

RICOH SmartSDK Emulator User's Manual

Version: 1.04

Important

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Introduction

Purpose of This Document

This document provides information necessary to use RICOH SmartSDK Emulator.

Terms Used In This Document

- RICOH SmartSDK

RICOH SmartSDK is the web API used for controlling Ricoh's MFP/LP from the applications displayed on SmartOperation Panel installed to MFP/LP and from the applications which run on external application servers. For example, RICOH SmartSDK enables controlling scan jobs, copy jobs, device management, and log management. For details, refer to the specification document of RICOH SmartSDK.

- RICOH SmartSDK Emulator

RICOH SmartSDK Emulator supports developing RICOH SmartSDK applications by providing the operating environment complying with the specification of RICOH SmartSDK on your computer. For information necessary to develop RICOH SmartSDK applications, refer to the specification document of RICOH SmartSDK.

- Web Browser NX

Web Browser NX is the platform which enables providing the functions of the applications installed to SmartOperation Panel, on the SmartOperation Panel installed onto Ricoh's MFP/LP. The functions can be provided by using HTML/CSS/JavaScript placed on web server, without having to install new apk. For details, refer to the start guide document of Web Browser NX.

- Web Browser NX Emulator

Web Browser NX Emulator supports development of Web Browser NX applications by providing the operation environment created on computer by complying with the specifications of Web Browser NX. For information required for developing Web Browser NX applications, refer to the specification document of Web Browser NX.

- Panel Emulator

Panel Emulator supports developing RICOH SmartSDK applications by providing the operating environment complying with the SmartOperation Panel specification on your computer. The Panel Emulator is provided with RICOH SmartSDK Emulator.

- SmartOperation Panel Application

A SmartOperation Panel Application is an Android-based RICOH SmartSDK application which is used from SmartOperation Panel.

- Remote Application

A Remote Application operates Ricoh MFP/LP from a remote location.

- Web Application

A Web Application is a web-based application which is used from Web Browser NX installed to Ricoh MFP/LP.

• Conventional Panel

A Conventional Panel is a WVGA/uVWGA control panel installed on Ricoh's MFP/LP.

• SOP

The product name in Japan is "MultiLink-Panel." For all other countries, the product name is "SmartOperation

Panel."

- SOP-G1

SOP-G1 is the first generation of MultiLink-Panel/SmartOperation Panel.

- SOP-G2

SOP-G2 is the second generation of MultiLink-Panel/SmartOperation Panel.

Guaranteed Operating Environment

Guaranteed Operating Environment

Operating systems: Windows 7 Professional SP1 (32-bit/64-bit), Windows 8.1 Professional SP1 (64-bit)

OS	Guarantee
Windows 7 Home (32-bit)	-
Windows 7 Home (64-bit)	-
Windows 7 Professional (32-bit)	X
Windows 7 Professional (64-bit)	X
Windows 8 Home (32-bit)	-
Windows 8 Home (64-bit)	-
Windows 8 Professional (32-bit)	-
Windows 8 Professional (64-bit)	-
Windows 8.1 Home (32-bit)	-
Windows 8.1 Home (64-bit)	-
Windows 8.1 Professional (32-bit)	-
Windows 8.1 Professional (64-bit)	X

RAM: 2 GB or larger recommended

Hard disk capacity: 300 MB or more of free disk space recommended

Display resolution: 1280 X 1024 or higher recommended

Applications that can function correctly: SmartOperation Panel Application, Remote Application, Web Application

Java SE: Java Development Kit 7 (since ver1.7.0_21)

<http://www.oracle.com/technetwork/java/javase/downloads/index.html> <The website is as of October 11, 2013>

Java SE	Correct functioning assured
JDK version 1.7	Version 1.7.0_21 & later
JDK version 1.8	Version 1.8

Installation Procedure

Install

1. Confirm that the following conditions are satisfied:

- The Java version 1.7.21 or later is set to path.

Open Command Prompt, enter the following command and run the command. The version of Java set to path appears.

```
java -version
```

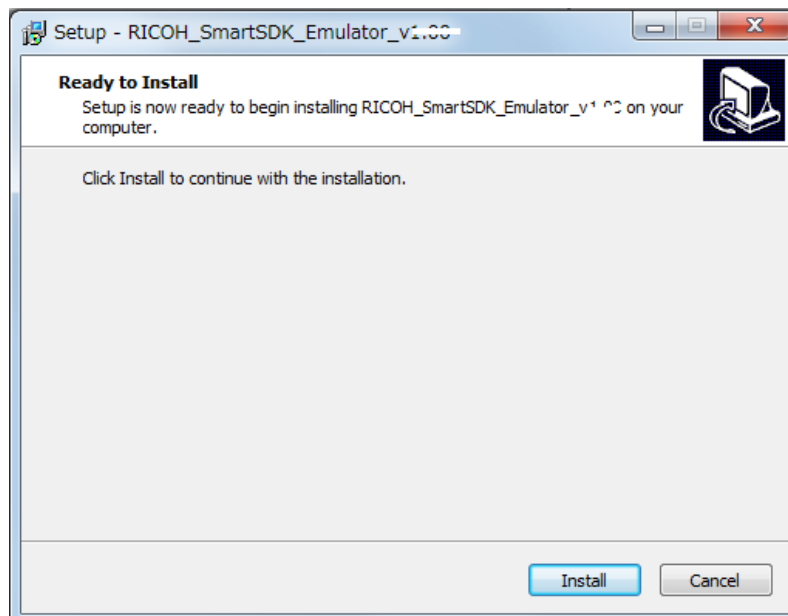
- Ports 80, 443, 4848, 55080, 55443, 54080, and 54443 are not used.

Open Windows Command Prompt and enter the command below to check the ports currently used.

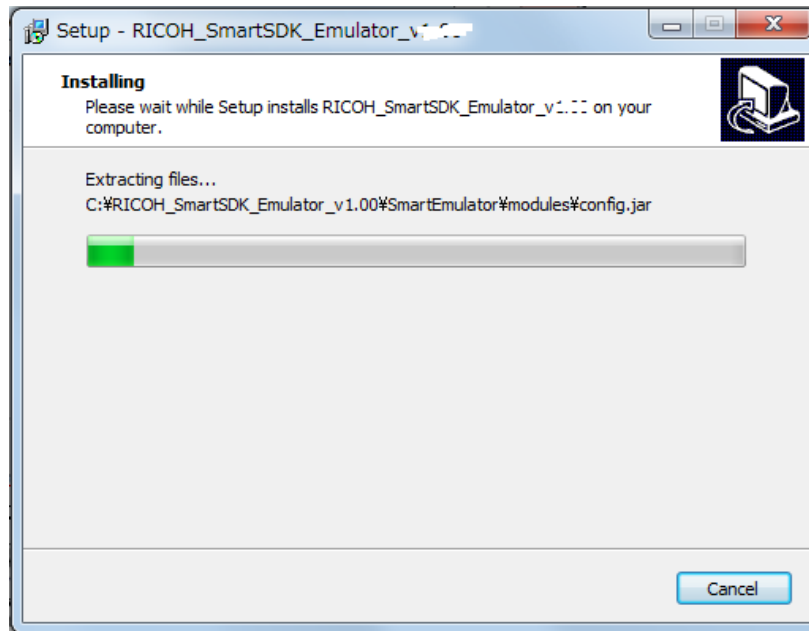
```
netstat -ano
```

2. Double-click "RICOH_SmartSDK_Emulator_v1.04.exe" to start setup.

When the following installation screen appears, click "Install." Clicking "Cancel" cancels the installation procedure.



