Installation Procedure

for

"Card Authentication Package" and
"Enhanced Locked Print NX"
(Activation Version)

Date:
Re-issued: 2010/8
Issued: 2009/08/21

Models and Supported VM Versions

For each model listed, please use the VM version shown (or newer).

Model Name	VM Ver.
D017/ D018/D019/D020	V4.16.07 or later
D009/ D011/D012/D013	V4.16.07 or later
D014/D015	V4.16.07 or later
G179	V4.16.07 or later
D023/D025	V4.16.07 or later
D027/D029	V4.16.07 or later
D037/D038/C040/D041	V4.16.07 or later
G190	V4.16.07 or later
D091/D092	V4.18 or later
D084/D085	V4.18 or later
D062/D063/D065/D066	V5.05.01 or later
G188/G189	V5.05.01 or later
M047	V5.07 or later
D067/D068/D069/D072	V6.02.04 or later
D081/D082	V7.01 or later
M065/M066	***V7.02***

Installation

Overview

There are several combinations for using "Card Authentication Package" and "Enhanced Locked Print NX".

- **Embedded Type A:** This is for a customer who wants to use "Card Authentication Package" and "Enhance Locked Print NX".
- **Embedded Type B:** This is for a customer who wants to use only "Card Authentication Package".
- **Server Type A:** This is for a customer who wants to use "Card Authentication Package Enterprise Server" and "Enhance Locked Print NX".
- **Server Type B:** This is for a customer who wants to use only "Card Authentication Package Enterprise Server".

Here is the matrix of possible combinations.

	Embedded Type A	Embedded Type B	Server Type A	Server Type B
CAP	Yes	Yes	Yes	Yes
CAP-ES	No	No	Yes	Yes
CRT	Yes	Yes	Yes	Yes
ELP-NX	Yes	No	Yes	No

- CAP: Card Authentication Package
- CAP-ES: Card Authentication Package Enterprise Server
- ELP-NX: Enhanced Locked Print NX (Application and Filter)
- CRT: Card Registration Tool for CAP

Confirmation Points before Installation

- Make sure that the firmware of the **target machine** is the latest version.
- Make sure that the firmware of the **VM card** is the latest version.
- Check the following SP settings;
  Bit 0 of SP5401-160 (SSP: Super Service Program) must be set to “0”.
  All bits of SP5401-162 (Extend Certification Detail) must be set to “0”.
  Bit 0 of SP5401-230 (Customized Authentication) must be set to “0”.
- ***CAP and ELP require that the device’s Auto Off Timer be set to 5 minutes or longer. This is because the device might not work correctly if it enters Sleep Mode before the VM, CAP, and ELP applications finish booting up.***

Installation of Card Authentication Package for MFP models

There were two installation methods for the “Card Authentication Package” for V1.1 and V1.2. However, There is only one installation method for V1.3 or later.

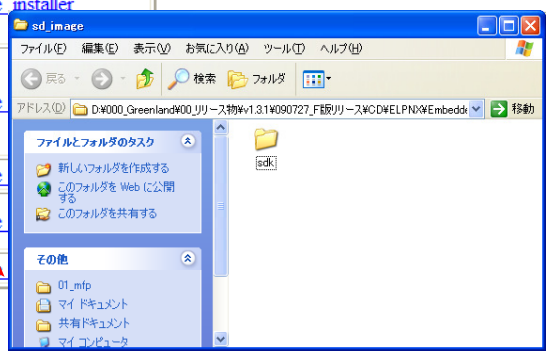
"Working with the PC"

1. Make sure the applications necessary to use the "Card Authentication Package" and “Enhanced Locked Print NX Package” are running on the PC.
2. Unzip the zip file for the "Card Authentication Package" and “Enhanced Locked Print NX Package”.
3. Open the "readme.html" from each unzipped file.
4. Click the “sd image” of the target machine
5. Copy the sdk folder onto the root directory of the VM card.

<CAP>

RICOH:

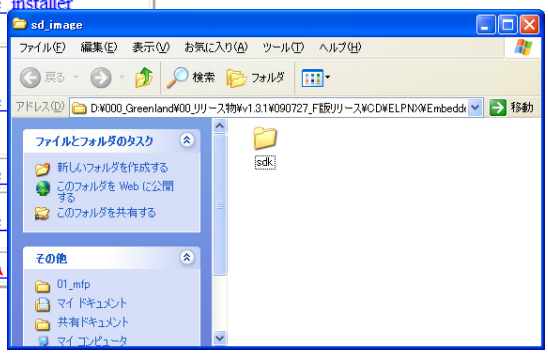
Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B Aficio MP 4000 / 4000B / 5000 / 5000B Aficio MP C2050 / C2550	sd image	remote installer
Aficio MP C6000 / C7500 Aficio MP C2800 / C3300 Aficio MP C4000 / C5000 Aficio MP 6001 / 7001 / 8001 / 9001	sd image	remote
Aficio MP 171	sd image	remote
Aficio SP 8200DN Aficio SP C420DN	sd image	remote
Aficio SP C820DN / C821DN	sd image	



<ELP NX>

RICOH:

Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B Aficio MP 4000 / 4000B / 5000 / 5000B Aficio MP C2050 / C2550	sd image	remote installer
Aficio MP C6000 / C7500 Aficio MP C2800 / C3300 Aficio MP C4000 / C5000 Aficio MP 6001 / 7001 / 8001 / 9001	sd image	remote
Aficio MP 171	sd image	remote
Aficio SP 8200DN Aficio SP C420DN	sd image	remote
Aficio SP C820DN / C821DN	sd image	



"Working with the Machine"

Note

- Make sure to turn off the Auto Off Timer. If the timer is left on, the machine will enter Auto Off Mode while the installation is in progress, causing the installation to fail.

6. Install a card reader device in a suitable location.
7. Connect the USB cable from the card reader device to the USB slot of the target machine.

Note

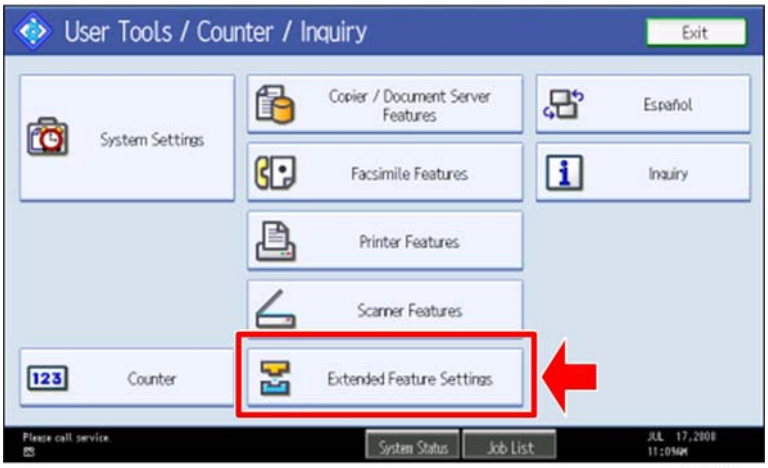
- The position of the USB slot may vary depending on the machine.

8. Secure the cable clamp to the USB slot.

Note

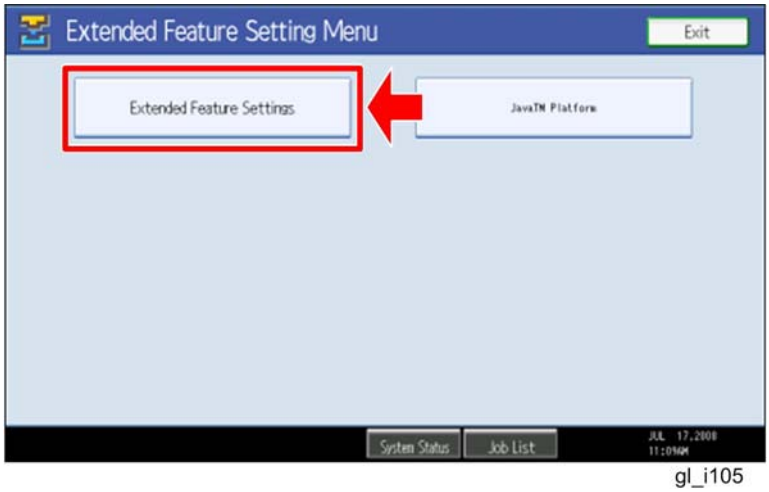
The procedure for the card reader installation depends on the machine. For details, see “USB Connection of the Card Reader” in the “Appendix” section.

