

Version Upgrade Tool Manual

[For Models Installing Flash Memory]

Version 1.06



Important

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Overview

SDK/J version upgrading procedure for the models supporting flash memory differs from the upgrading procedure for other models. Since SDK/J is installed to flash memory for these models, version upgrading is done by inserting the SD card to the actual machine instead of by using the SD card writer connected to computer.

During the upgrading process, the machine operation panel displays the banner messages to notify the progress of upgrading. When upgrading fails, the log of the upgrading process is output to the SD card so that the cause and the solution for the failure can be identified.

Applicable Models

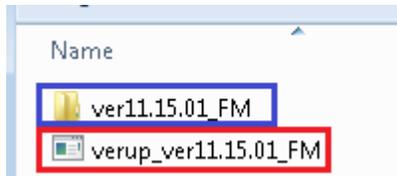
Models supporting flash memory

Procedure

1. Creating SD Card

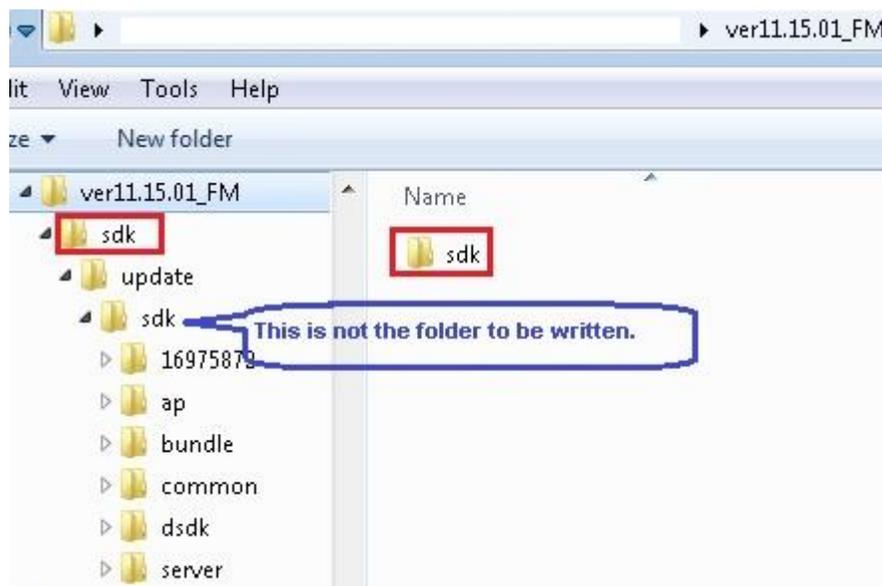
1-1 Double-click the version upgrade tool (self-extracting file):

When double-clicking the file shown inside the red box, the file shown inside the blue box is created.



1-2 Write the sdk folder which exists within the created folder onto SD card:

Get an empty SD card. Do not create any folders. Write the “sdk” folder shown inside the red box to the root of the empty SD card. Note that there is another “sdk” folder in lower layer, but this is not the folder to be written.



Notes on writing sdk folder onto SD card

- The SD card must be empty.
- Do not save other files (e.g. fwu files for other modules) with the sdk folder.
- The size of the sdk folder is about 100 MB. Confirm that the SD card has enough space. Maximum storage of the SD card is 2GB.
- It requires some time to complete writing the sdk folder onto an SD card. Do not eject the SD card until writing is complete. Before ejecting the card, always confirm that the writing process has completed.

2. Version Upgrading Procedure

2-0 Preparation

1. Confirm that SDK/J platform is correctly running, and there is no error occurring to a machine.
2. Clear auto start settings of all ESA applications.

2-1. Set the created SD card to the machine and turn the machine's main power on.

2-2. Upgrading process starts a short while after the machine's main power is turned on.

The panel displays the banner message "Updating SDK/J..."

2-3. Wait for a short while after the upgrading is done. The panel displays a message to notify that file upgrading has been completed.

When file upgrading succeeds	<ul style="list-style-type: none"> - The banner message "Update SDK/J done SUCCESS" appears. - In case of SDK/J version 11.29 and 12.12 or later, the banner message "Update SDK/J done SUCCESS(xx.yy.zz)" appears. - In case of SDK/J version 12.27 or later (2015 spring or later models), the banner message "Update SDK/J done SUCCESS(xx.yy.zz),restore SUCCESS" or "Update SDK/J done SUCCESS(xx.yy.zz),restore FAIL" appears. <p>* (xx.yy.zz) indicates SDK/J version after update.</p>
When file upgrading fails	<p>The banner message "Update SDK/J done FAIL" appears.</p> <p>After turning off the main power, eject the SD card from the machine and follow the solutions provided in section "4. How To Handle Version Upgrading Failures."</p>

2-4. When file upgrading succeeds and the message "Update SDK/J done SUCCESS" appears, wait for about 3 minutes and check if Java VM starts up correctly.