3. The following "Installing" dialog appears. Clicking "Cancel" cancels the installation procedure.



4. When installation is complete, the installation screen closes.
5. "RICOH_SmartSDK_Emulator_v1.04" is added to the Windows "All Programs" (click "Start" > "All Programs"). The shortcut for "RICOH_SmartSDK_Emulator_v1.04" is added on desktop.

Start

1. Click "Start" > "All Programs" > "RICOH_SmartSDK_Emulator_v1.04" or double-click the shortcut icon of "RICOH_SmartSDK_Emulator_v1.04" created on desktop.
2. Machine Type Selector opens.
Select Machine Name, Fax Function, API Version, and Panel Type.



Machine Type Selector

- Machine Name
Sets the name of the machine to start.
- Fax Function
Sets the availability of fax function.

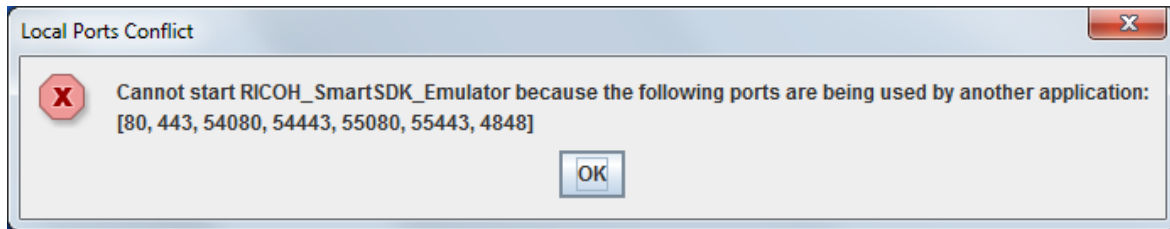
- API Version

Sets the API version of RICOH SmartSDK.

- Panel Type

Sets the type of the panel to activate. SOP-G2 is available only when the specified API version is 1.02 or later.

In case a port to be used for RICOH SmartSDK Emulator is used by another application, the following ports conflict error appears when clicking "Ok".

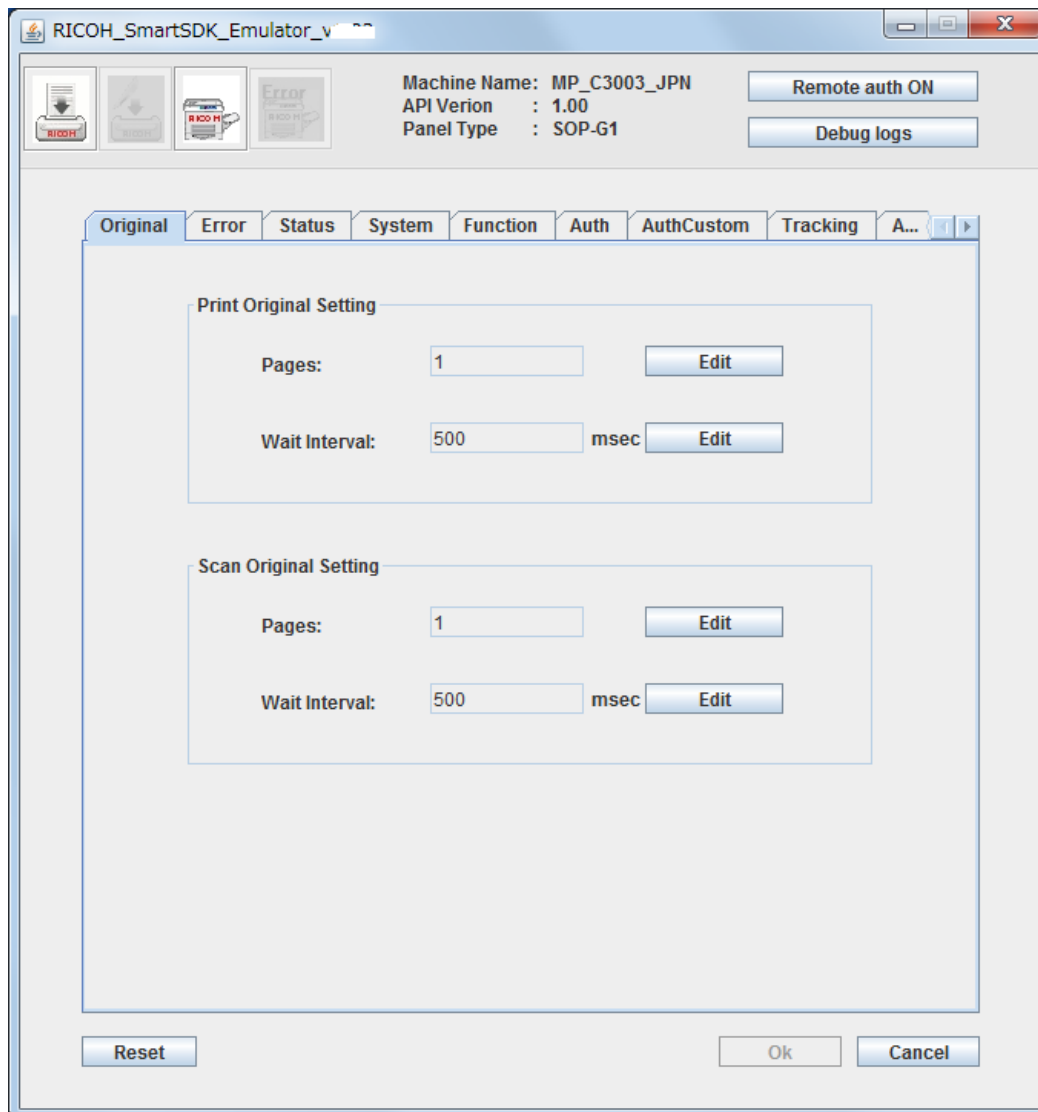


Local Ports Conflict

When this error appears, do one of the following and restart RICOH SmartSDK Emulator.

- Set HTTP/HTTPS port setting (see the next section "HTTP/HTTPS Port Setting").
- End the application which is using the port.

