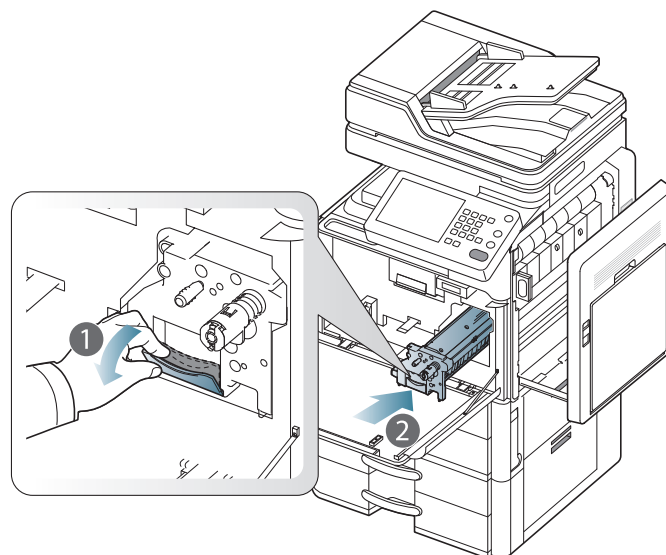


- To prevent damage to the imaging unit, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green surface underside of the imaging unit.

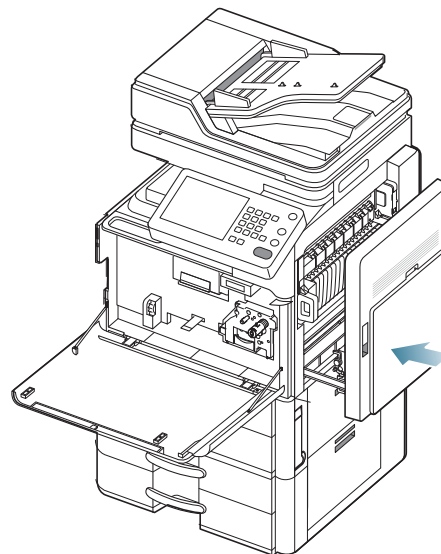
5. With a dry, lint-free cloth, wipe away any dust and spilled toner from the imaging unit area.



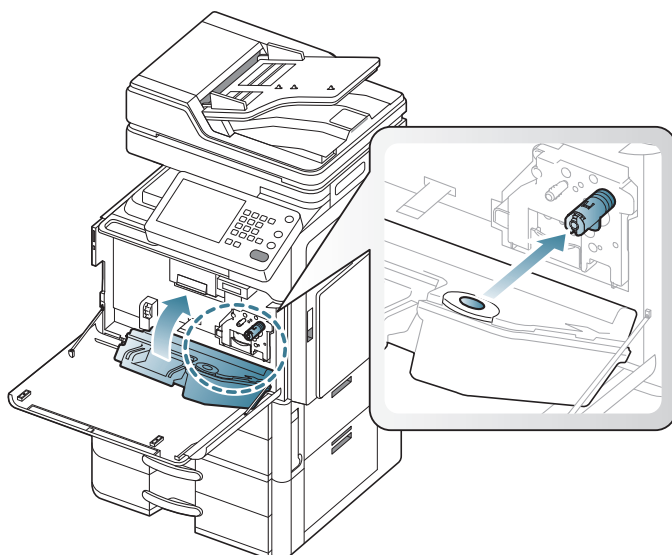
6. Hold the handles on the imaging unit, and push the imaging unit until it locks into place.



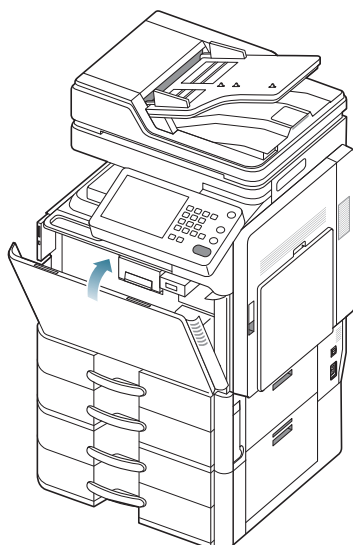
7. Close the right door.



8. Insert the waste toner container until it locks in place.



9. Close the front cover.



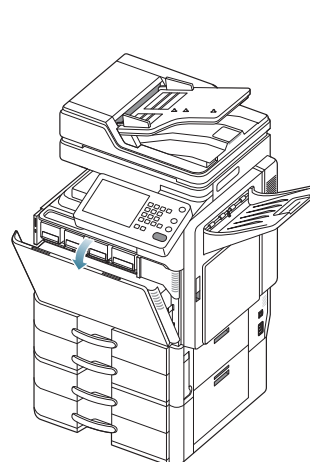
If the front cover is not completely closed, the machine will not operate.

## Cleaning the chargers of imaging units

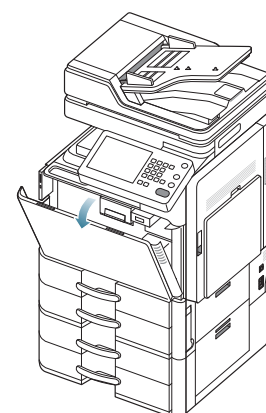
The paper dust stick and the chargers of the imaging units will need to be cleaned after a specified number of paper is printed out. When the message that demands you to clean the chargers of the imaging units appears, you have to clean the paper dust stick first. Then clean the chargers. The time when the message appears depends on environmental factors like altitude, temperature, humidity, and so on. You need to clean the charger to maintain printing quality. If cleaning is done, the message will disappear automatically.

Follow the cleaning procedure below.

1. Open the front door.

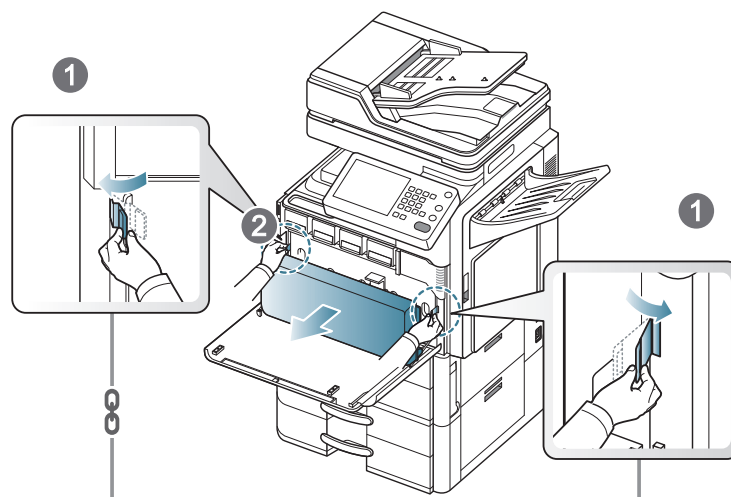


CLX-9252 9352 Series



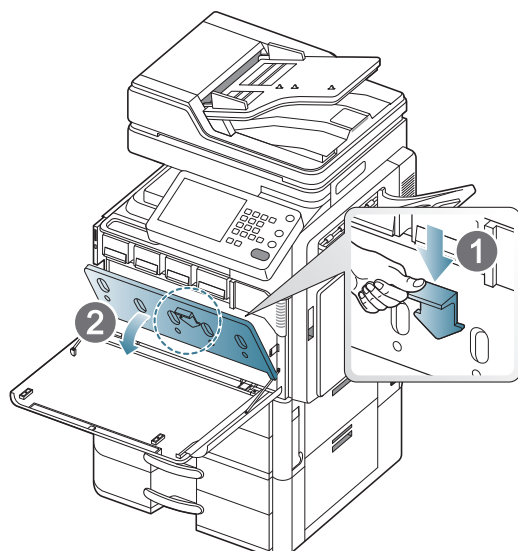
SCX-8230 8240 Series

2. Remove the waste toner container.  
For SCX-8230 8240 Series go to step 4.

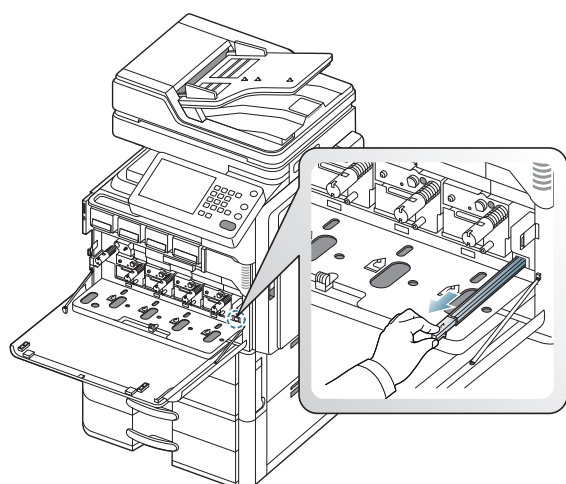


CLX-9252 9352 Series

3. Squeeze and push down the lever and open the inner cover.

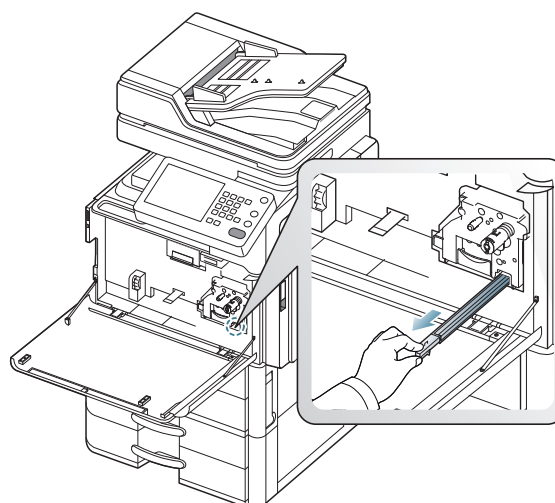
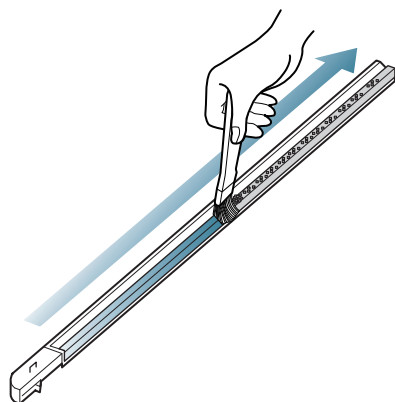