9. Install the VM card in the service slot of the target machine.
10. Turn on the target machine.
11. Turn off the Auto Off Timer.
12. Ask a machine administrator to login to the target machine with the login name and password of the machine’s administrator.



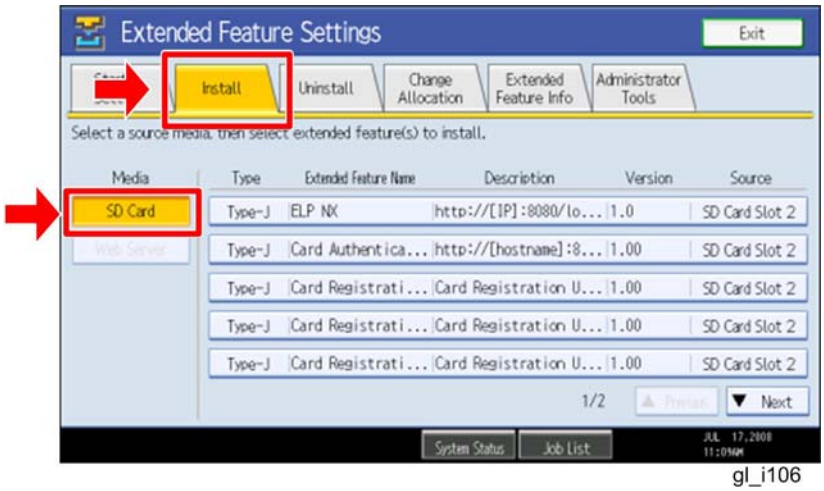
gl_i104

13. Enter the "User Tools", and then press "Extended Feature Settings" on the LCD.



gl_i105

14. Press "Extended Feature Settings" on the LCD.



gl_i106

15. Press the "Install" tab, and then press "SD Card".

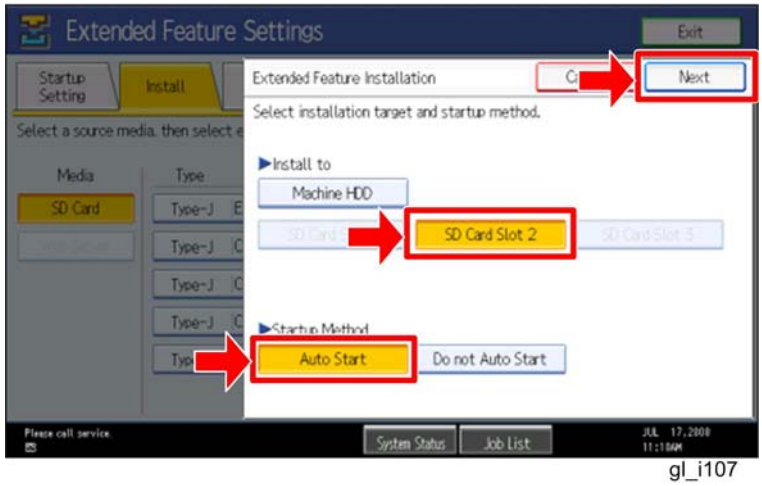
The following table shows the destination of the installed SDK application.

Application	Destination
Card Authentication Package	SD Card
Card Registration Tool for CAP	SD Card
Enhanced Locked Print NX Application	SD Card
Enhanced Locked Print NX Filter	HDD

16. Press the SDK application bar (except ELP NX-Filter) that you want to install.

Note

Do not install the “Enhanced Locked Print NX-Filter” in the SD card. The ELP NX Filter must be installed in the HDD of the target machine. See step 21 for how to install it.



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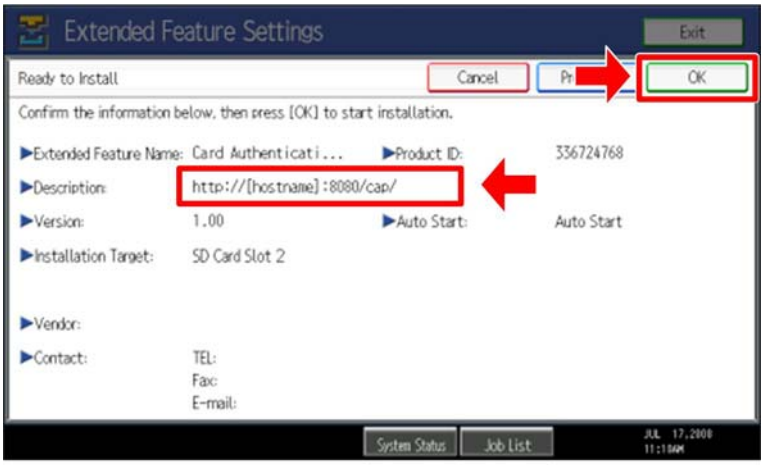
17. Press "SD Card Slot 2" and "Auto Select"
18. Press "Next" to continue this installation procedure.



gl_i108

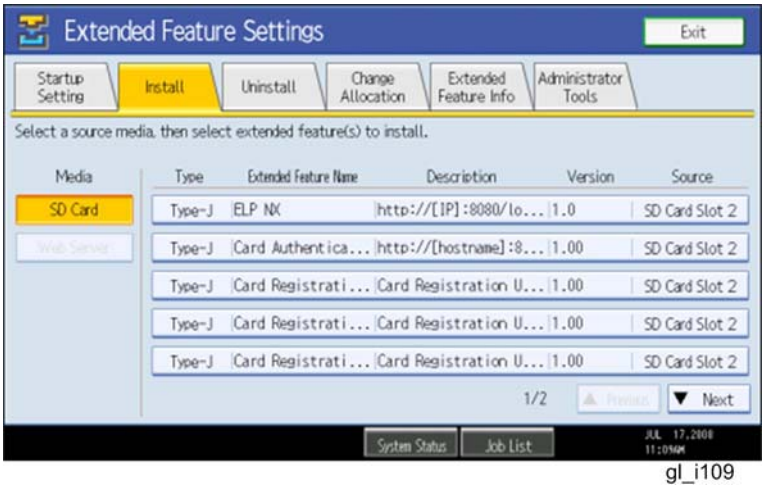
19. Check if the displayed SDK application name is correct.

Note

If the displayed SDK application is not what you want to install, check the contents of the VM card and retry this installation.

20. Press "OK" to complete this installation.

Note
Install the following applications from the SD card in the service slot with the operation panel; exactly which applications to install will depend on the customer's circumstances. ▪ Card Authentication Package ▪ Enhanced Locked Print NX Application ▪ Card Registration Tool for CAP



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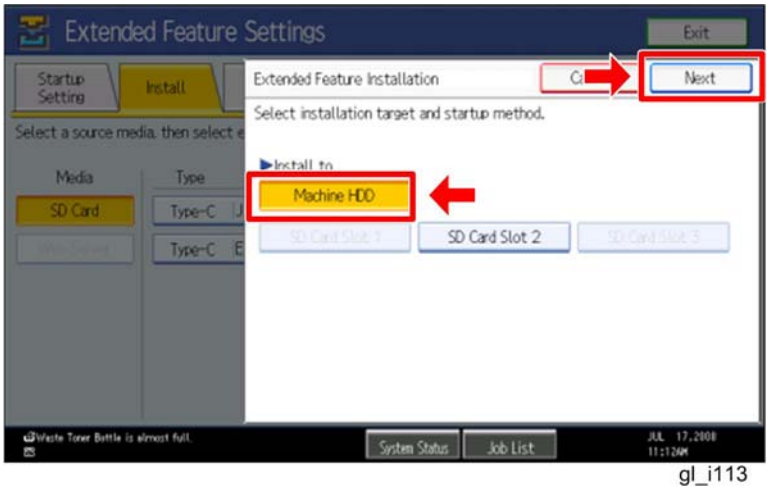
21. Press the "Enhanced Locked Print NX Filter" bar in the display shown above.