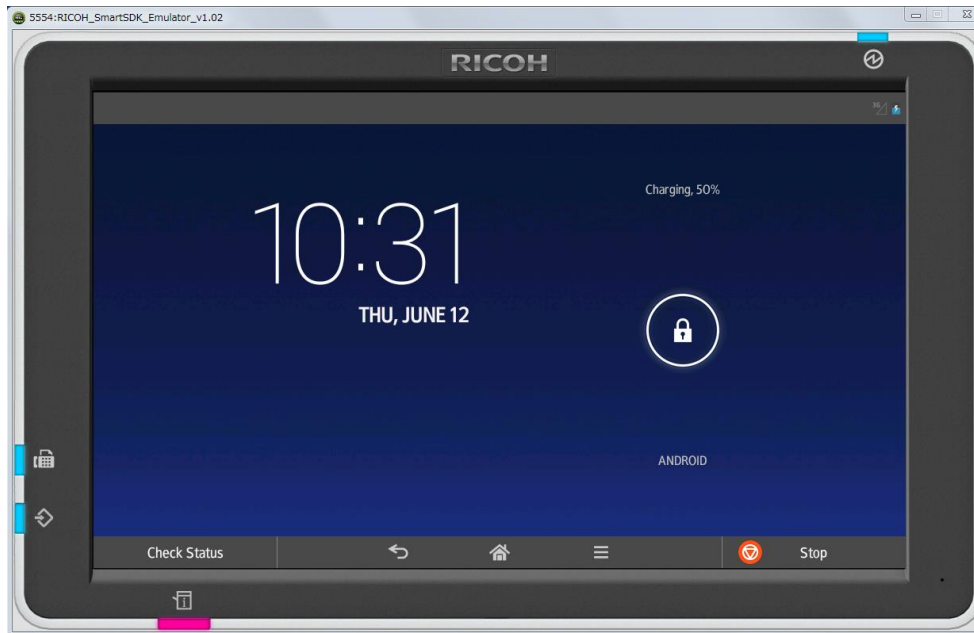
3. RICOH SmartSDK Emulator and Panel Emulator start.



RICOH SmartSDK Emulator



Panel Type: SOP-G1

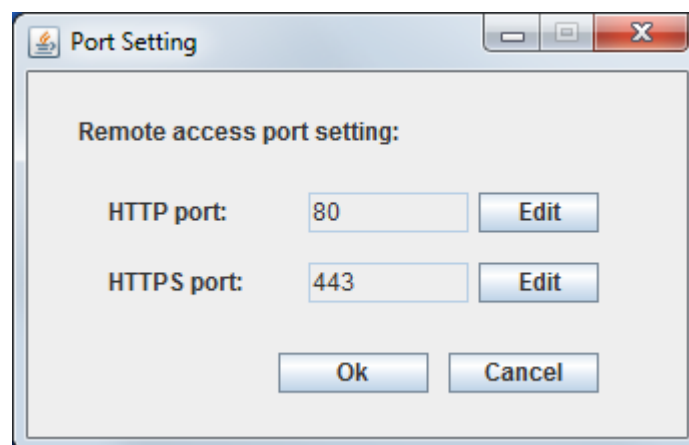


Panel Type: SOP-G2

HTTP/HTTPS Port Setting

The emulator provides the feature to set HTTP/HTTPS port used for remote communications.

When running "C:\RICOH_SmartSDK_Emulator_v1.04\conf\config.jar", a port setting screen appears and HTTP/HTTPS setting can be specified. To enable the specified HTTP/HTTPS port, RICOH SmartSDK Emulator must be restarted.



Port Setting

Install Application

An application can be installed and started by developing an Android application on Eclipse, setting "run configuration" and selecting the Emulator as a target device.

How to restore in case device does not appear on Eclipse's DDMS

A device appears on DDMS by one of the following methods:

- On DDMS "Devices" window, select "Reset adb".
- Open Command Prompt and restart adb server.
Enter the following commands on Command Prompt to restart adb server:
adb kill-server
adb start-server
- Restart RICOH SmartSDK Emulator v1.04.

Close

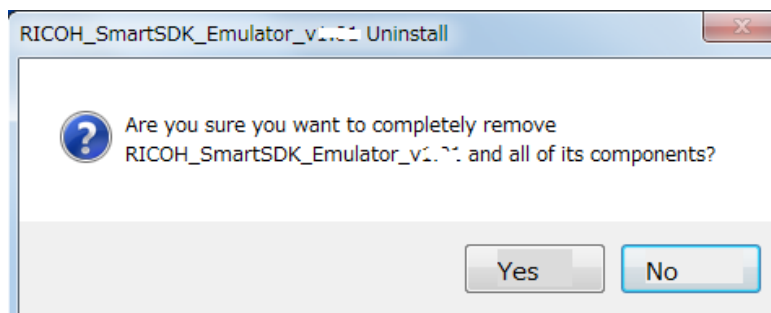
1. Click the "x" button at the top right of RICOH SmartSDK Emulator or Panel Emulator screen.

Attention:

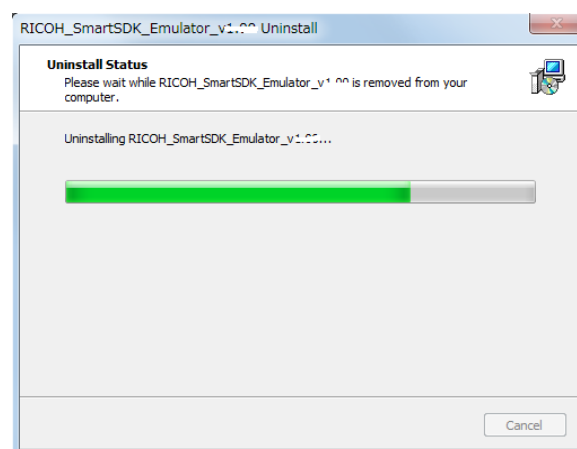
When closing either RICOH SmartSDK Emulator or Panel Emulator, be sure to close the other as well. If only one of the emulators is closed and then restarted, correct functioning cannot be assured.

Uninstall

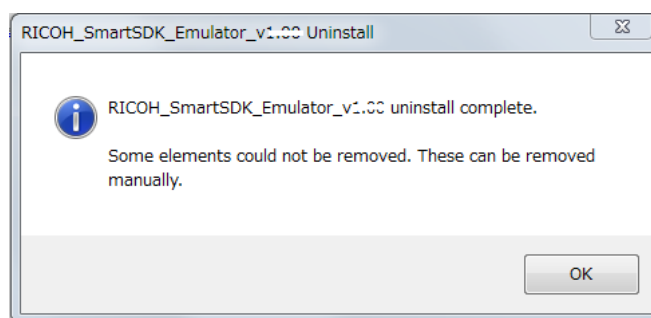
1. Click "Start" > "All Programs" > "Uninstall RICOH_SmartSDK_Emulator_v1.04."
2. When the following uninstall dialog appears, click "Yes." Clicking "No" cancels the uninstallation procedure.



3. The following uninstall screen appears and the program is uninstalled. Once this screen appears, the uninstallation procedure cannot be cancelled.