In case of SDK/J version 11.29 and 12.12 or later, that is appearing banner message "Update SDK/J done SUCCESS(xx.yy.zz)", Java VM start-up can be checked without waiting.

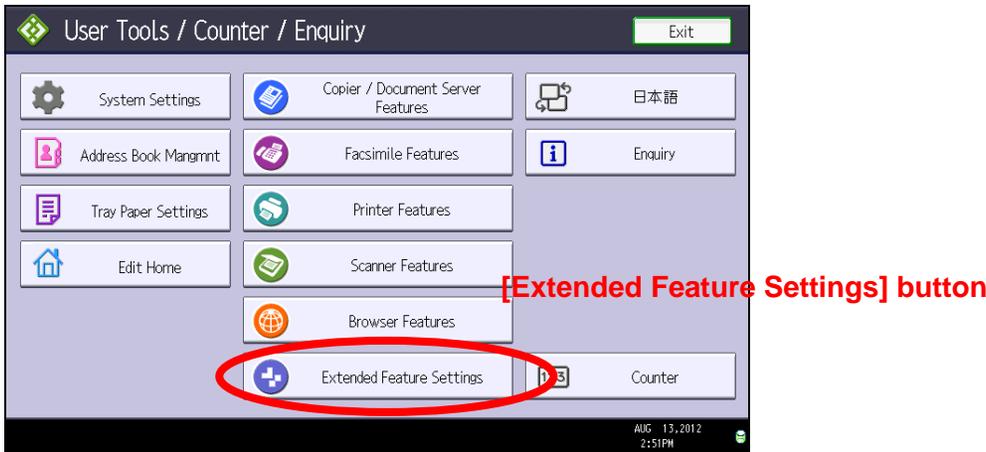
How to check Java VM startup:

2-4-1. Press the [User Tools/Counter] key on the control panel.

The "User Tools / Counter / Enquiry" screen appears.



2-4-2. Press the [Extended Feature Settings] button.



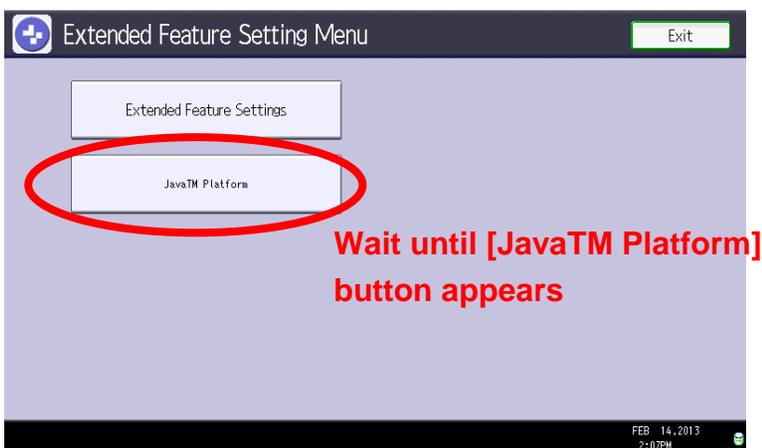
2-4-3. When Java VM startup is completed, the [JavaTM Platform] button appears.

If [JavaTM Platform] button does not appear:

1. Press the [Exit] button once and go back to the "User Tools / Counter / Enquiry" screen.
2. Wait for about 20-30 seconds, and then press the [Extended Feature Settings] button again as shown in step 2-4-2.

Repeat the steps 1 and 2 for about 2 to 3 minutes. If the [JavaTM Platform] button still does not appear, contact us for inquiry.

If the [JavaTM Platform] button appears, version upgrading has completed successfully. Press the [Extended Feature Settings] button on the screen and check the version of Java. After checking the version, exit the Extended Feature Settings screen.



2-5. Turn off the main power and eject the SD card. The banner keeps displaying a message until the main power is

turned off.

When the main power is turned off and the power is turned on the next time, no message appears on the banner.

Important: Do not turn the machine power off during the version upgrading process.