4. Pull the paper dust stick out.



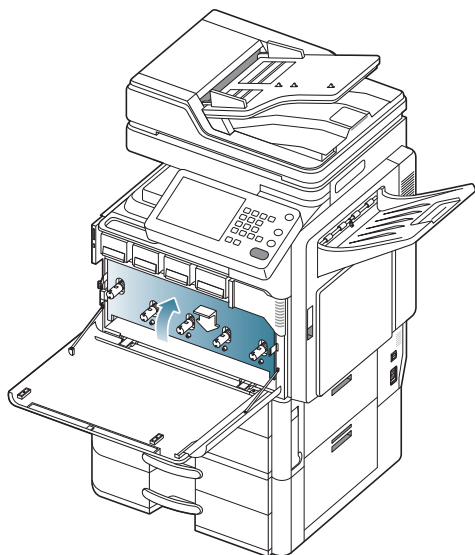
CLX-9250 9350 Series

5. Remove the paper dust.



SCX-8030 8040 Series

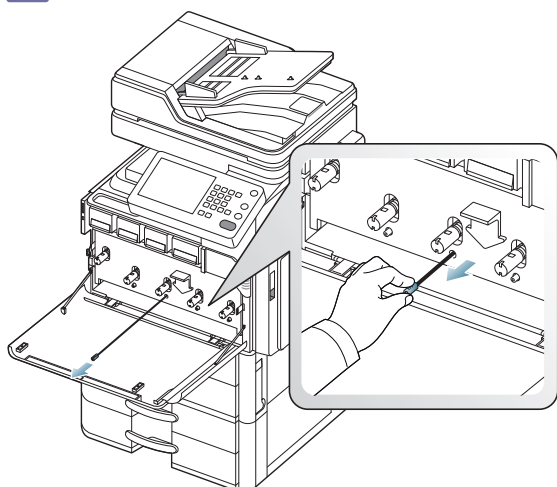
6. Insert the paper dust stick back.  
For SCX-8230 8240 Series go to step 8.
7. Close the inner cover.



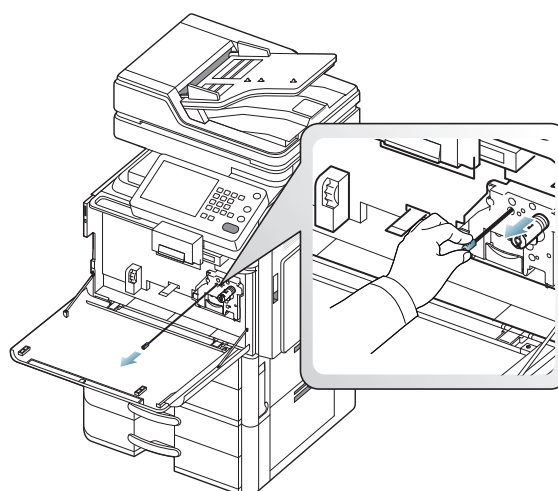
8. Pull the corresponding charger cleaner as shown below.



Do not pull the charger cleaner too hard, otherwise it can be separated from the machine. It can cause damage to the machine.



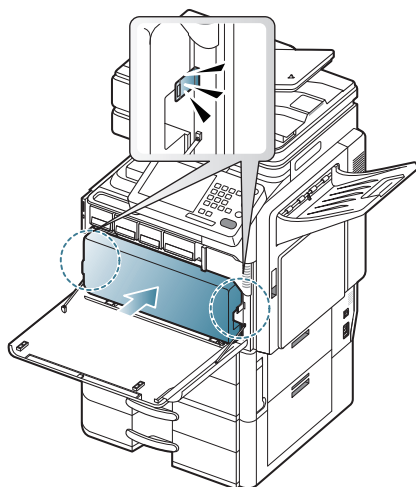
CLX-9250 9350 Series



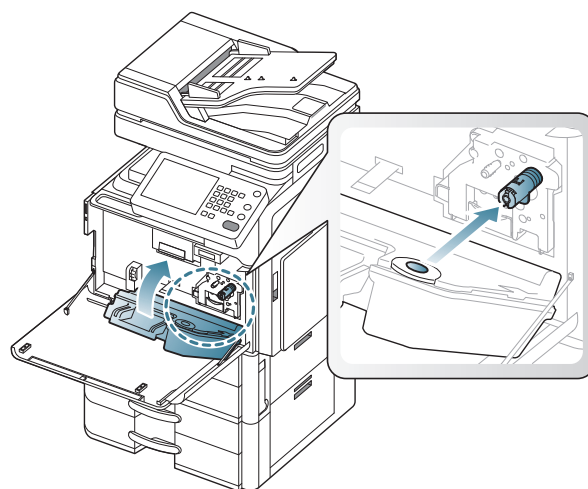
SCX-8030 8040 Series

9. Push the corresponding charger cleaner completely back.  
Repeat step 8 and 9 five times.

**10. Insert the waste toner container.**

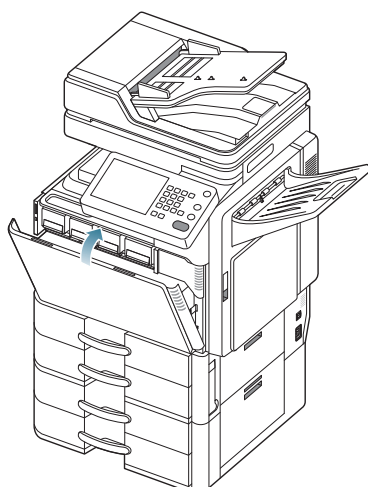


CLX-9252 9352 Series

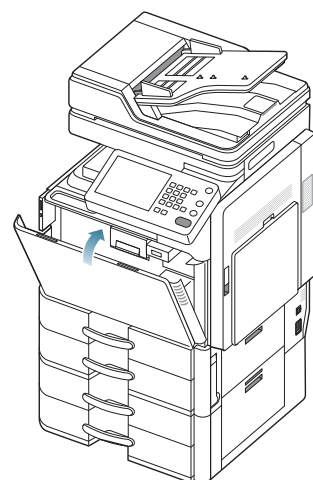


SCX-8230 8240 Series

**11. Close the front door. Ensure that the cover is securely closed.**



CLX-9252 9352 Series



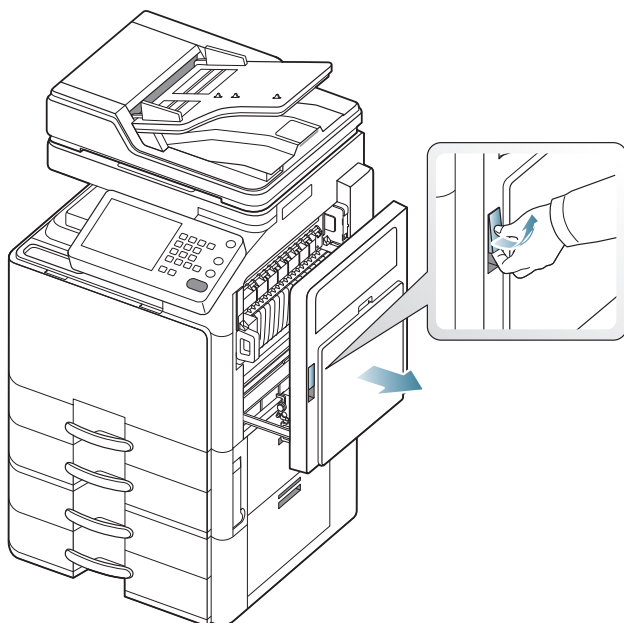
SCX-8230 8240 Series

If the message still appears, do steps 8 and 9 again.

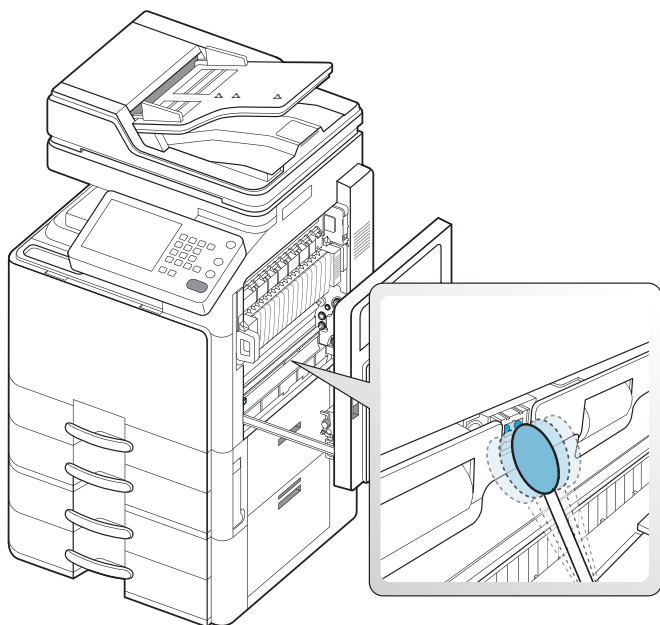
## Cleaning the paper sensor

You need to clean the paper sensor to prevent paper jams. Follow the cleaning procedure below.

1. Open the right door.



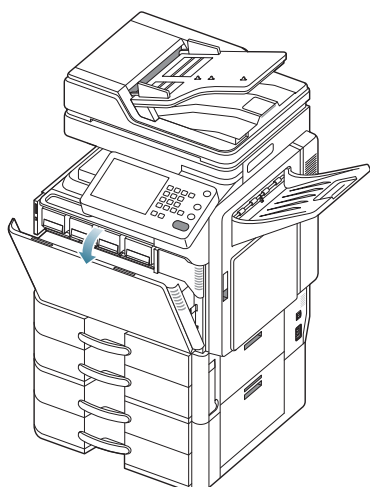
2. Clean the paper sensor with a soft, lint-free cloth or cotton swabs. Dampen the cloth or cotton swabs slightly with water, but be careful not to let any water drip onto or into the machine.



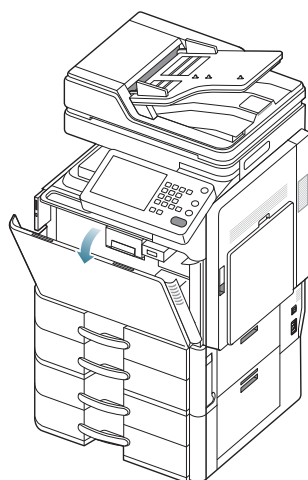
3. Close the right cover.