4. When the uninstallation is complete, the following dialog appears to notify the program has been successfully removed. Click "OK" to end uninstallation.



Features

Device State Setting Feature

When starting RICOH SmartSDK Emulator, the screen of RICOH SmartSDK Emulator appears (Figure 1: RICOH SmartSDK Emulator). The screen shows the machine name, the API version, and the panel type selected on Machine Type Selector. This screen allows setting the state of the actual device in which RICOH SmartSDK runs. The settings are retained even when restarting RICOH SmartSDK Emulator. When closing the RICOH SmartSDK Emulator screen, RICOH SmartSDK Emulator shuts down.

Note:

It may take a few seconds for the system to shut down completely after the RICOH SmartSDK Emulator screen closes. When restarting RICOH SmartSDK Emulator, confirm that the system has shut down completely.

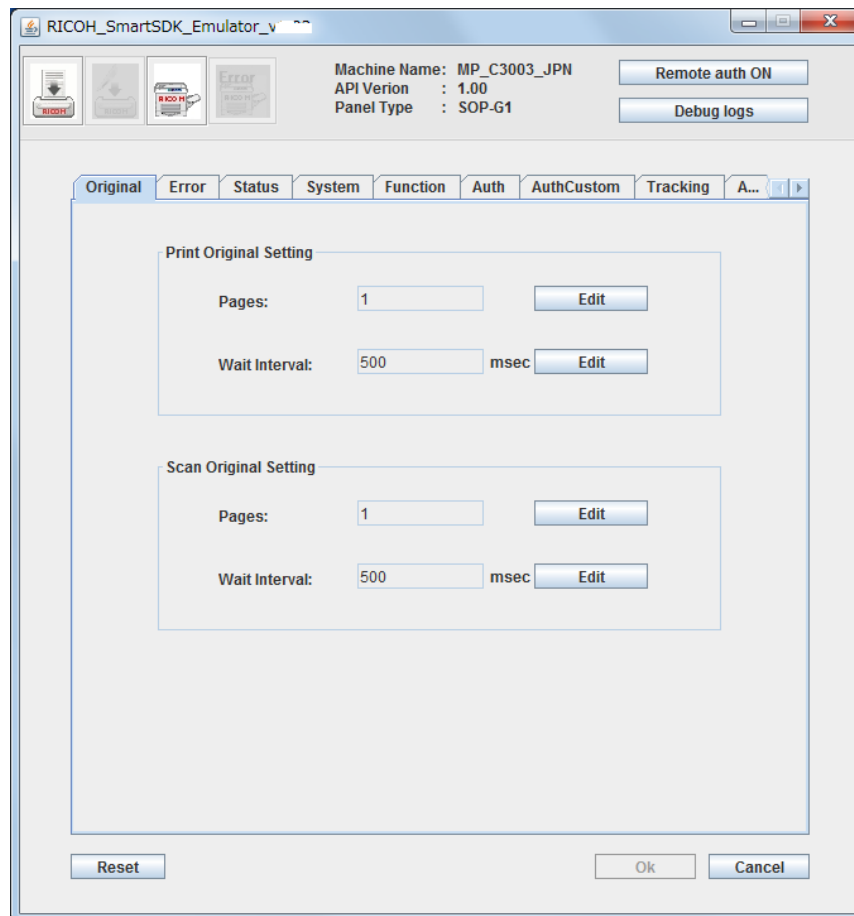










Figure 1: RICOH SmartSDK Emulator

Toolbar Feature

The toolbar feature enables setting frequently-used device settings just by clicking icons. Settings are available on the toolbar area shown at the top of the RICOH SmartSDK Emulator screen. The following describes each icon.

Icon	Setting
	This icon indicates the state that the document is not set to the ADF. When clicking this icon, the document is set to the ADF.
	This icon indicates the state that the document is set to the ADF. When clicking this icon, the document is removed from the ADF.
	This icon indicates the state that the document is not set to the exposure glass. When clicking this icon, the document is set to the exposure glass. Note that the document cannot be set if the ADF cover is being closed.
	This icon indicates the state that the document is set to the exposure glass. When clicking this icon, the document is removed from the exposure glass. Note that the document cannot be removed if the ADF cover is being closed.
	This icon indicates the state that the ADF cover is being closed. When clicking this icon, the ADF cover opens.
	This icon indicates the state that the ADF cover is being open. When clicking this icon, the ADF cover closes.
	This icon indicates the state that no error state is being set. Nothing occurs when clicking this icon.
	This icon indicates the state in which error state is being set. When clicking this icon, all error states are cleared.

Note:

Document scanning location changes by the document setting.

- Document set on ADF: Scan on ADF
- Document set on exposure glass: Scan on exposure glass
- Document set on both ADF and on exposure glass: Scan on ADF

Parameter Setting Feature

The parameter setting feature allows setting detailed states of the actual device. The settings are available on the parameter setting tabs displayed on RICOH SmartSDK Emulator. To apply the changed settings, click the “OK” button at the bottom of the parameter setting area. At this time, the “OK” button grays out. To cancel the changed settings, click the “Cancel” button.

Machine state setting

The Status tab provides the feature to set machine states of the actual machine (Figure 2: Status Setting).

Trays			
	Paper Remain	Size	Status
TRAY1	<input checked="" type="radio"/> Full <input type="radio"/> Empty	A3 ▼	Ready ▼
TRAY2	<input checked="" type="radio"/> Full <input type="radio"/> Empty	A3 ▼	Ready ▼
TRAY3	<input checked="" type="radio"/> Full <input type="radio"/> Empty	A3 ▼	Ready ▼
TRAY4	<input checked="" type="radio"/> Full <input type="radio"/> Empty	A3 ▼	Ready ▼

Toner		
	Toner Remain	
Cyan	<input checked="" type="radio"/> Full <input type="radio"/> Empty	<div style="width: 100%; height: 10px; background-color: cyan;"></div>
Yellow	<input checked="" type="radio"/> Full <input type="radio"/> Empty	<div style="width: 100%; height: 10px; background-color: yellow;"></div>
Magenta	<input checked="" type="radio"/> Full <input type="radio"/> Empty	<div style="width: 100%; height: 10px; background-color: magenta;"></div>
Black	<input checked="" type="radio"/> Full <input type="radio"/> Empty	<div style="width: 100%; height: 10px; background-color: black;"></div>

System	
<input type="checkbox"/>	Service call

Figure 2: Status Setting

Trays

1) Paper Remain

Sets the remaining paper amount of each tray. The remaining paper volume is 100% when selecting [Full], and 0% when selecting [Empty].

2) Size

Sets the paper size of each tray. The size can be changed to [A3/A4/A5] on the pull-down menu.

3) Status

Sets the state of each tray. The state can be changed to [Ready/Error/Unload] on the pull-down menu.

Toner

1) Toner Remain

Sets the toner remaining amount of each toner. The remaining toner amount is 100% when selecting [Full], and 0% when selecting [Empty].