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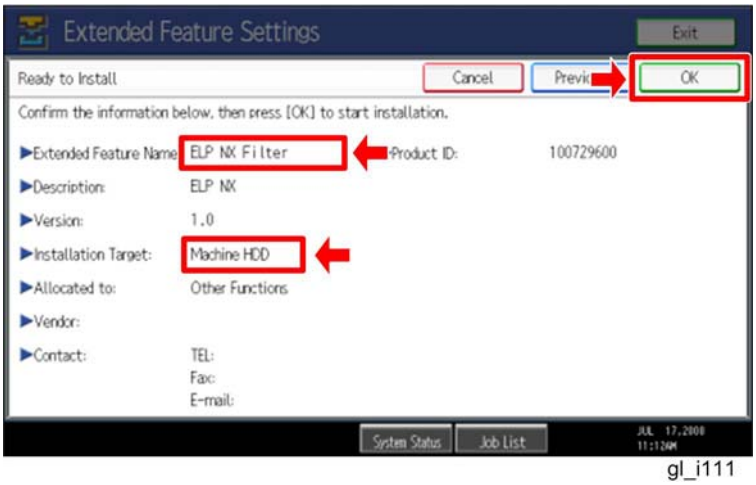
22. Press "Machine HDD", and then press "Next".



gl_i111

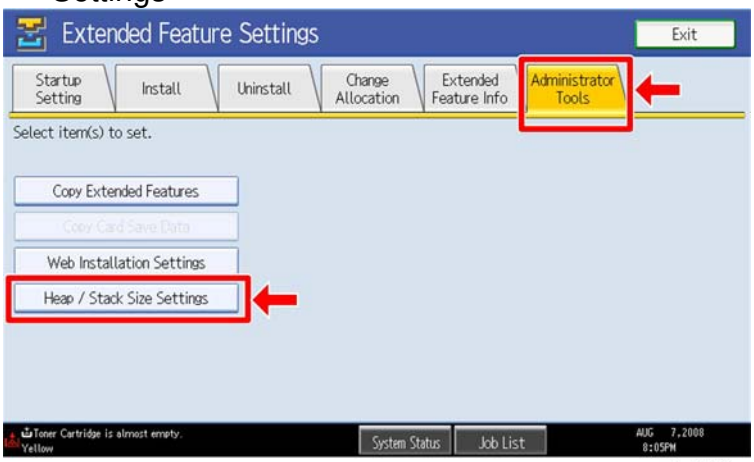
23. Check if the displayed SDK application name is correct and "Machine HDD" is selected as the installation target.

Note

If the displayed SDK application is not what you want to install, check the contents of the VM card and retry this installation.

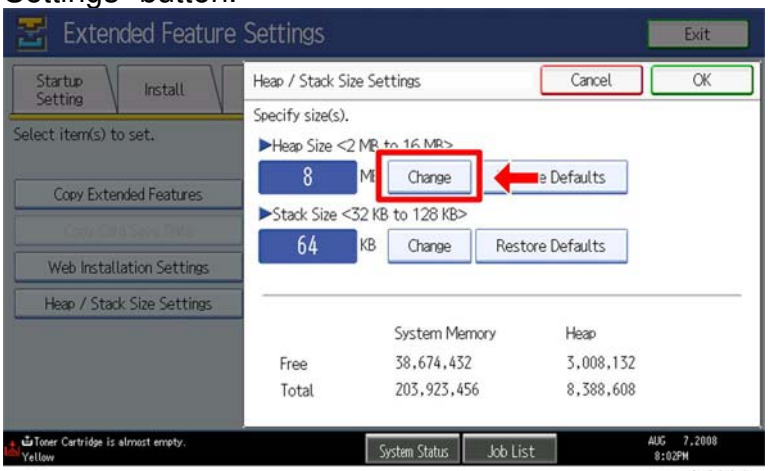
24. Press "OK" to complete this installation.

25. Allocate the Function key (on the operation panel) for the Java VM applications if the customer wants to use a key other than "Other Functions" (default).
26. Enter the "Extended Features Settings".
    - "User Tools/Counter" > "Extended Features Settings" > "Extended Features Settings"



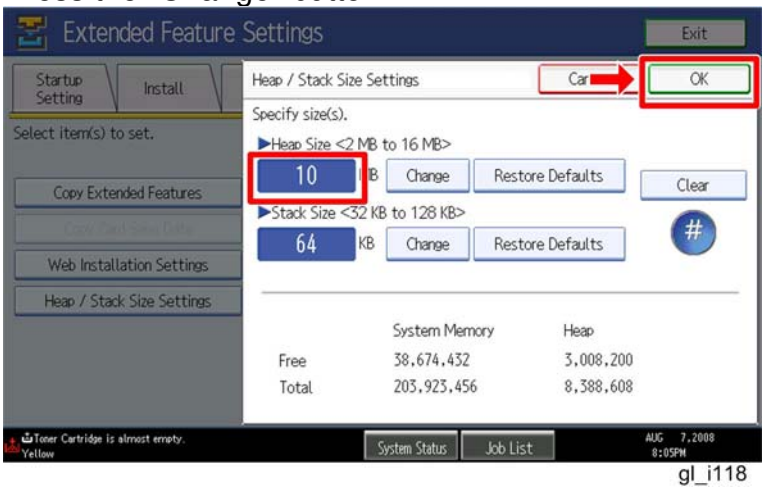
gl_i116

27. Press the "Administrator Tools" tab, and then press the "Heap/ Stack Size Settings" button.



gl_i117

28. Press the "Change" button.



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29. Input an appropriate value (see the table below) with the numeric keys on the operation panel, and then press the "# (Enter)" key.
    Required heap size for the "Copy Extended Feature" depends on a combination of installed applications. For details, refer to the table below.

CAP	ELP-NX	GlobalScan NX	Required Heap Size
Yes	-	-	8 MB
Yes	Yes	-	16 MB
Yes	Yes	Yes	16 MB
Yes	-	Yes	16 MB

30. Press the "OK" button to return to the previous screen.
31. Press the "User Tools/Counter" key to exit the UP mode.
32. Turn the target machine off and on.

"Working with the PC"

33. Activate the "Card Authentication Package" and "Enhanced Locked Print" (if it is installed) with the Remote Manager.

Note

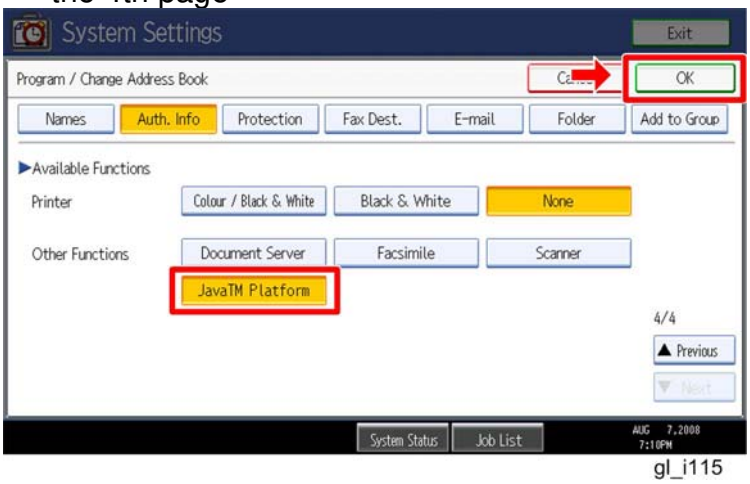
- For details, see "DSDK Application Installation" in the "Embedded Software Remote Manager Installation/Activation Guide".