## Cleaning the waste toner bottle area

1. Open the front door.

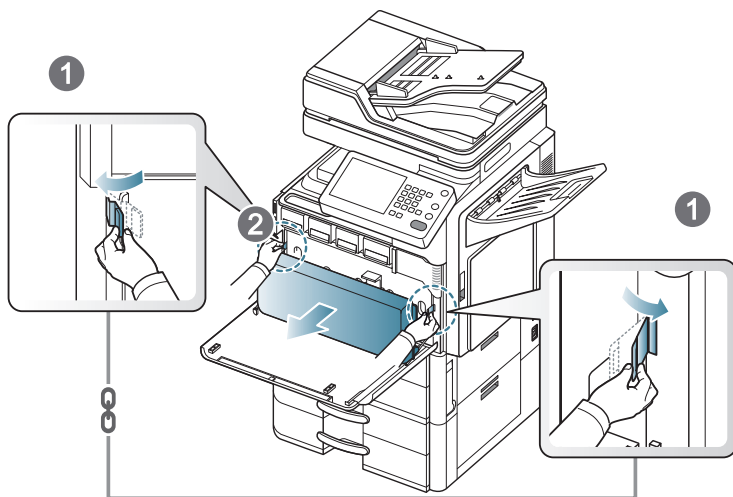


CLX-9252 9352 Series

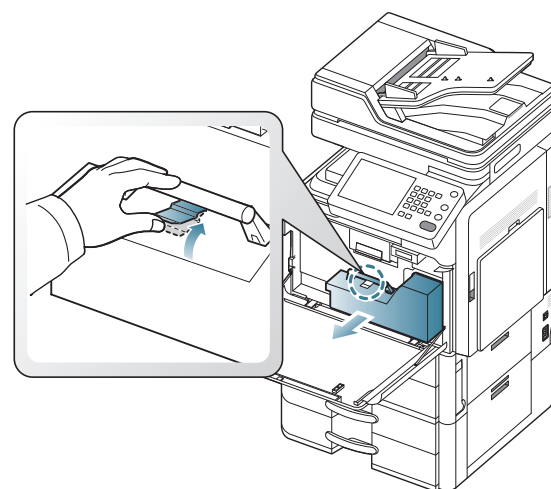


SCX-8230 8240 Series

2. Squeeze the left/right locking levers and push outward. Remove the waste toner container.

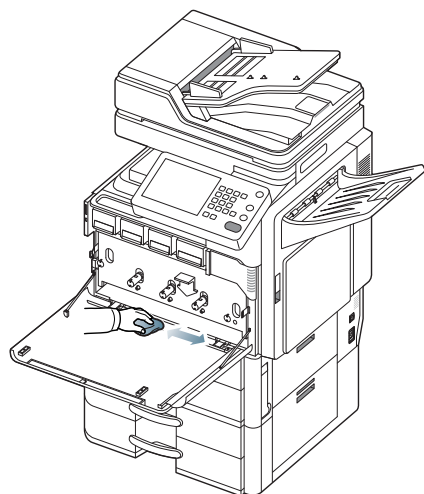


CLX-9252 9352 Series



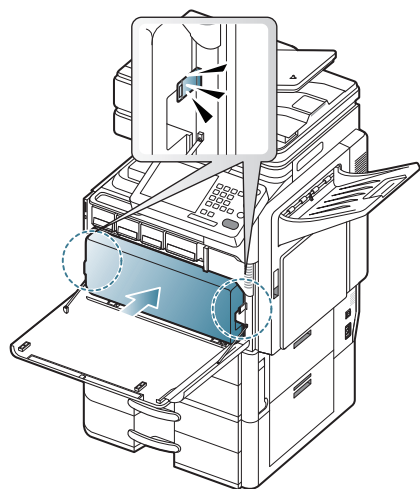
SCX-8230 8240 Series

3. With a dry, lint-free cloth, wipe away any dust and spilled toner from the waste toner container area.



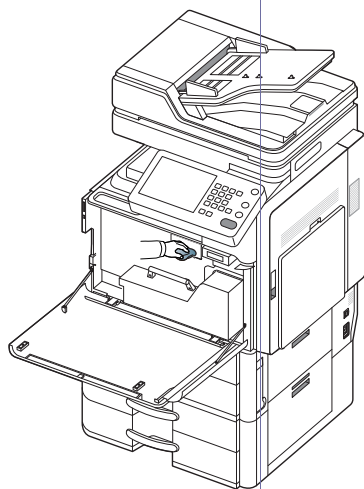
CLX-9252 9352 Series

4. Reinsert the waste toner container.

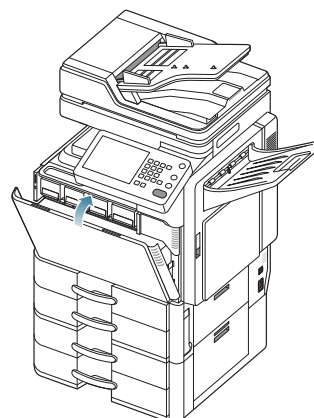


CLX-9252 9352 Series

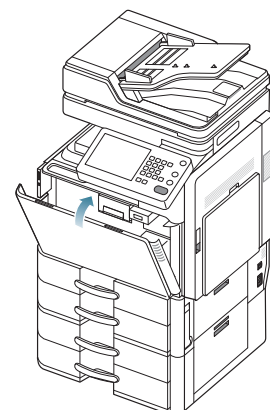
5. Close the front door. Ensure that the cover is securely closed.



SCX-8230 8240 Series

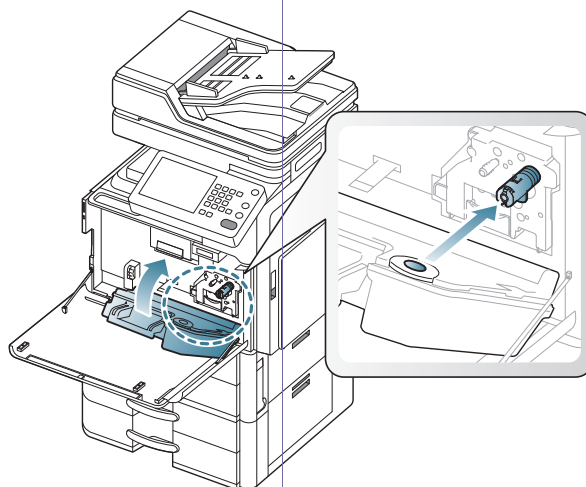


CLX-9252 9352 Series



SCX-8230 8240 Series

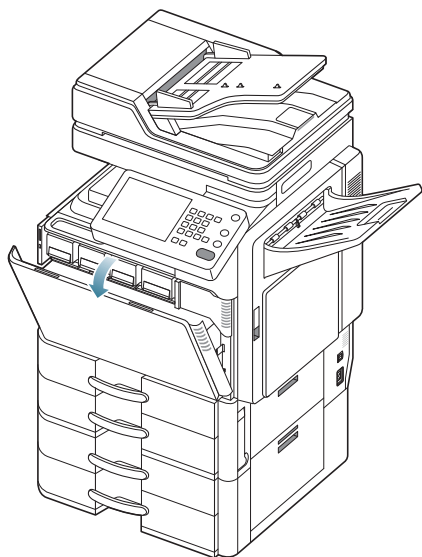
6. Plug in the power cord and turn the machine on.



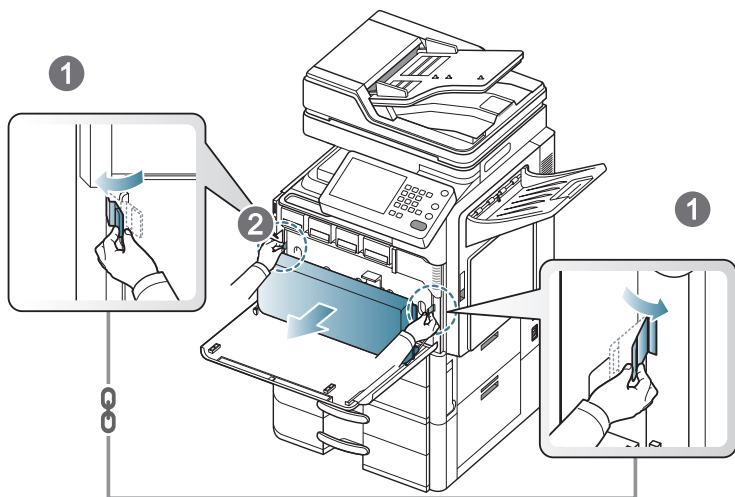
SCX-8230 8240 Series

## Cleaning the LSU window (CXL-9252 9352 Series only)

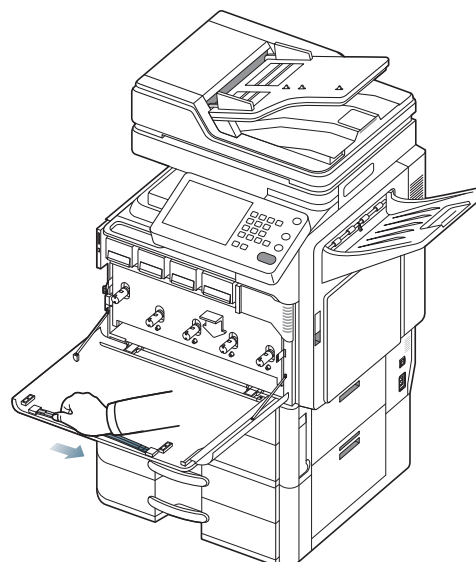
1. Open the front door.