System

1) Service call

Sets the system states of the machine. Selecting [Service call] generates a Service Call error state.

Note:

The settings specified on the Status tab only affect the device state of RICOH SmartSDK; they do not affect the availability to run jobs. For example, a printer job can be started even when starting a printer while Toner Remain is “Empty.” To generate an error during a job (e.g. toner empty), specify error setting on the Error tab.

Document state setting

The Original tab provides the feature to set document scanning and printing states of the actual machine (Figure 3: Original Setting).

The screenshot shows the 'Original' tab selected in a settings window. The window has tabs for 'Original', 'Error', 'Status', 'System', 'Function', 'Auth', 'AuthCustom', 'Tracking', and 'A...'. The 'Original' tab contains two main sections: 'Print Original Setting' and 'Scan Original Setting'. Each section has two settings: 'Pages' and 'Wait Interval'. The 'Pages' setting is a text box with the value '1' and an 'Edit' button. The 'Wait Interval' setting is a text box with the value '500' followed by 'msec' and an 'Edit' button.

Figure 3: Original Setting

Print Original Setting

1) Pages

Sets the number of pages in the print original document. The number can be changed by clicking the “Edit” button. The available setting range is [1–10000].

2) Wait interval

Sets the interval to start printing the next document. The number can be changed by clicking the “Edit” button. The available setting range is [0-60000] milliseconds.

ScanOriginal Setting

1) Pages

Sets the number of pages in the scan original document. The number can be changed by clicking the “Edit” button. The available setting range is [1–10000].

2) Wait interval

Sets the interval to start scanning the next document. The number can be changed by clicking the “Edit” button. The available setting range is [0-60000] milliseconds.

Error state setting

The Error tab provides the feature to set error states of the actual machine (Figure 4: Error Setting).

Error State	Checkbox	Label	Value	Unit	Action
ADF Paper Jam	<input type="checkbox"/>	Scan Original Count	0	page	Edit
Plotter Paper Jam	<input type="checkbox"/>	Print Original Count	0	page	Edit
Toner Empty	<input type="checkbox"/>	Print Original Count	0	page	Edit
Media Empty	<input type="checkbox"/>	Print Original Count	0	page	Edit
Memory Full	<input type="checkbox"/>				

Figure 4: Error Setting

1) ADF Paper Jam / Plotter Paper Jam / Toner Empty / Media Empty / Memory Full

Sets the error to generate. Check the checkbox of the error to generate.

2) Print Original Count / Scan Original Count

Sets the timing to generate the error. The number can be changed by clicking the “Edit” button. The available setting range is [0-10000] pages.

Note:

- The settings specified on the Error tab do not affect the device state feature of RICOH SmartSDK. For example,

when setting Toner Empty and the error occurs after a job is started, the toner state is the same as the state before the start of the job. Specify machine state on the Status tab.

- Media Empty error occurs after printing the specified number of pages. Other errors occur during printing the specified number of pages.

SDK Service state setting

On System/Function/Auth/AuthCustom/Tracking tabs, SDK Service behaviors can be set. For the information for developing the applications using the SDK Service, refer to the specification document of SDK Service.

1) System tab

The System tab provides the feature to set SDK Service system states (Figure 5: System Setting)

The screenshot shows the 'System' tab of the SDK Service interface. The 'Setting' section includes:

- Network:** Radio buttons for ☒ Connect and ☐ Disconnect.
- Power Mode:** A pull-down menu showing 'NORMAL_STANDBY'.
- Offline Mode:** A pull-down menu showing 'ONLINE'.
- Hdd:** Radio buttons for ☒ Available and ☐ Unavailable.

The 'Install' section includes:

- Package Name:** A text field containing 'jp.co.ricoh' and an 'Edit' button.
- Mode:** Radio buttons for ☒ Install and ☐ VersionUp.
- A 'Notify Install' button.

The 'Uninstall' section includes:

- Package Name:** A text field containing 'jp.co.ricoh' and an 'Edit' button.
- Mode:** Radio buttons for ☒ Update and ☐ Uninstall.
- A 'Request Suppress' button.

At the bottom of the window are two buttons: 'System Shutdown' and 'System Reset'.

Figure 5: System Setting

- Network

Sets the network connection status.

- Power Mode

Sets the power mode. The power mode can be changed by this pull-down menu, but may become unchangeable if power mode is locked by power mode locking.

- Offline Mode

Sets the offline mode. The offline mode can be changed by this pull-down menu, but may become unchangeable if offline mode is locked by offline locking.

- Hdd

Sets the availability of HDD.

- Install

When clicking "Notify Install", an install/upgrade notification is sent.

- Uninstall

When clicking "Request Suppress", an installation state change suppress request is issued.

- System Shutdown

Sends a shutdown notification to an application.

- System Reset

Sends a system reset notification to an application.

- LegacyApp

When clicking a button, Launcher application is notified that the legacy application corresponding to the button has been started.

2) Function tab

3) The Function tab provides settings for SDK Service fax reception (Figure 6: Function Setting).

The following parameters for fax reception event can be set: Port, RtiCsi, Code Type, Code Info, Job Log ID, File ID, Mail Subject, Num.Disp, and SavaLocation. When clicking "Receiving", a fax reception notification is sent to an application with the settings specified on this tab.

Original	Error	Status	System	Function	Auth	AuthCustom	Tracking	A...
Fax								
Port:		<input checked="" type="radio"/> g3	<input type="radio"/> g3_2	<input type="radio"/> g3_3				
		<input type="radio"/> isdn	<input type="radio"/> mail	<input type="radio"/> ipfax				
RtiCsi:		<input type="text" value="rtiCsi"/>			<input type="button" value="Edit"/>			
Code Type:		<input checked="" type="radio"/> fcd	<input type="radio"/> conf					
		<input type="radio"/> di	<input type="radio"/> sub					
Code Info.:		<input type="text" value="ricoh_code_info"/>			<input type="button" value="Edit"/>			
Job Log ID:		<input type="text" value="500"/>			<input type="button" value="Edit"/>			
File ID:		<input type="text" value="ricoh_fileid"/>			<input type="button" value="Edit"/>			
Mail Subject:		<input type="text" value="ricoh_mail_sub"/>			<input type="button" value="Edit"/>			
Num. Disp.:		<input type="text" value="ricoh_num_disp"/>			<input type="button" value="Edit"/>			
Save Location:		<input type="text" value="ricoh_location"/>			<input type="button" value="Edit"/>			
Fax Receiving:		<input type="button" value="Receive"/>						

Figure 6: Function Setting

Auth tab

The Auth tab provides settings related to the authentication feature of SDK Service (Figure 7: Auth).

Note that the actual authentication process is not performed. There is no compatibility with address book.