The following steps from 34 to 38 should be done by a machine administrator.

34. Configure the card reader settings with the Card Authentication Package Web UI.
35. Turn the target machine off and on.

"Working with the Machine"

36. Enable "Java TM Platform" for each user with the Address Book Manager.
    - "User Tools/Setting" > "System Settings" > Administrator Tools" > Address Book Management" > select a user icon > "Auth. Info" > "Other Functions" on the 4th page



gl_i115

37. Set the Auto Off Timer to “5 minutes”.
38. Check if the card reader works normally.
    - Press the "Other Function" key for "SDK application" on the operation panel.
    - Select "Card Registration Tool for CAP"
    - Press "Obtain Card ID" on the LCD. After the "Set the card to register" message appears, hold the card over the card reader.
    - Check to see that the card ID is displayed on the LCD of the target machine. (If the card ID is not displayed, the card may not be available. In that case, register the card ID.)

Note

For details about steps from 34 to 38, see the operation instructions for "Setting Up the Card Reader".

The following step 39 should be done by a field service representative.

39. Uninstall the "Card Registration Tool" with the operation panel if the customer wants to delete it.

Installation of Card Authentication Package for LP and 4-line LCD Models

"Working with the Machine"

Note

- Make sure to turn off the Auto Off Timer. If the timer is left on, the machine will enter Auto Off Mode while the installation is in progress, causing the installation to fail.

1. Install a card reader device in a suitable location.
2. Connect the USB cable from the card reader device to the USB slot of the target machine.

Note

- The position of the USB slot may vary depending on the machine.

3. Secure the cable clamp to the USB slot.

Note

The procedure for the card reader installation depends on the machine. For details, see “USB Connection of the Card Reader” in the “Appendix” section.

4. Install the VM card in the service slot of the target machine.
5. Turn on the target machine.
6. Turn off the Auto Off Timer.

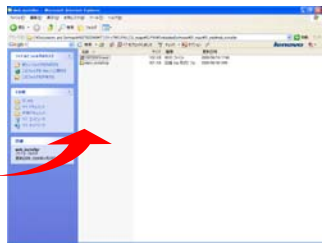
"Working with the PC"

7. Prepare the applications related to the "Card Authentication Package" and “Enhanced Locked Print NX Package” on your PC.
8. Unzip the zip file for the "Card Authentication Package" and “Enhanced Locked Print NX Package”.
9. Open the "readme.html" from each unzipped file.

<CAP>

RICOH:

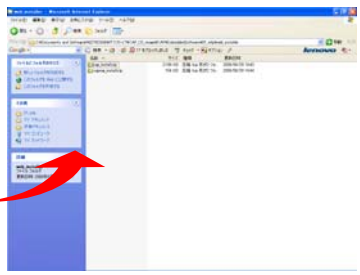
Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B Aficio MP 4000 / 4000B / 5000 / 5000B Aficio MP C2050 / C2550	sd_image	remote_installer
Aficio MP C6000 / C7500 Aficio MP C2800 / C3300 Aficio MP C4000 / C5000 Aficio MP 6001 / 7001 / 8001 / 9001	sd_image	remote_installer
Aficio MP 171	sd_image	remote_installer
Aficio SP 8200DN Aficio SP C420DN	sd_image	remote_installer
Aficio SP C820DN / C821DN	sd_image	remote_installer



<ELPNX>

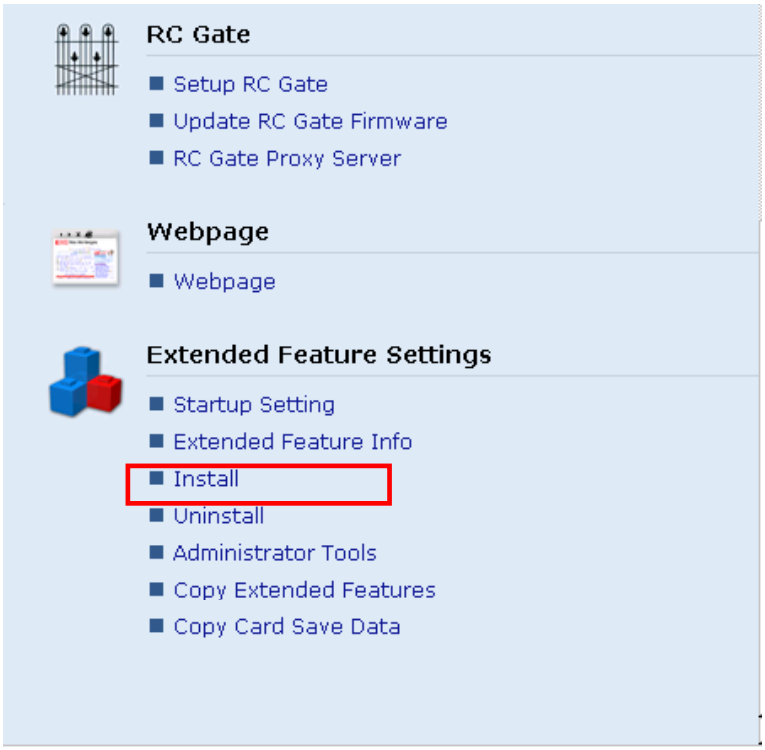
RICOH:

Device Name	SD Image	Remote Install Image
Aficio MP 2550 / 2550B / 3350 / 3350B Aficio MP 4000 / 4000B / 5000 / 5000B Aficio MP C2050 / C2550	sd_image	remote_installer
Aficio MP C6000 / C7500 Aficio MP C2800 / C3300 Aficio MP C4000 / C5000 Aficio MP 6001 / 7001 / 8001 / 9001	sd_image	remote_installer
Aficio MP 171	sd_image	remote_installer
Aficio SP 8200DN Aficio SP C420DN	sd_image	remote_installer
Aficio SP C820DN / C821DN	sd_image	remote_installer

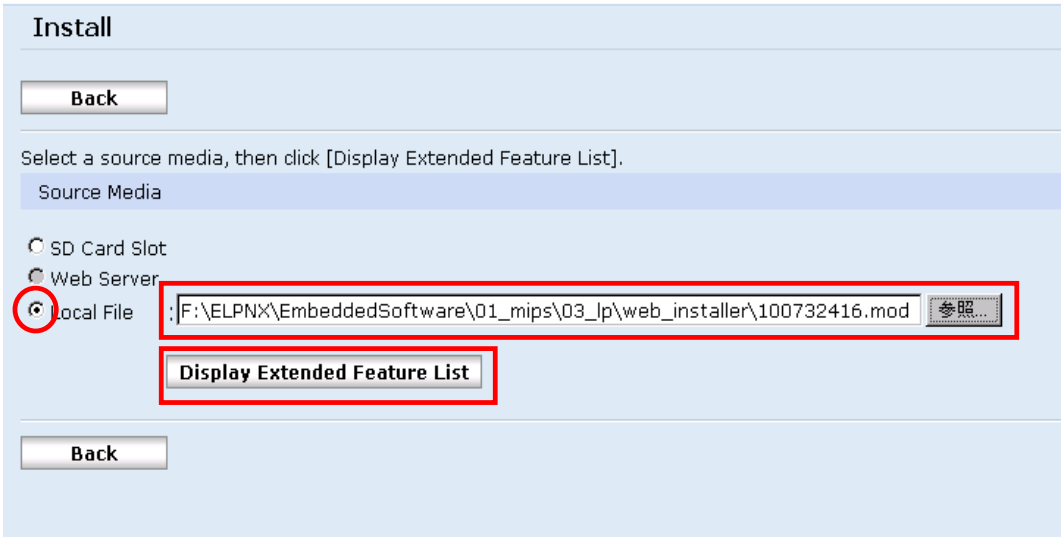


10. Click the “remote installer” of the target machine
11. Copy the zip file of each application on your PC
12. Run the Web Image Monitor for the target machine.
13. Ask a machine administrator to login to the target machine with the login name and password of the machine’s administrator.