2. Squeeze the left/right locking levers and push outward. Remove the waste toner container.

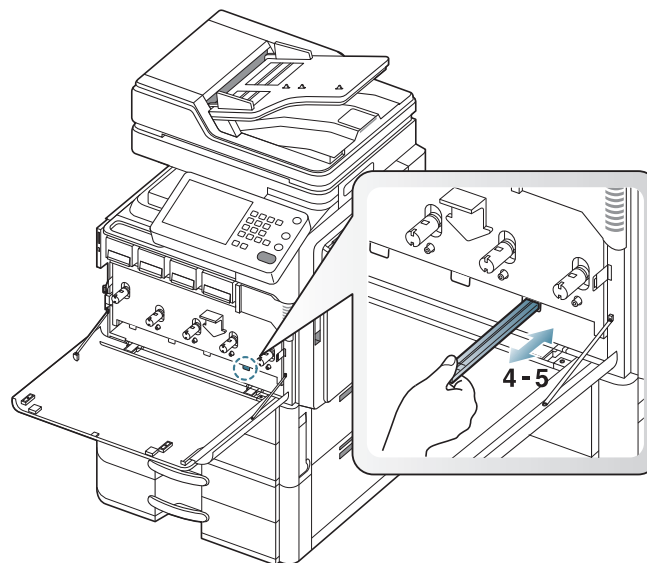


3. Take out the LSU window cleaning stick.



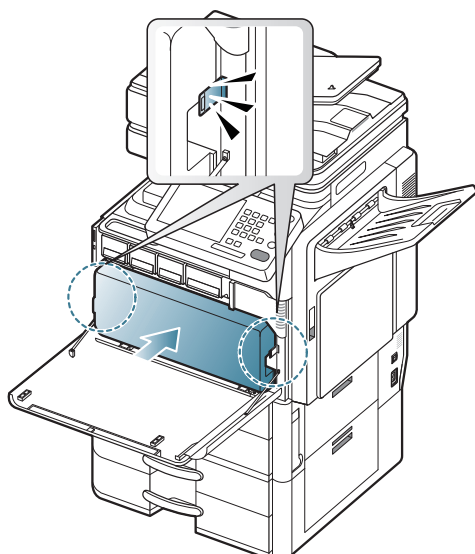
4. Locate the LSU window cleaning hole and insert the LSU window cleaning stick.

Slowly push and pull the LSU window cleaning stick 4 or 5 times to clean the LSU window.

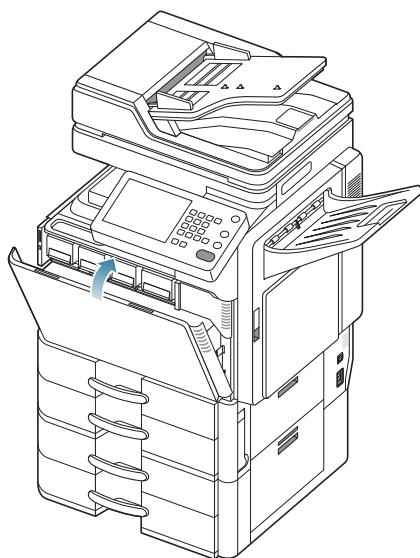


5. Repeat step 4 for all 4 LSU window holes.

6. Insert the waste toner container.



7. Insert the LSU window cleaning stick back into its place.
8. Close the front cover. Ensure that the cover is securely closed.

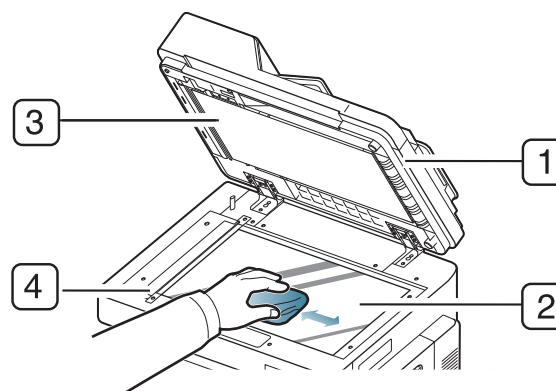


If the front cover is not completely closed, the machine will not operate.

## Cleaning the scan unit

Keeping the scan unit clean helps to ensure the best possible copy quality. We suggest that you clean the scan unit at the start of each day and during the day, as needed.

1. Prepare a soft, lint-free cloth.
2. Open the scanner lid.
3. Wipe the surface of the scanner glass and the document feeder glass with the cloth until it is clean and dry.

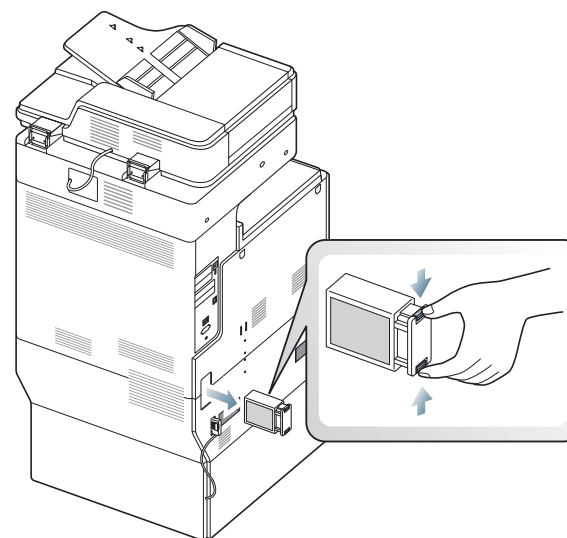


- |   |                       |
|---|-----------------------|
| 1 | Scanner lid           |
| 2 | Scanner glass         |
| 3 | White sheet           |
| 4 | Document feeder glass |

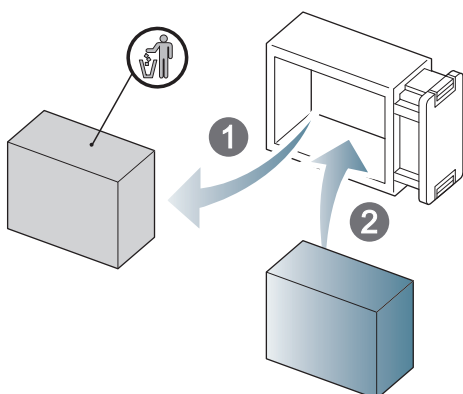
4. Wipe the underside of the scanner lid and white sheet until it is clean and dry.
5. Close the scanner lid.

## Cleaning the ozone filter

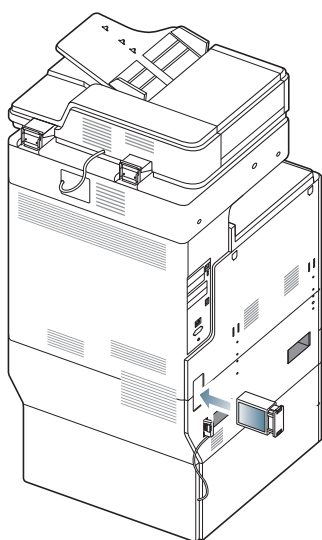
1. Locate the ozone filter unit at the side of the machine and pull it out by squeezing the sides.



2. Take the old filter out and insert the new filter.



3. Insert the ozone filter unit back into the machine.



## Tips for storing the machine, supplies, and paper

- Keep them in a cool place with no humidity.
- Keep them covered so that dusts cannot be accumulated.
- Keep them out of water.

### Machine

- Lock the scanner glass.
- Unplug the power cord and other cables.
- Store the machine in a box.

### Toner cartridge/ Imaging unit


To get the best, print quality from the toner cartridge, keep the following guidelines in mind:

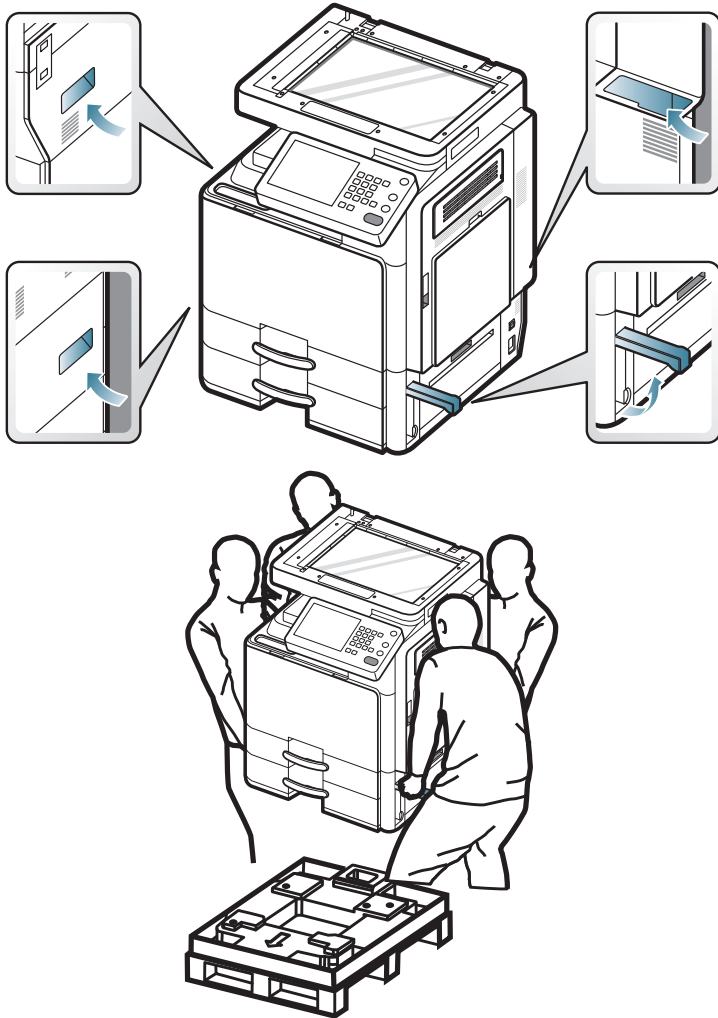
- Do not remove the toner cartridge from its package until it's ready to use.
- Do not refill the toner cartridge. The machine warranty does not cover damage caused by using a refilled cartridge.
- Store toner cartridges in the same environment as your machine.
- Keep it in a stable place so the toner dust is not slanted to one side.

### Paper

- Store print media in its ream wrapper until you are ready to use it.
- Place cartons on pallets or shelves, not on the floor.
- Do not place heavy objects on top of the paper, whether it is packed or unpacked.
- Keep it away from moisture or other conditions that can cause it to wrinkle or curl.
- Keep it in a temperatures between 15°C ~30°C and humidity between 10% ~ 70%.

## Tips for moving the machine

 **Use safe lifting and handling techniques. If you need to move this machine, you need at least four people. Use the lifting handles, as shown below. If less than four people attempt to lift the machine, it can lead to back injury.**



- Do not tilt or turn it upside down. Otherwise, the inside of the machine may be contaminated by toner, which can cause damage to the machine or bad print quality.
- Make sure at least four people are holding the machine securely.
- Lock the scanner lock.
- **Moving long distances using a truck:**
  - Remove the finisher, optional trays, or desk and inner imaging units and toner cartridges.
  - Fasten the scanner locking screw and the 3 finisher locking screws.
  - Tape trays and DADF cover.
- **Moving short distances (e.g. moving between floors) to prevent damage from vibration:**
  - Remove the finisher.