Important Notes on Version Upgrading

1. When creating an SD card for upgrading, follow the information indicated under "Notes on writing sdk folder onto SD card."
2. Always follow the version upgrading procedure given in this document.
SDK/J platform cannot be backed up.
In case SDK/J platform data corrupts, SDK/J platform may not be recoverable.
3. Check SDK/J behaviors before upgrading.
Confirm that SDK/J platform is correctly running and that there is no error generating to the machine.
4. Clear auto start setting of ESA applications.
If auto start is enabled, an unexpected error may occur when rebooting the machine after upgrade.
Before upgrading, always disable auto start of applications that are already installed.
5. Do not write data to SD card during version upgrading process.
If content of SD card changes during upgrading process, an unexpected error may occur.
6. Do not turn off the power during version upgrading process.
This may cause data corruption in SDK/J platform.
7. Ensure that the machine's main power is turned off and then on (machine restart).
To restart from Web Image Monitor, click "Reset Device" on Home screen.
To restart on the actual machine, turn the Main Power switch off and then on.
8. As to models of 2015 spring or later:
When SDK/J is upgraded to version 12.27 or later from version 12.26 previous, the machine operation panel displays the banner message "Update SDK/J done SUCCESS(xx.yy.zz),restore FAIL".
* (xx.yy.zz) indicates SDK/J version.
Since this is not an error message, the version upgrading is successfully completed and JavaVM operates correctly.
However, the setting value of JavaVM is not taken over in this case, so the JavaVM must be set again in a conventional manner.

3. How to Handle Version Upgrading Failures

The logs of version upgrading processes are output to the SD card as a text file (\sdk\update\sdkjversionup.log). When version upgrading fails, after turning off the main power, eject the SD card from the machine and check the cause of the failure in the log.

The following is an example of a log for a successful case.

File content	Description
script file = /mnt/sd0/sdk/update/bootscript	Boot script path
2012/08/22 17:57:47 start	Start of boot script process
2012/08/22 17:59:47 end SUCCESS	End of boot script process & result

The following is a log for an error case.

File content	Description
script file = /mnt/sd0/sdk/update/bootscript	Boot script path
2012/08/22 17:57:47 start	Start of boot script process
XXXX Error	Error message(s) *
XXXX Error	
2012/08/22 17:57:57 end FAIL	End of boot script process & result

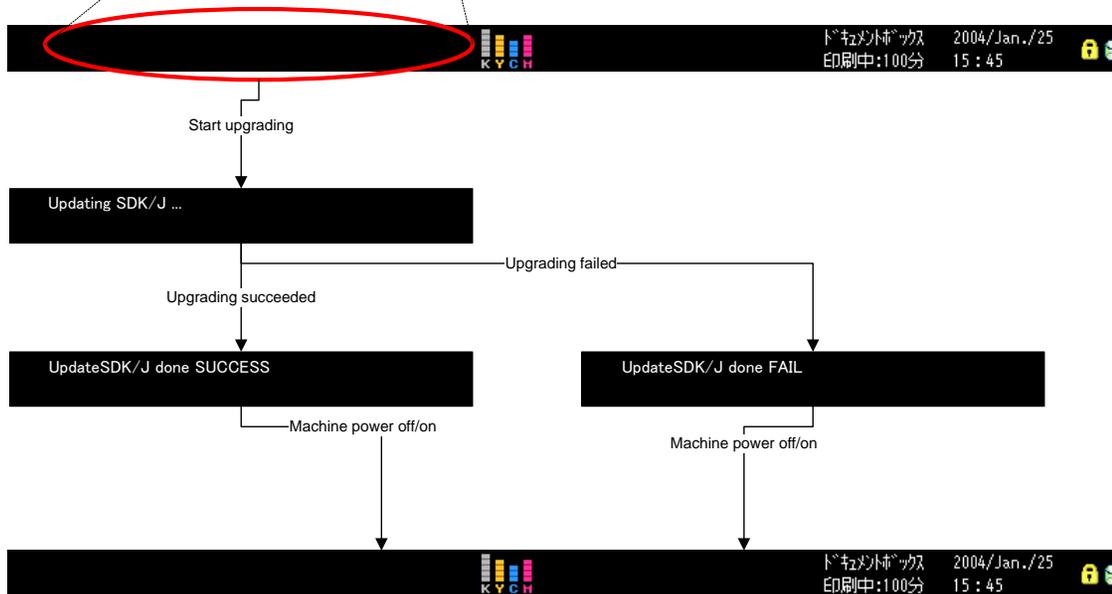
* The following describes the solutions for the cases error messages (XXXX Error) are output to the log.