14. Press “Configuration” in the main display.



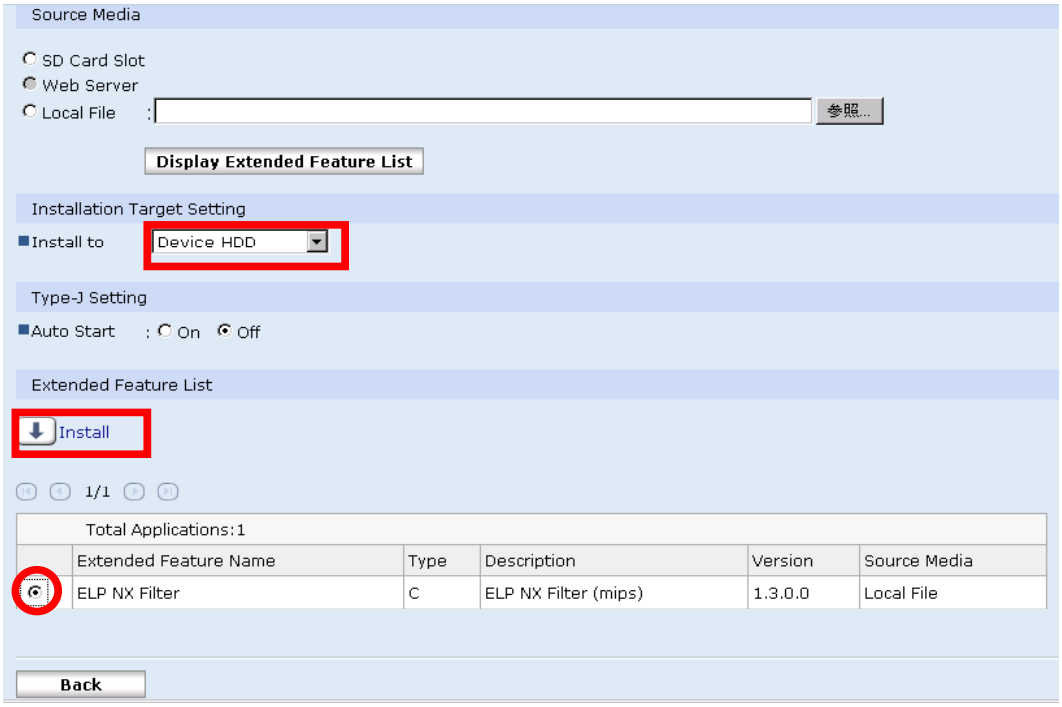
15. Press "Install”.



16. Select "Local File" button and select a SDK application file that you want to install then press "Display Extended Feature List"

Note

Make sure that the correct application file name and folder.

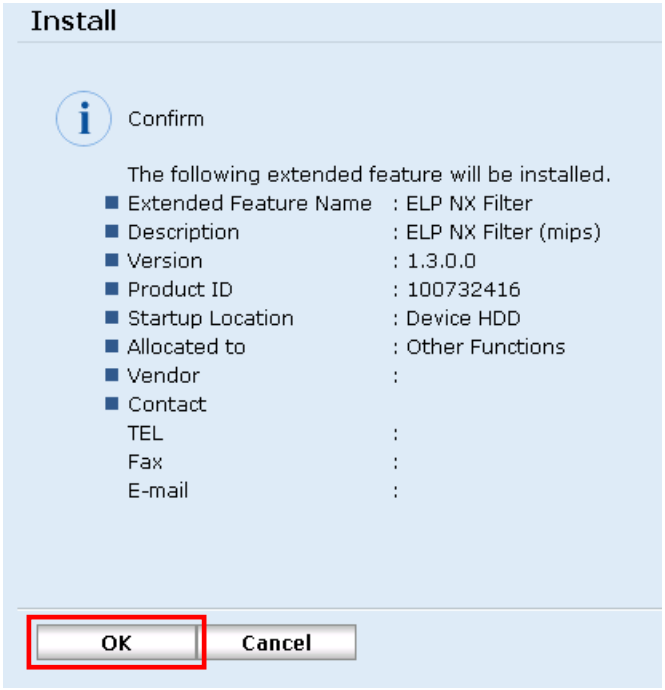


17. Select the destination of the installed SDK application.

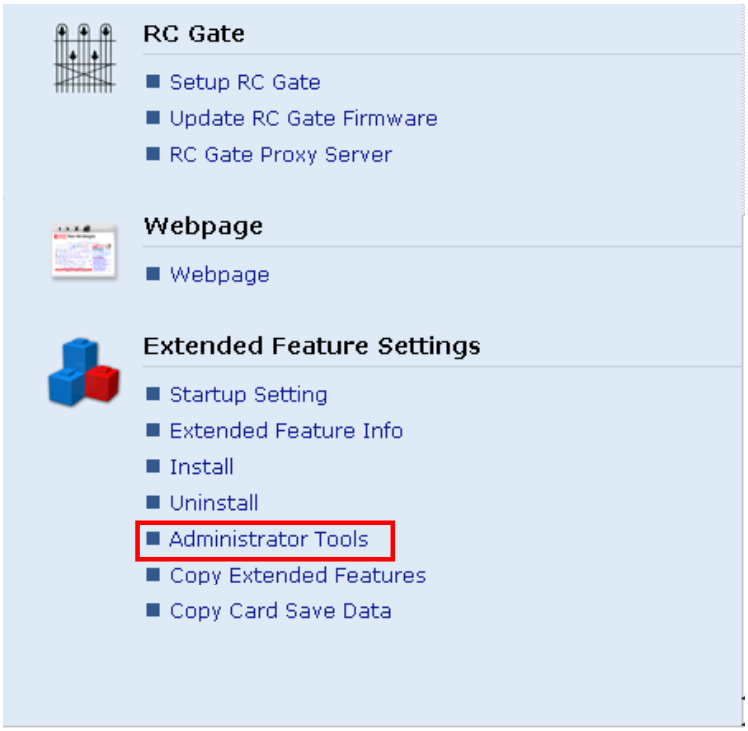
The following table shows the destination of the installed SDK application.

Application	Destination
Card Authentication Package	SD Card
Card Registration Tool for CAP (4-line LCD model only)	SD Card
Enhanced Locked Print NX Application	SD Card
Enhanced Locked Print NX Filter	HDD

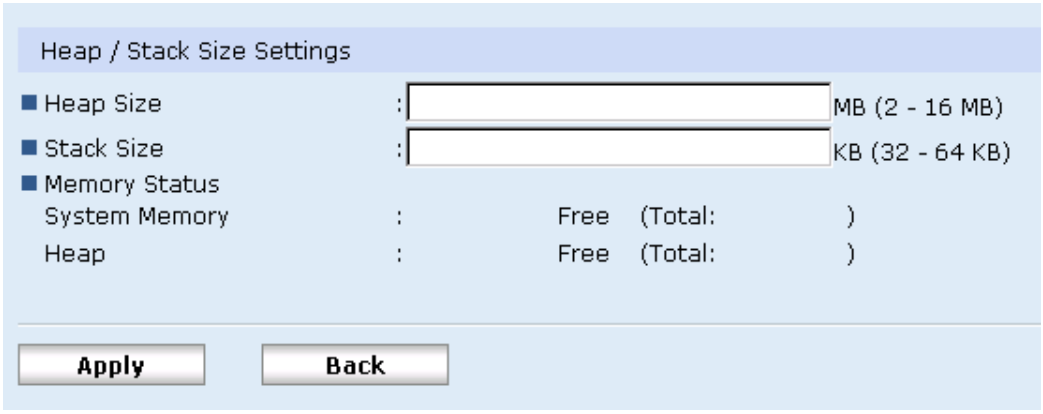
18. Press the radio button of the SDK application that you want to install.
19. Press “Install”.



20. Check the information for the installed SDK application.
21. Press “OK” to complete this installation.
22. If you want to install other SDK application, perform from step 16.