## Printing a demo page

Print a demo page to check the print quality of the machine if you have not used the machine for sometime.

### From the machine

See "Report" on page 21.


### From the SyncThru™ Web Service

See "Print Information" on page 72.

# quick guide for windows 8 user

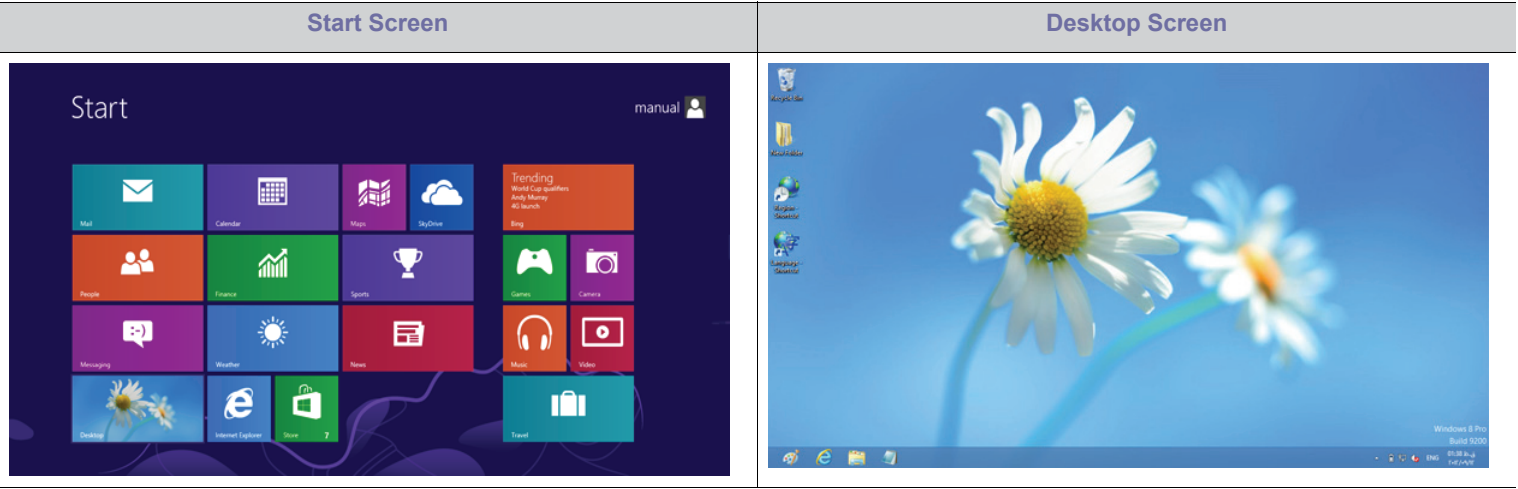
This chapter will outline features specific to the Windows 8 OS. This chapter applies to users running Windows 8.

- Understanding the screen
- System requirements
- Installing the driver locally
- Installing the driver over the network
- Uninstalling the driver
- Using Samsung Printer Experience
- Accessing management tools
- Installing accessories
- Troubleshooting

- 
- The screen may appear somewhat different depending on the model or interface in use.
  - Since this guide has been prepared based on Windows 8, some of the instructions may differ depending on the version. It may also be modified without prior notice.

## Understanding the screen

Windows 8 provides both the new **Start** screen mode and the **Desktop** screen mode of the existing OS.



## System requirements

Operating system	Requirement (recommended)		
	CPU	RAM	Free HDD Space
Windows™ 8	Intel™ Pentium™ IV 1 GHz 32-bit or 64-bit processor or higher	1 GB (2 GB)	16 GB
	<ul style="list-style-type: none"><li>• Support for DirectX™ 9 graphics with 128 MB memory (to enable the Aero theme).</li><li>• DVD-R/W Drive</li></ul>		

## Installing the driver locally

A locally connected machine is a machine directly attached to your computer using the cable.



- Only use a USB cable no longer than 3 meters (118 inches).
- **Samsung Printer Experience** app can only be used in the **Start** screen when V4 driver is installed. The V4 driver is automatically downloaded from the Windows Update if your computer is connected to the Internet. If not, you can manually download the V4 driver from Samsung website, [www.samsung.com](http://www.samsung.com) > find your product > Support or downloads.
- If you install the driver using the supplied software CD, V4 driver is not installed. If you want to use the V4 driver in the **Desktop** screen, you can download from the Samsung website, [www.samsung.com](http://www.samsung.com) > find your product > Support or downloads.

### From the Start Screen

1. Make sure that your computer is connected to the Internet and powered on.
2. Make sure that the machine is powered on.
3. Connect the computer and the machine with a USB cable.  
The driver is automatically installed from the **Windows Update**.



- If you want to install Samsung's printer management tools, you need to install them using the supplied software CD (see "From the Desktop Screen" on page 116).
- You can download Samsung Printer Experience app from the **Windows Store**. You need have a Microsoft account to use the Windows **Store**.
  1. From **Charms**, select **Search**.
  2. Click **Store**.
  3. Search and click **Samsung Printer Experience**.
  4. Click **Install**.

### From the Desktop Screen



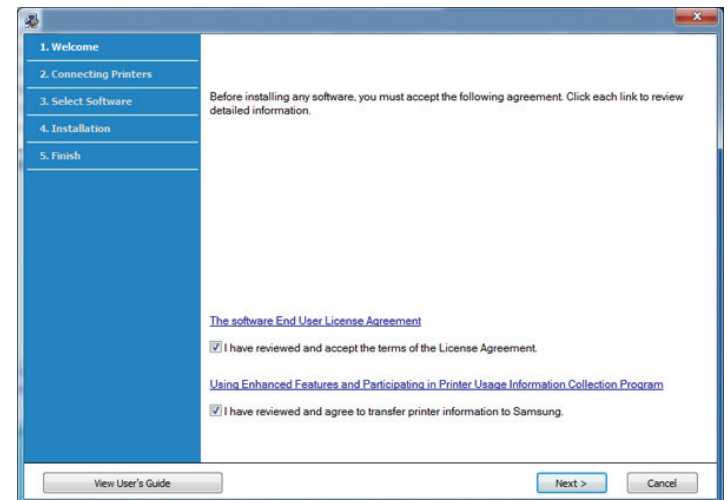
If you install the driver using the supplied software CD, you cannot use the installed driver from the **Start** screen.

1. Insert the supplied software CD into your CD-ROM drive.  
If the installation window does not appear, from **Charms**, select **Search** > **Apps** and search for **Run**. Type in X:\Setup.exe, replacing "X" with the letter that represents your CD-ROM drive and click **OK**.



If "Tap to choose what happens with this disc." pop-up window appears, click the window and select **Run Setup.exe**.

2. Read and accept **The software End User License Agreement** and **Using Enhanced Features and Participating in Printer Usage Information Collection Program** (optional). Then, click **Next**.



3. Follow the instructions in the installation window.

## Installing the driver over the network



- Some features and optional goods may not be available depending on model or country.
- Machine that do not support networking will not be able to use this feature.
- **Samsung Printer Experience** app can only be used in the **Start** screen when V4 driver is installed. The V4 driver is automatically downloaded from the Windows Update if your computer is connected to the Internet. If not, you can manually download the V4 driver from Samsung website, [www.samsung.com](http://www.samsung.com) > find your product > Support or downloads.
- If you install the driver using the supplied software CD, V4 driver is not installed. If you want to use the V4 driver in the **Desktop** screen, you can download from the Samsung website, [www.samsung.com](http://www.samsung.com) > find your product > Support or downloads.


### From the Start Screen

1. Make sure that the machine is connected to the network and powered on. Also, your machine's IP address should have been set (see Admin guide).
2. From **Charms**, select **Settings** > **Change PC settings** > **Devices**.
3. Click **Add a device**.  
Discovered machines will be shown on the screen.
4. Click the model name or host name you wish to use.
  - You can print a Network Configuration Report from the machine's control panel that will show the current machine's host name (see Admin guide).
  - If you want to install Samsung's printer management tools, you need to install them using the supplied software CD (see "From the Desktop Screen" on page 116).
  - You can download Samsung Printer Experience app from the **Windows Store**. You need have a Microsoft account to use the Windows **Store**.


1. From **Charms**, select **Search**.
2. Click **Store**.
3. Search and click **Samsung Printer Experience**.
4. Click **Install**.

5. The driver is automatically installed from the **Windows Update**.

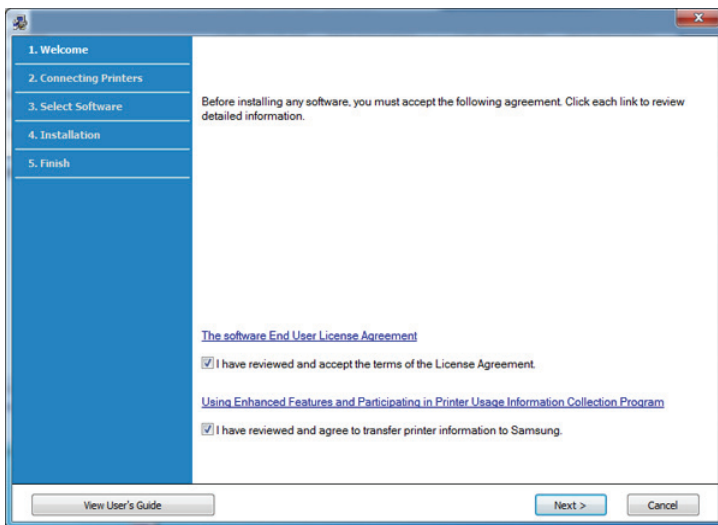
## From the Desktop Screen


 If you install the driver using the supplied software CD, you cannot use the installed driver from the **Start** screen.

1. Make sure that the machine is connected to the network and powered on. Also, your machine's IP address should have been set (see Admin guide).
2. Insert the supplied software CD into your CD-ROM drive.  
If the installation window does not appear, from **Charms**, select **Search** > **Apps** and search for **Run**. Type in X:\Setup.exe, replacing "X" with the letter that represents your CD-ROM drive and click **OK**.

 If "Tap to choose what happens with this disc." pop-up window appears, click the window and select **Run Setup.exe**.