Original	Error	Status	System	Function	Auth	AuthCustom	Tracking	A...
Auth Setting								
User Admin:	<input type="radio"/>	ON	<input checked="" type="radio"/>	OFF				
Machine Admin:	<input type="radio"/>	ON	<input checked="" type="radio"/>	OFF				
Document Admin:	<input type="radio"/>	ON	<input checked="" type="radio"/>	OFF				
Network Admin:	<input type="radio"/>	ON	<input checked="" type="radio"/>	OFF				
User Auth:	<input type="radio"/>	ON	<input checked="" type="radio"/>	OFF				
User								
User ID:	user001		Edit					
User Name:	userName		Edit					
Available								
Copier:	<input checked="" type="radio"/>	Available	<input type="radio"/>	Unavailable				
Doc Server:	<input checked="" type="radio"/>	Available	<input type="radio"/>	Unavailable				
Fax:	<input checked="" type="radio"/>	Available	<input type="radio"/>	Unavailable				
Scanner:	<input checked="" type="radio"/>	Available	<input type="radio"/>	Unavailable				
Printer:	<input checked="" type="radio"/>	Available	<input type="radio"/>	Unavailable				
Browser:	<input checked="" type="radio"/>	Available	<input type="radio"/>	Unavailable				

Figure 7: Auth

- Auth Setting

Sets the administrator authentication state.

- User

Sets the settings related to login user. User settings are available only when "User Admin" and "User Auth" for "Auth Setting" are set to "ON". When clicking "Login", a user logs in. When clicking "Logout", the user logs out. When clicking "Apply", user information of a login user is updated. If setting "User Admin" or "User Auth" in "Auth Setting" to "OFF" while a user is logged in, the user automatically logs out.

Auth Custom tab

The Auth Custom tab provides the settings related to custom authentication feature of SDK Service (Figure 7: Auth). These settings only set API behaviors; the actual authentication process is not performed.

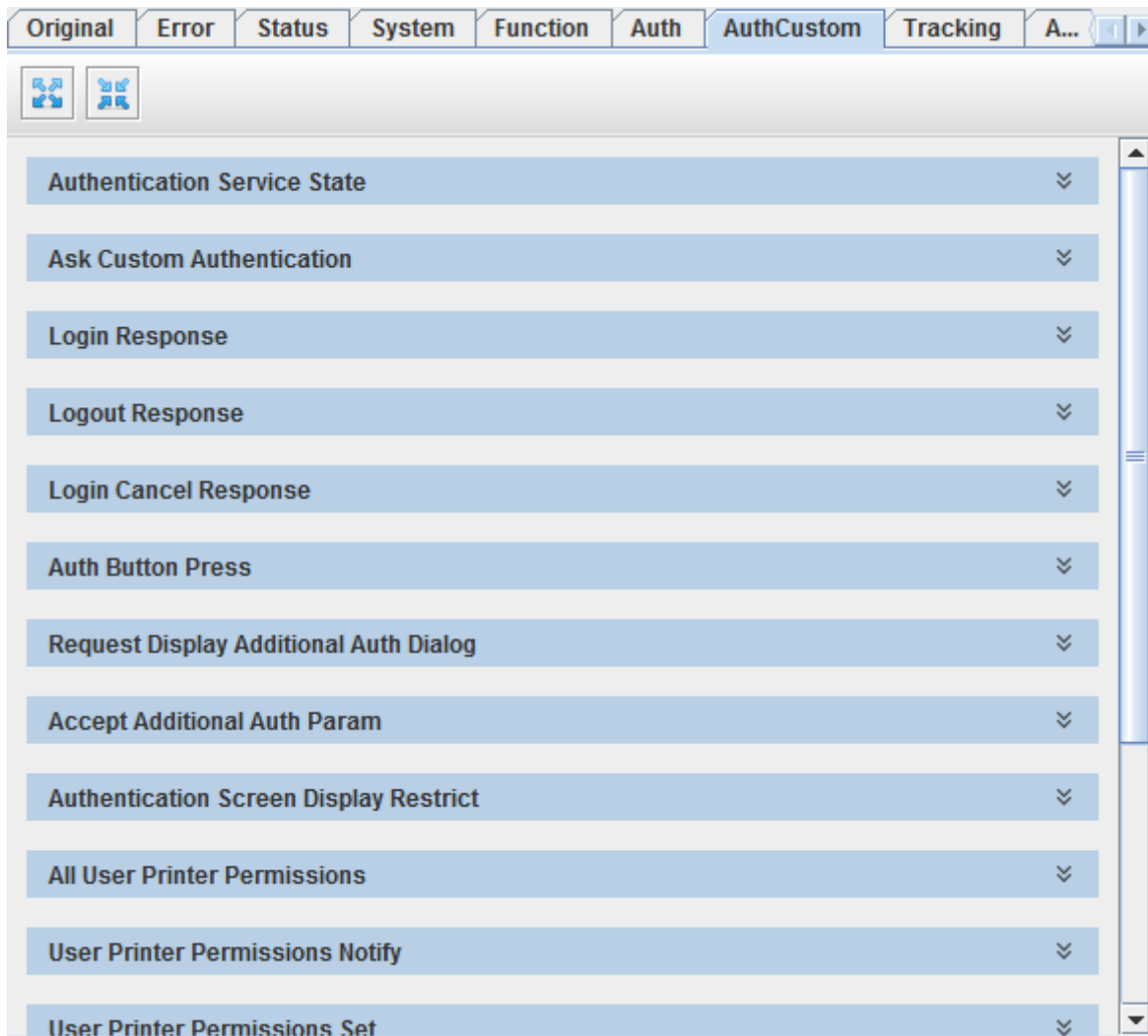


Figure 8: Auth Custom Setting

- Authentication Service State

Issues authentication service state change notification, and sets parameter values of authentication service state change notification and authentication service state acquisition.

Name	Corresponding key
Result	REUSLT
State	STATE
Trigger	TRIGGER
Error Code	ERROR_CODE
User Id	USER_ID
User Name	USER_NAME
Copier Permission	COPIER_PERMISSION
Doc Server Permission	DOCUMENT_SERVER_PERMISSION
Fax Permission	FAX_PERMISSION
Scanner Permission	SCANNER_PERMISSION
Printer Permission	PRINTER_PERMISSION
Browser Permission	BROWSER_PERMISSION

Machine Admin Permission	MACHINE_ADMIN_PERMISSION
User Admin Permission	USER_ADMIN_PERMISSION
Doc Admin Permission	DOCUMENT_ADMIN_PERMISSION
Network Admin Permission	NETWORK_ADMIN_PERMISSION
Certificate User Permission	CERTIFICATE_USER_PERMISSION
Supervisor User Permission	SUPERVISOR_PERMISSION
Supplicant Device	SUPPLICANT_TERM_TYPE
Supplicant Device	SUPPLICANT_DEVICE
Supplicant Req App	SUPPLICANT_REQUEST_APPLICATION
Auth Service State	When clicking "Notify", an authentication service state notification is issued.

- Ask Custom Authentication – Ask Custom Authentication

Name	Corresponding key
Ask Custom Authentication	When clicking "Ask", a custom authentication type inquiry is issued.