23. Press "Administrator Tools" in the mail view.



24. Input an appropriate value of the Heap size (see the table below) then press "Apply".

    Required heap size for the "Copy Extended Feature" depends on a combination of installed applications. For details, refer to the table below.

CAP	ELP-NX	GlobalScan NX	Required Heap Size
Yes	-	-	8 MB
Yes	Yes	-	16 MB
Yes	Yes	Yes	16 MB
Yes	-	Yes	16 MB

25. Turn the target machine off and on.

"Working with the PC"

26. Activate the "Card Authentication Package" and "Enhanced Locked Print" (if it is installed) with the Remote Manager.

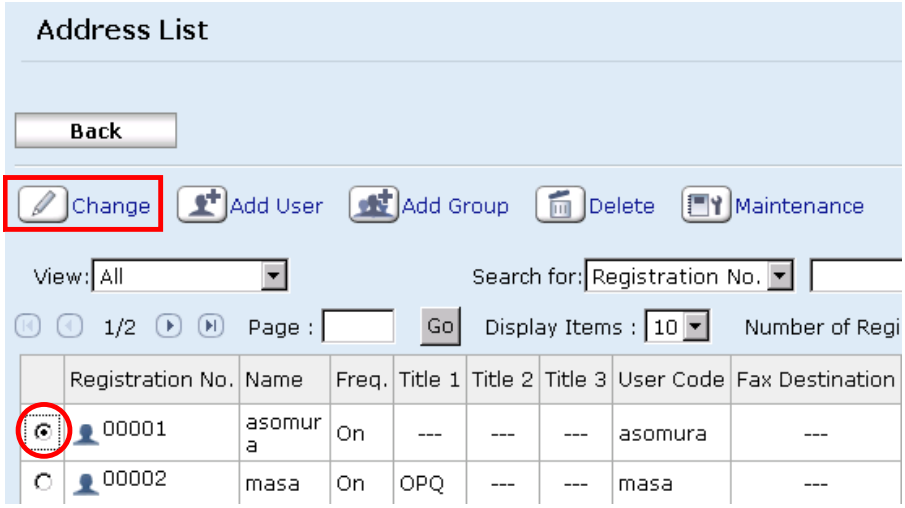
Note

- For details, see "DSDK Application Installation" in the "Embedded Software Remote Manager Installation/Activation Guide".

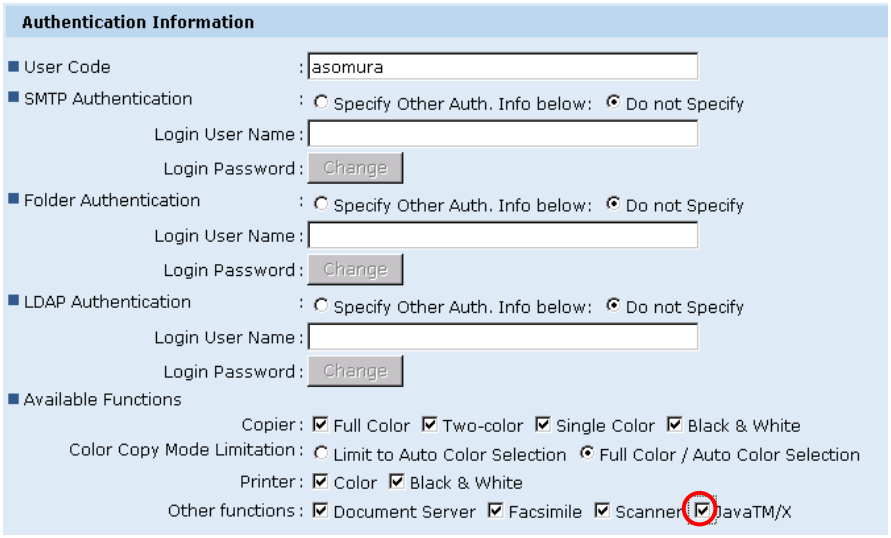
The following steps from 27 to 35 should be done by a machine administrator.

27. Configure the card reader settings with the Card Authentication Package Web UI.
28. Run the Web Image monitor for the target machine.
29. Login to the target machine with the login name and password of the machine's administrator.

30. Select “Address Book”



31. Select Registration No. and press “Change”.



32. Select “JavaTM/X” and press “OK”.
33. Turn the target machine off and on.
34. Set the Auto Off Timer to “5 minutes”.

"Working with the Machine"

The following steps 35 and 36 are only for 4-line LCD models.

35. Check if the card reader works normally.
    - Press the "Other Function" key for "SDK application" on the operation panel.
    - Select "Card Registration Tool for CAP".
    - Press "Obtain Card ID" on the LCD. After the "Set the card to register" message appears, hold the card over the card reader.
    - Check to see that the card ID is displayed on the LCD of the target machine. (If the card ID is not displayed, the card may not be available. In that case, register the card ID.)

Note

For details about step 27 to 36 see the operation instructions for "Setting Up the Card Reader".

The following step 36 should be done by a field service representative.

36. Uninstall the "Card Registration Tool" with the operation panel if the customer wants to delete it.

Uninstallation

Uninstalling Card Authentication Package

1. Turn on the target machine.
2. Deactivate "Card Authentication Package" and "Enhanced Locked Print-NX Application" with the Remote Manager. For details, see "Deactivation" in the "Embedded Software Remote Manager Installation/Activation Guide".

Important

Before uninstalling activated SDK applications, deactivation must be done. Otherwise, the product key will be wasted.

Step 3 is required only for MFP models

3. Enter the User Tools, and then select "Off" in the "Enhanced Authentication Management" (Administrator Tools > Enhanced Authentication).

Note

If the SDK applications are uninstalled from the target machine with "Enhanced Authentication" turned on, SC636 is issued. In that case, enter the SP mode and change the bit 0 setting of SP5401-160 (**SSP**: Super Service Program) to "0".

4. Uninstall the SDK applications which you want to remove, except for the Java VM application, with the operation panel or Web Image Monitor.
5. Turn the target machine off and on.
6. Uninstall the Java VM application with the operation panel or Web Image Monitor.
7. Change the following SP settings.
   - Bit 0 of SP5401-160 (SSP: Super Service Program) must be set to “0”.
   - All bits of SP5401-162 (Extend Certification Detail) must be set to “0”.
   - Bit 0 of SP5401-230 (Customized Authentication) must be set to “0”.
8. Turn off the target machine, and then remove the VM card from the target machine.

Remote Updating Procedure

Updating Card Authentication Package

Important

- First update the Java VM Platform if the Java VM Platform and Card Authentication Package are supposed to be updated at the same time.
- Make sure that the IC Card Reader setting is not set to “KeyStore” and the IC card reader is not connected. This is because under these conditions, CAP deactivation/un-install may not work properly on some models.

Updating from Ver.1.2.x to Ver.1.3.x or from Ver.1.3.x (without the VM update) to Ver.1.4.x

1. Ask a machine administrator to disable the Card Authentication Package with the operation panel or Web Image Monitor.
2. Launch the Remote Manager.
3. Add a Card Authentication Package for updating in the Remote Manager

Note

See the "Adding a Card Authentication Package in the "Remote Manager" sub section of the "Card Authentication Package Installation" section of the Remote Manager Operation Guide.

4. Install the Card Authentication Package for updating in the target machine

Note

See the "Installing the Card Authentication Package in the Target Machine" sub section of the "Card Authentication Package Installation" section of the Remote Manager Operation Guide.

5. Turn off and on the target machine.
6. Ask a machine administrator to check if the version of the Card Authentication Package is updated and if the installed Card Authentication Package is "Starting Up"

Updating from Ver.1.3.x (with the VM update) to Ver.1.4.x

1. Remove the IC card reader from the target machine.
2. Export the system configuration file.
3. Select Enhanced Authentication Management to “NO”.
4. Deactivate the Card Authentication Package using the Remote Manager.
5. Uninstall Card Authentication Package v1.3.x.x using the Remote Manager.
6. Turn off the target machine.
7. Update the VM card.
8. Turn on the target machine.
9. Install Card Authentication Package v1.4.x.x using the Remote Manager.