3. Read and accept **The software End User License Agreement** and **Using Enhanced Features and Participating in Printer Usage Information Collection Program** (optional). Then, click **Next**.



4. Select **Network connection** on the **Printer Connection Type** screen.
5. If the **Connect Device** window appears, check that the machine is connected to your network. Then, click **Next**.  
 The firewall software might be blocking network communication. Before connecting the device to the network, disable the computer's firewall.
6. Discovered machines will be shown on the screen. Select the one you wish to use and click **OK**.
7. Follow the instructions in the installation window.

## Uninstalling the driver

### From the Start Screen

1. Make sure that the machine is connected to your computer and powered on.
2. Click on the **Uninstall Samsung Printer Software** tile in the **Start** screen.
3. Follow the instructions in the window.

-  • If you cannot find a Samsung Printer Software tile, uninstll from the desktop screen mode (see "From the Desktop Screen" on page 117).
- If you want to uninstall Samsung's printer management tools, from the **Start** screen, right-click the app > **Uninstall** > right-click the program you want to delete > **Uninstall** and follow the instruction in the window.

### From the Desktop Screen


1. From Charms, select **Search** > **Apps**.
2. Search and click **Control Panel**.
3. Click **Programs and Features**.
4. Right-click the driver you want to uninstall and select **Uninstall**.
5. Follow the instructions in the window.

## Using Samsung Printer Experience

**Samsung Printer Experience** is a Samsung application that combines Samsung machine settings and machine management into one location. You can set device settings, order supplies, open troubleshooting guides, visit Samsung's web site, and check connected machine information. This application will be automatically downloaded from the Windows **Store** if the machine is connected to a computer with an Internet connection.

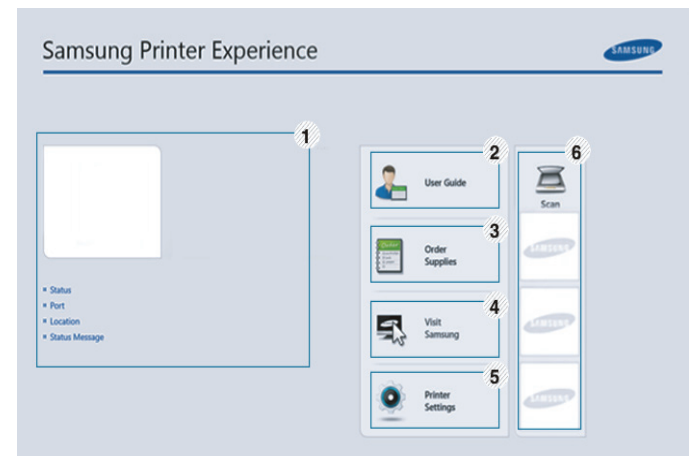
### Understanding the Samsung Printer Experience


To open the application,

From the **Start** screen, select the **Samsung Printer Experience** () tile.

The **Samsung Printer Experience** interface comprises various useful features as described in the following table:

 The screenshot may differ depending on the model you are using.



1	<b>Printer Information</b>	This area gives you general information about your machine. You can check information, such as the machine's status, location, IP address, and remaining toner level.
2	<b>User Guide</b>	<p>You can view the online User's Guide. You need to be connected to the Internet to use this feature.</p> <p> This button opens the <b>Troubleshooting Guide</b> when an error occurs. You can directly open the troubleshooting section in the user's guide.</p>
3	<b>Order Supplies</b>	Click on this button to order replacement toner cartridges online. You need to be connected to the Internet to use this feature.
4	<b>Visit Samsung</b>	Links to Samsung printer website. You need to be connected to the Internet to use this feature.
5	<b>Printer Settings</b>	You can configure various machine settings such as machine setup, paper, layout, emulation, networking, and print information through <b>SyncThru™ Web Service</b> . Your machine needs to be connected to a network. This button will be disabled if your machine is connected via USB cable.
6	<b>Device List &amp; Latest Scanned Image</b>	<p>The scan list displays devices that supports <b>Samsung Printer Experience</b>. Under the device, you can see the latest scanned images. Your machine needs to be connected to a network to scan from here.</p> <p>This section is for the users with multi-functional printers.</p>

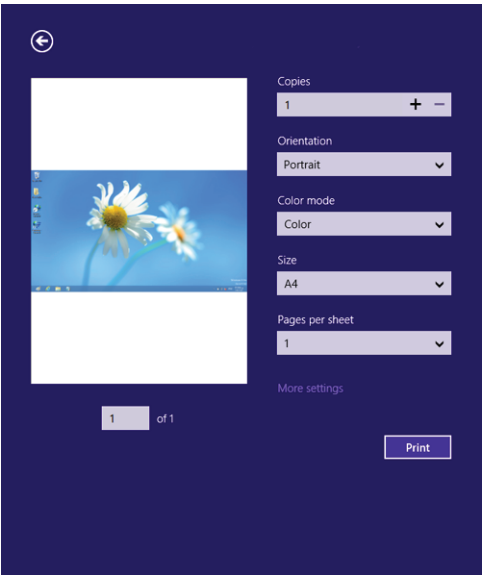
## Printing from Windows 8

This section explains common printing tasks from the **Start** screen.

### Basic printing



1. Open the document to print.
2. From the **Charms**, select **Devices**.
3. Select your printer from the list
4. Select the printer settings, such as the number of copies and orientation.

5. Click the **Print** button to start the print job.




### Cancelling a print job

If the printing job is waiting in the print queue or print spooler, cancel the job as follows:

- You can access this window by simply double-clicking the machine icon (  ) in the Windows task bar.
- You can also cancel the current job by pressing  (**Stop**) button on the control panel.

### Opening more settings

-  The screen may appear somewhat different depending on the model or options.

You can set up more printing parameters.

1. Open the document you want to print.
2. From the **Charms**, select **Devices**.
3. Select your printer from the list
4. Click **More settings**.

**Basic tab**



**Basic**

This option allows you to choose the basic printing settings such as copies, orientation, and document type.

**Eco settings**

This option allows you to choose multiple pages per side to save media.

**Advanced tab**



**Paper settings**

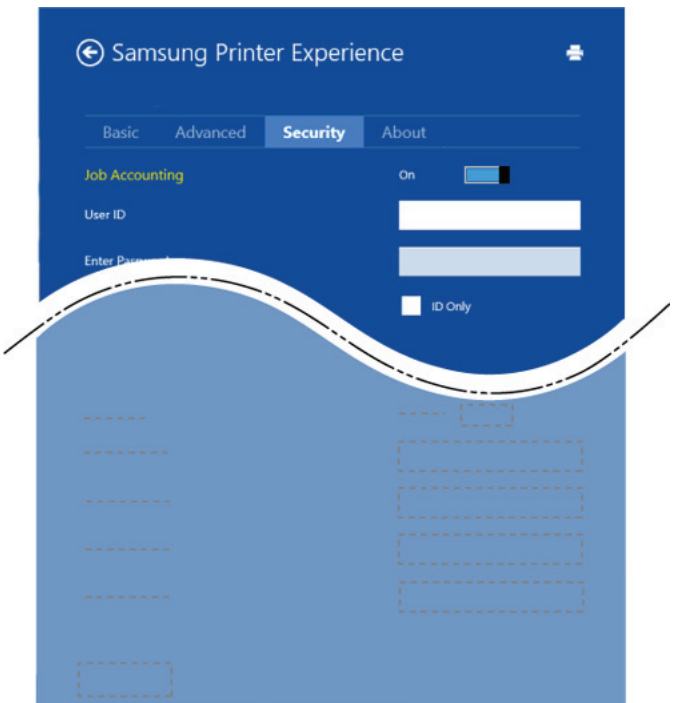
This option allows you to set the basic paper handling specifications.

**Layout settings**

This option allows you to set the various ways to layout your documents.

**Security tab**

Some features may not be available depending on the model or options. If this tab is not shown or disabled, it means that this features are not supported.



**Job Accounting**

This option allows you to print with the given permission.

**Confidential Printing**

This option is used for printing confidential documents. You need to enter a password to print using it.



**Scanning from Windows 8**




This section is for the users with multi-functional printers.

Scanning with your machine lets you turn pictures and text into digital files that can be stored on your computer.

**Scanning from Samsung Printer Experience**


The most frequently used printing menus are displayed for quick scanning.

1. Place a single document face down on the document glass, or load the documents face up into the document feeder.
2. Click the **Samsung Printer Experience** tile on the **Start** screen.
3. Click **Scan** (  ).
4. Set up the scanning parameters such as image type, document size, and resolution.
5. Click **Prescan** (  ) to check the image.

- 6. Adjust the prescanned image with scanning operation functions such as rotate and mirror.
- 7. Click **Scan** () and save the image.
-  • When you place the originals in the ADF (or DADF), **Prescan** () is not available.
- You can skip step 5, if the Prescan option is selected.



## Accessing management tools

Samsung provides a variety of management tools for Samsung printers.

- 1. From the **Charms**, select **Search > Apps**.
  - 2. Find **Samsung Printers**.
  - 3. Under **Samsung Printers**, you can see installed management tools.
  - 4. Click the management tool you want to use.
-  After installing the driver, for some management tools, you can access them directly from the **Start** screen by clicking on the corresponding tile.

## Installing accessories

When you install optional devices, such as optional tray, memory, etc, this machine automatically detects and sets the optional devices. If you cannot use the optional devices you installed in this driver, you can set the optional devices in **Device Settings** to use.

- 1. From the **Charms**, select **Search > Settings**.
- 2. Search for **Devices and Printers**.
- 3. Right-click on your printer icon and select **Printer properties**.
-  If **Printer properties** item has a ► mark, you can select other printer drivers connected with the selected printer.
- 4. Select **Device Settings**.
-  The **Printer properties** window may differ depending on the driver or operating system you are using.
- 5. Select the appropriate option.
- 6. Click **OK** until you exit the **Printer properties** window.

## Troubleshooting

Problem	Suggested Solutions
<b>Samsung Printer Experience</b> is not shown when you click <b>more settings</b> .	<b>Samsung Printer Experience</b> is not installed. Download the app. from the Windows <b>Store</b> and install it.
Machine information is not displayed when you click the device in the <b>Devices and Printers</b> .	Check the <b>Printer properties</b> . Click the <b>Ports</b> tab. ( <b>Control Panel &gt; Devices and Printers &gt; Right-click on your printer icon and select Printer properties</b> )
The error related toast message pops up.	If the port is set to File or LPT, uncheck them and select TCP/IP, USB, or WSD.