Category	Error message output to the log	Solution
Incorrect tool used for version upgrading	PIECEMARK Error,machine=XXXXX	The tool used for version upgrading does not support the model of the machine. Use the tool which supports the target model and recreate the SD card.
SD card is invalid	<p>pastePut() - error : The file of the copy origin is not found Put Error!</p> <p>pasteCopy() - error : The file of the copy origin is not found. Copy Error!</p>	Files within the tool cannot be found. Recreate the SD card.
No available space left on the machine	<p>File name xx error,No space left on device pastePut() - error : The destination directory cannot be made. pastePut() - error : fileCopy Error. Put Error!</p> <p>File name xx error,No space left on device pasteCopy() - error : The destination directory cannot be made. pasteCopy() - error : fileCopy Error. Copy Error!</p>	Flash memory of the machine is full. Uninstall unnecessary SDK applications installed to the flash memory. If the error still occurs or if the error is unknown, please contact Ricoh.

Category	Error message output to the log	Solution
Available space on device is 10 MB or less *Applicable from 2015 spring models	Disk Full	Available flash memory of the machine is 10 MB or less. Uninstall unnecessary SDK applications installed to the flash memory. If the error still occurs or if the error is unknown, please contact Ricoh.
Other error These errors do not occur usually.	Put Error! (* Note)	*Note: The case the error messages in left column do not apply, please contact Ricoh.
	Copy Error! (*Note)	*Note: The case the error messages in left column do not apply, please contact Ricoh.
	parseDelete() - Error : file=[file name] errno=error number (*Note) Delete Error!	*Note: Check the error number of the line of parseDelete before "Delete Error!".
	errno=2	This is not considered as an error since this error message is for deleting a file directory which does not exist. If there are no other errors, version upgrading has succeeded.
	errno=5	Turn the machine's main power off and then back on, and redo version upgrade. If the error still occurs after redoing upgrade, please contact Ricoh.
	errno=12	Please contact Ricoh.
	errno=16	
	errno=1	
	errno=13	
	errno=14	
	errno=20	
	errno=21	
	errno=30	
	errno=62	
	errno=63	
	parseDelete() - error : ptoken count error Delete Error!	
	[XXXXX] is an unsupported command.	
	Version Error	

Specifications

Panel Screen Flow



Message Specifications

All messages are displayed in English regardless of the language setting of the operation panel.

- Starting/Processing version upgrading:

"Updating SDK/J..."

- Version upgrading succeeded:

"Update SDK/J done SUCCESS",

"Update SDK/J done SUCCESS,restore SUCCESS" or

"Update SDK/J done SUCCESS,restore FAIL".

- Version upgrading failed:

"Update SDK/J done FAIL"

Notes on Banner Display

In case the banner messages of applications and system are displayed with the banner messages of this upgrading tool, the messages appear in the following order:

Tool banner message > System message > Application message > Tool banner message > ... (continues)

Modification Record

Ver. 1.06 May. 10, 2016	<p><u>Additions and Modifications:</u></p> <ul style="list-style-type: none"> - Updated "Version Upgrading Procedure" (page 4). - Updated "Important Notes on Version Upgrading" (page 7). - Updated "Message Specifications" (page 11).
Ver. 1.05 Apr. 17, 2015	<p><u>Additions and Modifications:</u></p> <ul style="list-style-type: none"> - Updated "Version Upgrading Procedure" (page 4).
Ver. 1.04 Apr. 16, 2015	<p><u>Additions and Modifications:</u></p> <ul style="list-style-type: none"> - Updated "How to Handle Version Upgrading Failures" (page 8).
Ver. 1.03 Aug. 07, 2014	<p><u>Additions and Modifications:</u></p> <ul style="list-style-type: none"> - Removed "Downloading from SERES" (page 3).
Ver. 1.02 May. 13, 2014	<p><u>Additions and Modifications:</u></p> <ul style="list-style-type: none"> - Added error message types to "Other error" of error messages (page 9).
Ver. 1.01 Apr. 11, 2014	<p><u>Additions and Modifications:</u></p> <ul style="list-style-type: none"> - Added "Downloading from SERES" (page 3).- Added "Creating SD Card" (page 3). - Updated "Version Upgrading Procedure" (page 4). - Added "Important Notes on Version Upgrading" (page 7). - Updated "How to Handle Version Upgrading Failures" (page 8). - Changed the section title "Important" to "Notes on Banner Display" (page 11).
Ver. 1.00 Feb. 14, 2013	<p><u>First release</u></p>