   Important

   Make sure that the heap size is set to the appropriate value. To set the heap size, see Step 29 of the CAP installation procedure on pg. 11 above.
10. Activate “Card Authentication Package” using the Remote Manager.
11. Turn off and on the target machine.
12. Import the system configuration file.
13. Turn off and connect the IC card reader to the target machine,.
14. Turn on the target machine.

Updating Enhanced Locked Print NX Application and Filter

Updating from Ver.1.2.x to Ver.1.3.x

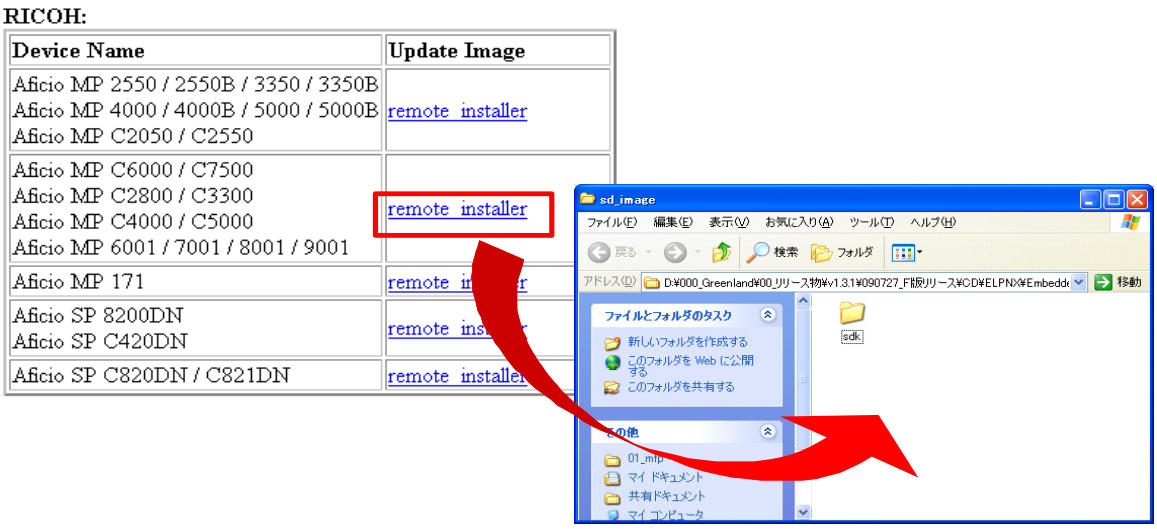
Note

- It is not possible to update directly from Ver1.**2**.x to Ver1.**4**.x.
- To do this procedure, you will need the product key of the Enhanced Locked Print NX Application currently installed.
- Make sure to turn off the Auto Off Timer. If the timer is left on, the machine will enter Auto Off Mode while the installation is in progress, causing the installation to fail.

Enhanced Locked Print NX Application

For MFP, LP, and 4-line LCD models:

1. Prepare the applications related to the "Enhanced Locked Print NX Package" on your PC.
2. Unzip the zip file of the "Enhanced Locked Print NX Package" on your PC.
3. Open the "readme.html" from the unzipped file.



4. Click the “remote installer” of the target machine
5. Copy the zip file on your PC.
6. Login to the ELP Administrative Tool.
7. Export the system configuration file.

Note

See the “Exporting/Importing the System Configuration File” section of the "ELP Administrator’s Guide.”

8. Ask a machine administrator to disable the ELP NX application using Web Image Monitor.
9. Uninstall the ELP NX Filter using Web Image Monitor
10. Install the ELP NX Filter using Web Image Monitor.

Important

When the ELP NX Filter is uninstalled, all print jobs stored in memory are erased.

11. Deactivate the product license using the Remote Manager.
12. Uninstall the ELP NX Application using the Remote Manager.
13. Install the new version (the update) of the ELP NX Application using Remote Manager.
14. Reissue the product license using Remote Manager.
15. Store the obtained product license in the target machine using Remote Manager.

Note

For details about steps from 11 to 15, see the “Uninstallation Procedure” section of the "Remote Manager Operation Guide.”

16. Turn the main power of the target machine OFF/ON.
17. Login to the ELP Administrative Tool.
18. Import the system configuration file.

Note

See the “Exporting/Importing the System Configuration File” section of the "ELP Administrator’s Guide.”

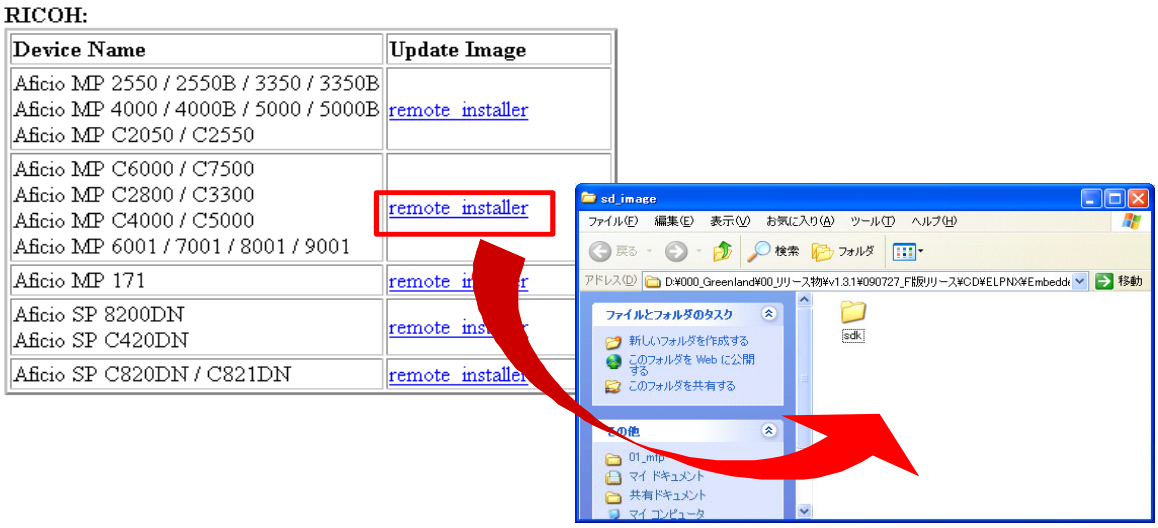
19. Turn the main power of the target machine OFF/ON.
20. Ask a machine administrator to confirm that the ELP NX application has been successfully updated to the target version, and that the application is operating normally.

Updating from Ver.1.3.x to Ver.1.4.x

Enhanced Locked Print NX Application

For MFP, LP, and 4-line LCD models:

1. Make sure the applications necessary to use the "Enhanced Locked Print NX Package" are running on the PC.
2. Unzip the zip file for the "Enhanced Locked Print NX Package".
3. Open the "readme.html" from the unzipped file.



4. Click the “remote installer” link for the target machine.
5. Copy the zip file onto your PC.
6. Install the ELP NX Filter using Web Image Monitor.

Note

It is not necessary to uninstall the ELP NX Filter v1.3.x.x.

7. Install the new version of the ELP NX Application using the Remote Manager.
8. Turn the main power of the target machine OFF/ON.
9. Ask a machine administrator to confirm that the ELP NX application has been successfully updated to the target version, and that the application is operating normally.

CAP Card Registration Tool (Cardreg)

Note

- Make sure that the Cardreg version is the same as the CAP/ELP version.
- Make sure to turn off the Auto Off Timer. If the timer is left on, the machine will enter Auto Off Mode while the installation is in progress, causing the installation to fail.

Updating from Ver.1.2.x to Ver.1.3.x

1. Ask a machine administrator to disable the Cardreg using the operation panel or web Image Monitor.
2. Uninstall the Cardreg using the Remote Manager or WebImageMonitor.
3. Install the Cardreg (capreg_install.zip) using the Remote Manager or WebImageMonitor.
4. Turn the target machine OFF/ON.