# contact samsung worldwide

If you have any comments or questions regarding Samsung products, contact the Samsung customer care center.


Country/Region	Customer Care Center	Web Site
ALBANIA	42 27 5755	
ARGENTINE	0800-333-3733	www.samsung.com
ARMENIA	0-800-05-555	
AUSTRALIA	1300 362 603	www.samsung.com
AUSTRIA	0810-SAMSUNG (7267864, € 0.07/min)	www.samsung.com
AZERBAIJAN	088-55-55-555	
BAHRAIN	8000-4726	www.samsung.com
BELARUS	810-800-500-55-500	
BELGIUM	02-201-24-18	www.samsung.com/be (Dutch) www.samsung.com/be_fr (French)
BOSNIA	05 133 1999	
BRAZIL	0800-124-421 4004-0000	www.samsung.com
BULGARIA	07001 33 11	www.samsung.com
CANADA	1-800-SAMSUNG (726-7864)	www.samsung.com
CHILE	800-SAMSUNG (726-7864)	www.samsung.com
CHINA	400-810-5858	www.samsung.com
COLOMBIA	01-8000112112	www.samsung.com
COSTA RICA	0-800-507-7267	www.samsung.com
CROATIA	062 SAMSUNG (062 726 7864)	www.samsung.com
CZECH REPUBLIC	800-SAMSUNG (800-726786) Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8	www.samsung.com
DENMARK	70 70 19 70	www.samsung.com
DOMINICA	1-800-751-2676	www.samsung.com
ECUADOR	1-800-10-7267	www.samsung.com
EGYPT	0800-726786	www.samsung.com
EIRE	0818 717100	www.samsung.com
EL SALVADOR	800-6225	www.samsung.com
ESTONIA	800-7267	www.samsung.com
FINLAND	030-6227 515	www.samsung.com
FRANCE	01 48 63 00 00	www.samsung.com
GERMANY	01805 - SAMSUNG (726-7864 € 0,14/min)	www.samsung.com
GEORGIA	8-800-555-555	

Country/Region	Customer Care Center	Web Site
GREECE	IT and Mobile : 80111-SAMSUNG (80111 7267864) from land line, local charge/ from mobile, 210 6897691 Cameras, Camcorders, Televisions and Household Appliances From mobile and fixed 2106293100	www.samsung.com
GUATEMALA	1-800-299-0013	www.samsung.com
HONDURAS	800-27919267	www.samsung.com
HONG KONG	(852) 3698-4698	www.samsung.com/hk www.samsung.com/hk_en/
HUNGARY	06-80-SAMSUNG (726-7864)	www.samsung.com
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JAMAICA	1-800-234-7267	www.samsung.com
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JORDAN	800-22273	www.samsung.com
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KOSOVO	+381 0113216899	
KUWAIT	183-2255	www.samsung.com
KYRGYZSTAN	00-800-500-55-500	www.samsung.com
LATVIA	8000-7267	www.samsung.com
LITHUANIA	8-800-77777	www.samsung.com
LUXEMBURG	261 03 710	www.samsung.com
MALAYSIA	1800-88-9999	www.samsung.com
MACEDONIA	023 207 777	
MEXICO	01-800-SAMSUNG (726-7864)	www.samsung.com
MOLDOVA	00-800-500-55-500	
MONTENEGRO	020 405 888	
MOROCCO	080 100 2255	www.samsung.com
NIGERIA	080-SAMSUNG(726-7864)	www.samsung.com
NETHERLANDS	0900-SAMSUNG (0900-7267864) (€ 0,10/min)	www.samsung.com
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	www.samsung.com
NICARAGUA	00-1800-5077267	www.samsung.com
NORWAY	815-56 480	www.samsung.com
OMAN	800-SAMSUNG (726-7864)	www.samsung.com
PANAMA	800-7267	www.samsung.com
PERU	0-800-777-08	www.samsung.com

Country/Region	Customer Care Center	Web Site
PHILIPPINES	1800-10-SAMSUNG (726-7864) 1-800-3-SAMSUNG (726-7864) 1-800-8-SAMSUNG (726-7864) 02-5805777	www.samsung.com
POLAND	0 801 1SAMSUNG (172678) 022-607-93-33	www.samsung.com
PORTUGAL	80820-SAMSUNG (726-7864)	www.samsung.com
PUERTO RICO	1-800-682-3180	www.samsung.com
RUMANIA	08010 SAMSUNG (08010 726 7864) only from landline, local network Romtelecom - local tariff / 021 206 01 10 for landline and mobile, normal tariff.	www.samsung.com
RUSSIA	8-800-555-55-55	www.samsung.com
SAUDI ARABIA	9200-21230	www.samsung.com
SERBIA	0700 SAMSUNG (0700 726 7864)	www.samsung.com
SINGAPORE	1800-SAMSUNG (726-7864)	www.samsung.com
SLOVAKIA	0800-SAMSUNG (726-7864)	www.samsung.com
SOUTH AFRICA	0860 SAMSUNG (726-7864)	www.samsung.com
SPAIN	902-1-SAMSUNG(902 172 678)	www.samsung.com
SWEDEN	0771 726 7864 (SAMSUNG)	www.samsung.com
SWITZERLAND	0848-SAMSUNG (7267864, CHF 0.08/min)	www.samsung.com/ch www.samsung.com/ch_fr/
TADJIKISTAN	8-10-800-500-55-500	www.samsung.com
TAIWAN	0800-329-999	www.samsung.com
THAILAND	1800-29-3232 02-689-3232	www.samsung.com
TRINIDAD & TOBAGO	1-800-SAMSUNG (726-7864)	www.samsung.com
TURKEY	444 77 11	www.samsung.com
U.A.E	800-SAMSUNG (726-7864)	www.samsung.com
U.K	0330 SAMSUNG (726-7864)	www.samsung.com
U.S.A	1-800-SAMSUNG (726-7864)	www.samsung.com
UKRAINE	0-800-502-000	www.samsung.com/ua www.samsung.com/ua_ru
UZBEKISTAN	8-10-800-500-55-500	www.samsung.com
VENEZUELA	0-800-100-5303	www.samsung.com
VIETNAM	1 800 588 889	www.samsung.com

# glossary

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 The following glossary helps you get familiar with the product by understanding the terminologies commonly used with printing as well as mentioned in this user's guide.

## 802.11

802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

## 802.11b/g/n

802.11b/g/n can share same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices may occasionally suffer interference from microwave ovens, cordless telephones, and Bluetooth devices.

## Access point

Access Point or Wireless Access Point (AP or WAP) is a device that connects wireless communication devices together on wireless local area networks (WLAN), and acts as a central transmitter and receiver of WLAN radio signals.

## ADF

An Automatic Document Feeder (ADF) is a scanning unit that will automatically feed an original sheet of paper so that the machine can scan some amount of the paper at once.

## AppleTalk

AppleTalk is a proprietary suite of protocols developed by Apple, Inc for computer networking. It was included in the original Macintosh (1984) and is now deprecated by Apple in favor of TCP/IP networking.

## BIT Depth

A computer graphics term describing the number of bits used to represent the color of a single pixel in a bitmapped image. Higher color depth gives a broader range of distinct colors. As the number of bits increases, the number of possible colors becomes impractically large for a color map. 1-bit color is commonly called as monochrome or black and white.

## BMP

A bitmapped graphics format used internally by the Microsoft Windows graphics subsystem (GDI), and used commonly as a simple graphics file format on that platform.

## BOOTP

Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assign the IP address from a pool of addresses to each

client. BOOTP enables 'diskless workstation' computers to obtain an IP address prior to loading any advanced operating system.

## CCD

Charge Coupled Device (CCD) is a hardware which enables the scan job. CCD Locking mechanism is also used to hold the CCD module to prevent any damage when you move the machine.

## Collation

Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

## Control Panel

A control panel is a flat, typically vertical, area where control or monitoring instruments are displayed. They are typically found in front of the machine.

## Coverage

It is the printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. So, if the paper or original has complicated images or lots of text on it, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

## CSV

Comma Separated Values (CSV). A type of file format, CSV is used to exchange data between disparate applications. The file format, as it is used in Microsoft Excel, has become a de facto standard throughout the industry, even among non-Microsoft platforms.

## DADF

A Duplex Automatic Document Feeder (DADF) is a scanning unit that will automatically feed and turn over an original sheet of paper so that the machine can scan on both sides of the paper.

## Default

The value or setting that is in effect when taking a printer out of its box state, reset, or initialized.

## DHCP

A Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. DHCP also provides a mechanism for allocation of IP addresses to client hosts.

## **DIMM**

Dual Inline Memory Module (DIMM), a small circuit board that holds memory. DIMM stores all the data within the machine like printing data, received fax data.

## **DLNA**

The Digital Living Network Alliance (DLNA) is a standard that allows devices on a home network to share information with each other across the network.

## **DMP<sub>r</sub>**

The Digital Media Printer (DMP<sub>r</sub>) is a device that allows printing in DLNA home network. The DMP<sub>r</sub> prints a page by combining images with an Extensible HyperText Markup Language (XHTML) template.

## **DNS**

The Domain Name Server (DNS) is a system that stores information associated with domain names in a distributed database on networks, such as the Internet.

## **Dot Matrix Printer**

A dot matrix printer refers to a type of computer printer with a print head that runs back and forth on the page and prints by impact, striking an ink-soaked cloth ribbon against the paper, much like a typewriter.

## **DPI**

Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution, more visible detail in the image, and a larger file size.

## **DRPD**

Distinctive Ring Pattern Detection. Distinctive Ring is a telephone company service which enables a user to use a single telephone line to answer several different telephone numbers.

## **Duplex**

A mechanism that will automatically turn over a sheet of paper so that the machine can print (or scan) on both sides of the paper. A printer equipped with a Duplex Unit can print on both sides of paper during one print cycle.

## **Duty Cycle**

Duty cycle is the page quantity which does not affect printer performance for a month. Generally the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month assuming 20 working days, a printer limits 2,400 pages a day.

## **ECM**

Error Correction Mode (ECM) is an optional transmission mode built into Class 1 fax machines or fax modems. It automatically detects and corrects errors in the fax transmission process that are sometimes caused by telephone line noise.