- Login Response

Issues login response, and sets parameter values of login response.

Name	Corresponding key
Result	RESULT
Login Response	When clicking "Notify", a login response is issued.

- Logout Response

Issues logout response, and sets parameter values of logout response.

Name	Corresponding key
Result	RESULT
Logout Response	When clicking "Notify", a logout response is issued.

- Login Cancel Response

Issues login cancel result notification, and sets parameter values of login cancel result notification.

Name	Corresponding key
Result	RESULT
Login Cancel Response	When clicking "Notify", a login cancel result notification is issued.

- Auth Button

Issues authentication button press event notification, and sets parameter values of authentication button press event notification.

Name	Corresponding key
Type	BUTTON_TYPE
Logout Confirm	LOGOUT_CONFIRM
Auth Button Press Event	When clicking "Send", an authentication button press event is issued.

- Request Display Additional Auth Dialog

Issues additional authentication dialog display request, and sets parameter values of additional authentication dialog display request.

Name	Corresponding key
Request ID	REQUEST_ID
Display	DISPLAY
Type	DIALOG_TYPE
Extension Message	EXTENSION_MESSAGE
Display Custom Dialog	When clicking "Notify", an additional authentication dialog display request is issued.

- Accept Additional Auth Param

Sets parameters for additional authentication parameter reception notification.

Name	Corresponding key
Result	RESULT
Additional Auth Param	When clicking "Notify", an additional authentication parameter reception notification is issued.

- Authentication Screen Display Restrict

Issues authentication screen display restriction notification, and sets parameter values for authentication screen display restriction notification and authentication screen display restriction state acquisition.

Name	Corresponding key
Result	RESULT
Restrict	RESTRICT
Auth Screen Display Status	When clicking "Notify", an authentication screen display restriction notification is issued.

- All User Printer Permission

Sets parameter values of all user printer permission acquisition request.

Name	Corresponding key
Result	RESULT

- User Printer Permission Notify

Issues user printer permission notification, and sets parameter values of user printer permission notification. Only 1

Subject can be notified.

Name	Corresponding key
Subject Count	SUBJECT_COUNT
User Id	USER_ID
Copy Black Large	Subject Copy Black Large within SUBJECT_LIST
Copy Black Small	Subject Copy Black Small within SUBJECT_LIST
Copy Full Color Large	Subject Copy Full Color Large within SUBJECT_LIST
Copy Full Color Small	Subject Copy Full Color Small within SUBJECT_LIST
Print Black Large	Subject Print Black Large within SUBJECT_LIST
Print Black Small	Subject Print Black Small within SUBJECT_LIST
Print Full Color Large	Subject Print Full Color Large within SUBJECT_LIST
Print Full Color Small	Subject Print Full Color Small within SUBJECT_LIST
User Printer Permissions	When clicking "Notify", a user printer permission notification is issued.

- User Printer Permission Set

Sets parameter values of printer permission setting of a specified user.

Name	Corresponding key
Result	RESULT

- Tracking Server Error

Sets parameter values of tracking server error setting request.

Name	Corresponding key
Result	RESULT

- Display Banner

Sets parameter values of usage banner display request.

Name	Corresponding key
Result	RESULT

- Tracking Ready

Issues tracking ready request and sets parameter values for tracking ready notification.

Name	Corresponding key
Result	RESULT
Tracking Ready Notify	When clicking "Notify", a tracking ready request is issued.

- User Info Change

Issues user information change notification and sets parameter values of user information change notification.

Name	Corresponding key
Type	KIND
Target User ID	TARGET_USER_ID
Modified User ID	MODIFIED_USER_ID
User Info Change	When clicking "Notify", a user information change notification is issued.

- Detection Event

Issues tracking event notifications.

Name	Corresponding key
Detection Event	When clicking "Send", a tracking event notification is issued.

- SDK Authentication Setting (Not used.)

Tracking tab

Tracking tab provides settings related to tracking event notifications for SDKService custom authentication feature (Figure 7: Auth). When clicking "send", a tracking event is notified.

The screenshot shows the 'Tracking' tab in the RICOH SmartSDK Emulator. The interface has a tabbed menu at the top with 'Original', 'Error', 'Status', 'System', 'Function', 'Auth', 'AuthCustom', 'Tracking', and 'A...'. The 'Tracking' tab is selected. Below the tabs, there is a 'DetectionEvent' section. Under this, there are three sub-sections: 'Copy', 'Scan', and 'Print'. Each sub-section contains a 'User ID' field with an 'Edit' button and a 'send' button. The 'Copy' section also includes 'Color Mode' (monochrome), 'Duplex Mode' (face1), 'Paper Size' (mixed), and 'Paper Type' (iso_a4). The 'Scan' section includes 'Color Mode' (monochrome) and 'Scan Size' (large). The 'Print' section only shows the 'User ID' field.

Section	User ID	Edit	send	Other Settings
Copy				Color Mode: monochrome, Duplex Mode: face1, Paper Size: mixed, Paper Type: iso_a4
Scan				Color Mode: monochrome, Scan Size: large
Print				

Figure 9: Tracking

Address Book Management

The AddressBook Management tab provides AddressBook Management features. (Figure 10: AddressBook Management)