Updating from Ver.1.3.x to Ver.1.4.x

1. Ask a machine administrator to disable the Cardreg using the operation panel or Web Image Monitor.
2. Install the Cardreg (capreg_upadte.zip) using the Remote Manager or WebImageMonitor.
3. Turn the target machine OFF/ON.

Appendix

Matrix of Available Installation/Activation Tools

For MFP models:

	Installation Destination	Action	WIM	Remote Manager	SD Card
CAP	Target Machine	Installation	Yes	Yes	Yes
		Activation	No	Yes	No
		Version Up	Yes	Yes	No
		Activation	-	-	-
CAP-ES	Server	Installation	No	No	No
		Activation	No	No	No
ELP-NX APP	Target Machine	Installation	Yes	Yes	Yes
		Activation	No	Yes	No
		Version Up	Yes	Yes	Yes
		Activation	No	Yes	No
ELP-NX Filter	Target Machine	Installation	Yes	No	Yes
		Activation	-	-	-
		Version Up	Yes	No	No
		Activation	-	-	-
Cardreg	Target Machine	Installation	Yes	No	Yes
		Activation	-	-	-

For LP and 4-Line LCD models:

	Installation Destination	Action	WIM	Remote Manager	SD Card
CAP	Target Machine	Installation	Yes	Yes	No
		Activation	No	Yes	No
		Version Up	Yes	Yes	No
		Activation	-	-	-
CAP-ES	Server	Installation	No	No	No
		Activation	No	No	No
ELP-NX APP	Target Machine	Installation	Yes	Yes	No
		Activation	No	Yes	No
		Version Up	Yes	Yes	No
		Activation	No	Yes	No
ELP-NX Filter	Target Machine	Installation	Yes	No	No
		Activation	-	-	-
		Version Up	Yes	No	No
		Activation	-	-	-
Cardreg	Target Machine	Installation	Yes	No	No
		Activation	-	-	-

- CAP: Card Authentication Package Embedded Type
- CAP-ES: Card Authentication Package Server Type
- ELP-NX APP: Enhanced Locked Print - NX Application
- ELP-NX Filter: Enhanced Locked Print - NX Filter
- Cardreg: Card Registration Tool
- WIM: Web Image Monitor
- -: Not necessary

Installation File Types

SD Card

- Unzipped folder of each application

Remote Manager

- Zip file of each application

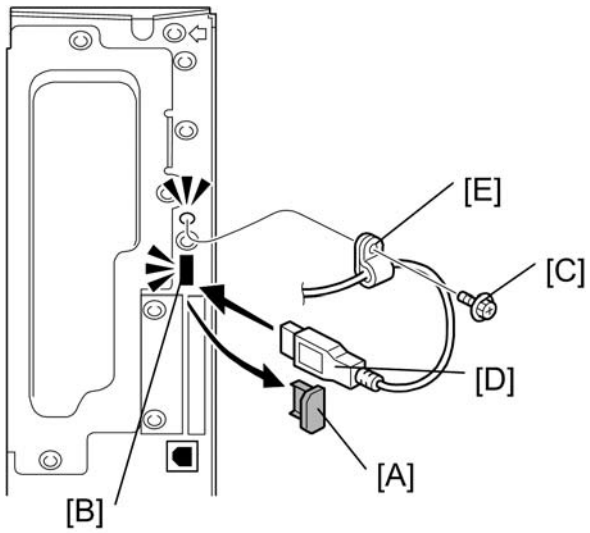
Web Image Monitor

- All applications except ELP-NX Filter: Zip file (same as RM)
- ELP-NX Filter: Unzipped folder in the /sdk/webinstaller folder.

USB Connection of the Card Reader

USB logo certification requires fixing a USB cable to a USB slot of the copier so that no other device can be connected to the USB slot of the copier.

For AL-C1 (D009/D011/D012/D013)



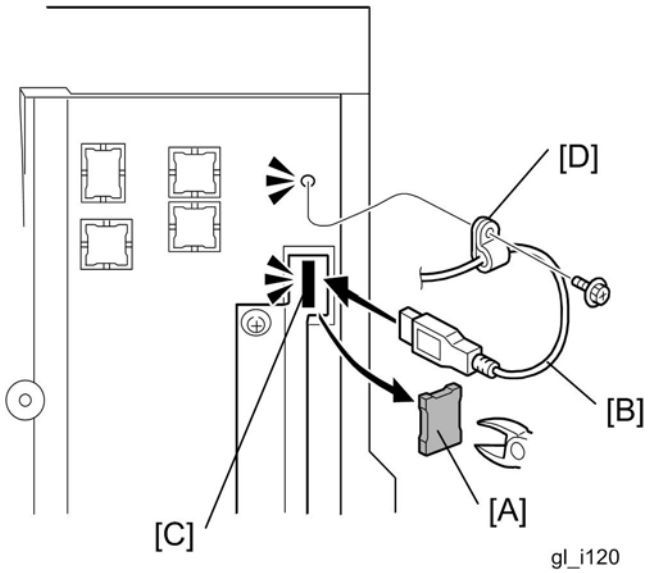
gl_i119

1. Remove the cap [A] of the USB slot [B] on the controller left bracket
2. Remove the screw [C] on the controller bracket.
3. Insert the USB cable [D] into the USB slot [B].
4. Attach the clamp [E] to the USB cable, and then attach the clamp to the controller left cover (🔩 x 1: This is the screw removed in step 2).

Note

Recommended clamp: P/N: 11050323

For R-C5 (D017/D018/D019/D020)



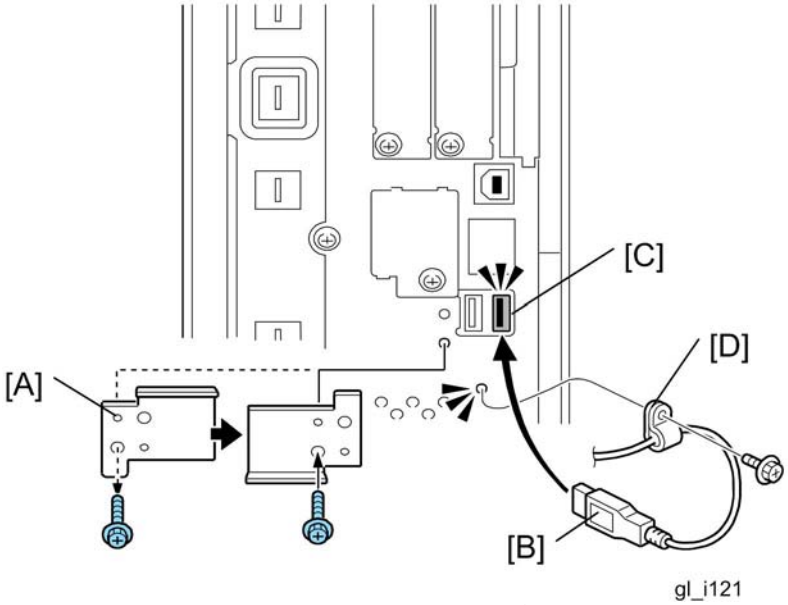
gl_i120

1. Cut off the piece [A] of the controller plastic cover.
2. Insert the USB cable [B] into the USB slot [C].
3. Attach the clamp [D] to the USB cable, and then attach the clamp to the plastic cover (🔩 x 1).

Note

Recommended clamp; P/N: 11050323
Recommended screw; P/N: 04503008N

For V-C2 (D014/D015)



1. Remove the USB slot cover [A] (🔩 x 1).
2. Turn the USB slot cover 180 degrees, and then reattach it to the controller unit.
3. Insert the USB cable [B] into the USB slot [C].
4. Attach the clamp [D] to the USB cable, and then attach the clamp to the controller unit (🔩 x 1: This is the screw removed in step 1).

Note

Recommended clamp: P/N: 11050323