## **Emulation**

Emulation is a technique of one machine obtaining the same results as another.

An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior, which is in contrast to simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

## **Ethernet**

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. It has become the most widespread LAN technology in use during the 1990s to the present.

## **EtherTalk**

A suite of protocols developed by Apple Computer for computer networking. It was included in the original Macintosh (1984) and is now deprecated by Apple in favor of TCP/IP networking.

## **FDI**

Foreign Device Interface (FDI) is a card installed inside the machine to allow a third party device such as a coin operated device or a card reader. Those devices allow the pay-for-print service on your machine.

## **FTP**

A File Transfer Protocol (FTP) is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol (such as the Internet or an intranet).

## **Fuser Unit**

The part of a laser printer that fuses the toner onto the print media. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to ensure that the toner stays on the paper permanently, which is why paper is warm when it comes out of a laser printer.

## **Gateway**

A connection between computer networks, or between a computer network and a telephone line. It is very popular, as it is a computer or a network that allows access to another computer or network.

## **Grayscale**

A shades of gray that represent light and dark portions of an image when color images are converted to grayscale; colors are represented by various shades of gray.

## **Halftone**

An image type that simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

## **HDD**

Hard Disk Drive (HDD), commonly referred to as a hard drive or hard disk, is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

## **IEEE**

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

## **IEEE 1284**

The 1284 parallel port standard was developed by the Institute of Electrical and Electronics Engineers (IEEE). The term "1284-B" refers to a specific connector type on the end of the parallel cable that attaches to the peripheral (for example, a printer).

## **Intranet**

A private network that uses Internet Protocols, network connectivity, and possibly the public telecommunication system to securely share part of an organization's information or operations with its employees. Sometimes the term refers only to the most visible service, the internal website.

## **IP address**

An Internet Protocol (IP) address is a unique number that devices use in order to identify and communicate with each other on a network utilizing the Internet Protocol standard.

## **IPM**

The Images Per Minute (IPM) is a way of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete within one minute.

## **IPP**

The Internet Printing Protocol (IPP) defines a standard protocol for printing as well as managing print jobs, media size, resolution, and so forth. IPP can be used locally or over the Internet to hundreds of printers, and also supports access control, authentication, and encryption, making it a much more capable and secure printing solution than older ones.

## **IPX/SPX**

IPX/SPX stands for Internet Packet Exchange/Sequenced Packet Exchange. It is a networking protocol used by the Novell NetWare operating systems. IPX and SPX both provide connection services similar to TCP/IP, with the IPX protocol having similarities to IP, and SPX having similarities to TCP. IPX/SPX was primarily designed for local area networks (LANs), and is a very efficient protocol for this purpose (typically its performance exceeds that of TCP/IP on a LAN).

## **ISO**

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. It produces world-wide industrial and commercial standards.

## **ITU-T**

The International Telecommunication Union is an international organization established to standardize and regulate international radio and telecommunications. Its main tasks include standardization, allocation of the radio spectrum, and organizing interconnection arrangements between different countries to allow international phone calls. A -T out of ITU-T indicates telecommunication.

## **ITU-T No. 1 chart**

Standardized test chart published by ITU-T for document facsimile transmissions.

## **JBIG**

Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality, which was designed for compression of binary images, particularly for faxes, but can also be used on other images.

## **JPEG**

Joint Photographic Experts Group (JPEG) is a most commonly used standard method of lossy compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.

## **LDAP**

The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.

## **LED**

A Light-Emitting Diode (LED) is a semiconductor device that indicates the status of a machine.

## **MAC address**

Media Access Control (MAC) address is a unique identifier associated with a network adapter. MAC address is a unique 48-bit identifier usually written as 12 hexadecimal characters grouped in pairs (e. g., 00-00-0c-34-11-4e). This address is usually hard-coded into a Network Interface Card (NIC) by its manufacturer, and used as an aid for routers trying to locate machines on large networks.

## **MFP**

Multi Function Peripheral (MFP) is an office machine that includes the following functionality in one physical body, so as to have a printer, a copier, a fax, a scanner and etc.

## **MH**

Modified Huffman (MH) is a compression method for decreasing the amount of data that needs to be transmitted between the fax machines to transfer the image recommended by ITU-T T.4. MH is a codebook-based run-length encoding scheme optimized to efficiently compress white space. As most faxes consist mostly of white space, this minimizes the transmission time of most faxes.

## **MMR**

Modified Modified READ (MMR) is a compression method recommended by ITU-T T.6.

## **Modem**

A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

## **MR**

Modified Read (MR) is a compression method recommended by ITU-T T.4. MR encodes the first scanned line using MH. The next line is compared to the first, the differences determined, and then the differences are encoded and transmitted.

## **NetWare**

A network operating system developed by Novell, Inc. It initially used cooperative multitasking to run various services on a PC, and the network protocols were based on the archetypal Xerox XNS stack. Today NetWare supports TCP/IP as well as IPX/SPX.

## **OPC**

Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer, and it is usually green or rust colored and has a cylinder shape.

An imaging unit containing a drum slowly wears the drum surface by its usage in the printer, and it should be replaced appropriately since it gets worn from contact with the cartridge development brush, cleaning mechanism, and paper.

## **Originals**

The first example of something, such as a document, photograph or text, etc, which is copied, reproduced or translated to produce others, but which is not itself copied or derived from something else.

## **OSI**

Open Systems Interconnection (OSI) is a model developed by the International Organization for Standardization (ISO) for communications. OSI offers a standard, modular approach to network design that divides the required set of complex functions into manageable, self-contained, functional layers. The layers are, from top to bottom, Application, Presentation, Session, Transport, Network, Data Link and Physical.

## **PABX**

A private automatic branch exchange (PABX) is an automatic telephone switching system within a private enterprise.

## **PCL**

Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol and has become an industry standard. Originally developed for early inkjet printers, PCL has been released in varying levels for thermal, dot matrix printer, and laser printers.

## **PDF**

Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems for representing two dimensional documents in a device independent and resolution independent format.

## **PostScript**

PostScript (PS) is a page description language and programming language used primarily in the electronic and desktop publishing areas. - that is run in an interpreter to generate an image.

## **Printer Driver**

A program used to send commands and transfer data from the computer to the printer.

## **Print Media**

The media like paper, envelopes, labels, and transparencies which can be used in a printer, a scanner, a fax or, a copier.

## **PPM**

Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

## **PRN file**

An interface for a device driver, this allows software to interact with the device driver using standard input/output system calls, which simplifies many tasks.

## **Protocol**

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

## **PS**

See PostScript.

## **PSTN**

The Public-Switched Telephone Network (PSTN) is the network of the world's public circuit-switched telephone networks which, on industrial premises, is usually routed through the switchboard.

## **RADIUS**

Remote Authentication Dial In User Service (RADIUS) is a protocol for remote user authentication and accounting. RADIUS enables centralized management of authentication data such as usernames and passwords using an AAA (authentication, authorization, and accounting) concept to manage network access.

## **Resolution**

The sharpness of an image, measured in Dots Per Inch (DPI). The higher the dpi, the greater the resolution.

## **SMB**

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications

between nodes on a network. It also provides an authenticated Inter-process communication mechanism.

## **SMTP**

Simple Mail Transfer Protocol (SMTP) is the standard for e-mail transmissions across the Internet. SMTP is a relatively simple, text-based protocol, where one or more recipients of a message are specified, and then the message text is transferred. It is a client-server protocol, where the client transmits an email message to the server.

## **SSID**

Service Set Identifier (SSID) is a name of a wireless local area network (WLAN). All wireless devices in a WLAN use the same SSID in order to communicate with each other. The SSIDs are case-sensitive and have a maximum length of 32 characters.

## **Subnet Mask**

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

## **TCP/IP**

The Transmission Control Protocol (TCP) and the Internet Protocol (IP); the set of communications protocols that implement the protocol stack on which the Internet and most commercial networks run.

## **TCR**

Transmission Confirmation Report (TCR) provides details of each transmission such as job status, transmission result and number of pages sent. This report can be set to print after each job or only after failed transmissions.

## **TIFF**

Tagged Image File Format (TIFF) is a variable-resolution bitmapped image format. TIFF describes image data that typically come from scanners. TIFF images make use of tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

## **Toner Cartridge**

A kind of bottle or container used in a machine like a printer which contains toner. Toner is a powder used in laser printers and photocopiers, which forms the text and images on the printed paper. Toner can be fused by a combination of heat/pressure from the fuser, causing it to bind to the fibers in the paper.

## **TWAIN**

An industry standard for scanners and software. By using a TWAIN-compliant scanner with a TWAIN-compliant program, a scan can be initiated from within the program. It is an image capture API for Microsoft Windows and Apple Macintosh operating systems.

## **UNC Path**

Uniform Naming Convention (UNC) is a standard way to access network shares in Window NT and other Microsoft products. The format of a UNC path is: \\<servername>\<sharename>\<Additional directory>

## **URL**

Uniform Resource Locator (URL) is the global address of documents and resources on the Internet. The first part of the address indicates what protocol to use, the second part specifies the IP address or the domain name where the resource is located.

## **USB**

Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

## **Watermark**

A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282; they have been used by papermakers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

## **WEP**

Wired Equivalent Privacy (WEP) is a security protocol specified in IEEE 802.11 to provide the same level of security as that of a wired LAN. WEP provides security by encrypting data over radio so that it is protected as it is transmitted from one end point to another.

## **WIA**

Windows Imaging Architecture (WIA) is an imaging architecture that is originally introduced in Windows Me and Windows XP. A scan can be initiated from within these operating systems by using a WIA-compliant scanner.

## **WPA**

Wi-Fi Protected Access (WPA) is a class of systems to secure wireless (Wi-Fi) computer networks, which was created to improve upon the security features of WEP.

## **WPA-PSK**

WPA-PSK (WPA Pre-Shared Key) is special mode of WPA for small business or home users. A shared key, or password, is configured in the wireless access point (WAP) and any wireless laptop or desktop devices. WPA-PSK generates a unique key for each session between a wireless client and the associated WAP for more advanced security.

## **WPS**

The Wi-Fi Protected Setup (WPS) is a standard for establishing a wireless home network. If your wireless access point supports WPS, you can configure the wireless network connection easily without a computer.

## **XPS**

XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format, which has benefits for portable document and electronic document, developed by Microsoft. It is an XML-based specification, based on a new print path and a vector-based device-independent document format.