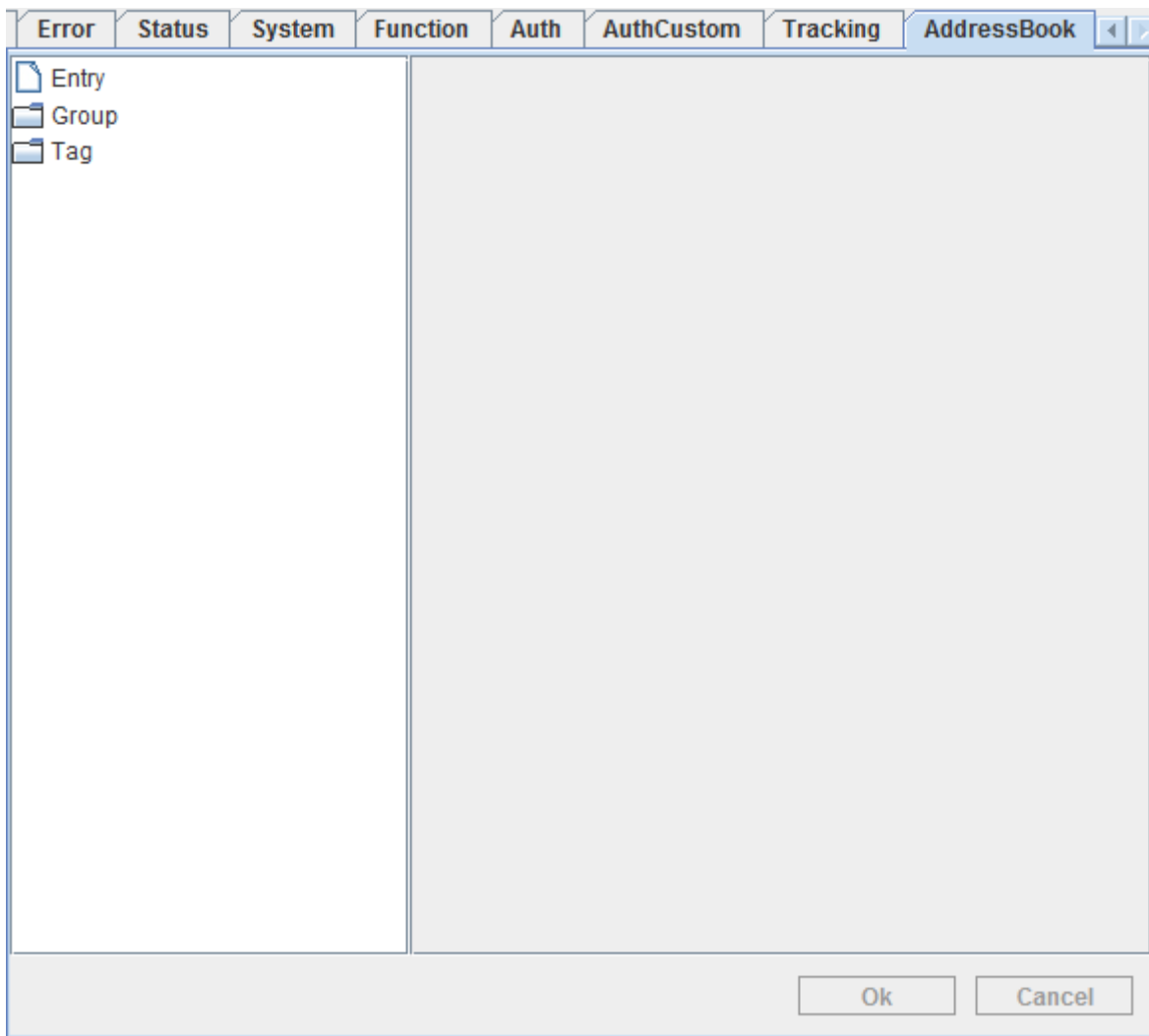


Figure 10: AddressBook Management

1) Entry

This feature provides creation, display, edition and deletion of the entry.

- Entry Creation

When clicking "Create Entry" with a pop up menu after right-click the Entry node, one entry will be added. The added entry node name is "Entry + entry ID". It can be added up to 10 entries.

After clicking the node and the child node to be added, the entry information becomes editable. The essential entry information is "Key Display" and "Name".

When clicking "OK," the entry is saved. It is unavailable to operate other nodes before the entry to be added is saved.

When clicking "Cancel," the entry is deleted.

- Entry Display

After clicking the node and the child node to enter, the entry information will be displayed in the right-hand of the screen.

- Entry Edition

When clicking "Edit Entry" with a pop up menu after right-click the entry, the entry information becomes editable. When clicking "OK," the entry is saved. It is unavailable to operate other nodes before the entry under edition is saved.

When clicking "Cancel," the changed settings are destroyed.

When clicking "Delete Entry" with a pop up menu after right-click the entry under edition, the entry is deleted.

- Entry Deletion

When clicking "Delete Entry" with a pop up menu after right-click the entry, the entry is deleted.

2) Group

Two Groups of information (fixed values) can be displayed with this feature.

When clicking the node and the child node of the group, the group information will be displayed in the right-hand of the screen.

3) Tag

26 titles of information can be displayed with this feature.

All entries are registered to Tag1. "Entry Num" of Tag 1 shows the number of entry. "TagsEntryList" of Tag1 interfaces "displayPriority" of entry information. Title information from Tag2 to Tag26 are fixed values.

When clicking the node and the child node of the title, the title information will be displayed in the right-hand of the screen.

Remote Authentication Feature

Provides the feature to perform HTTP basic authentication for the case a remote computer accesses a computer in which the Emulator runs on.

When clicking "Remote auth ON," the remote authentication feature switches from ON to OFF.

When clicking "Remote auth OFF," the remote authentication feature switches from OFF to ON.

User name and password are fixed values.

User ID: userid

Password: pwd

Reset Parameter Settings

The Emulator provides the feature to reset parameter settings.

When clicking "Reset," a confirmation screen appears (Figure 11: Confirm Reset). When clicking "OK," all values of parameter setting screen are reset to default values.

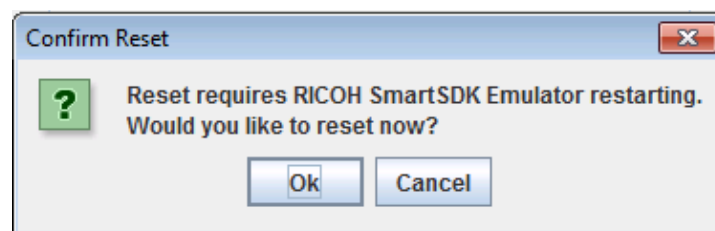


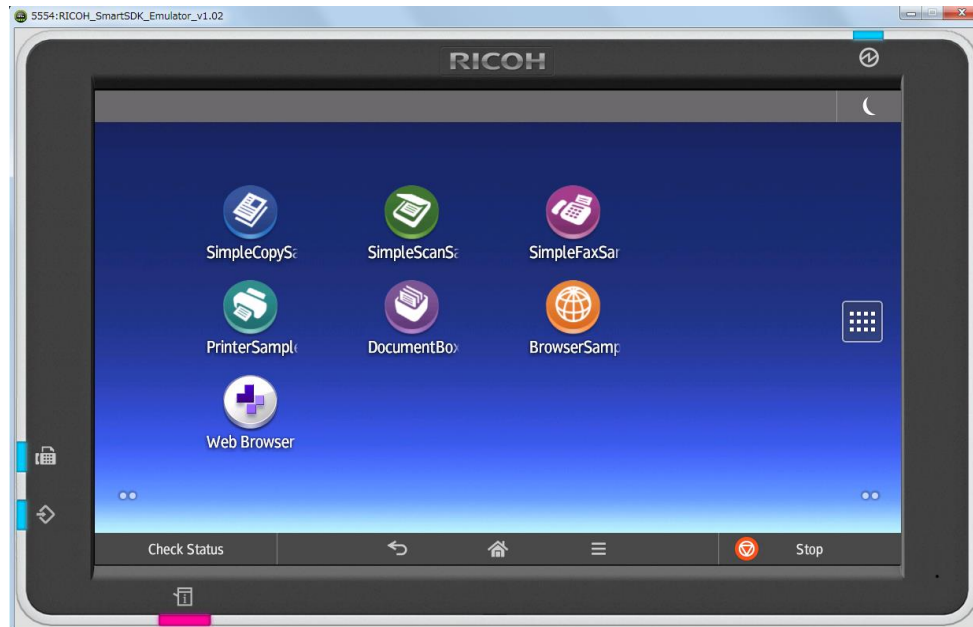
Figure 11: Confirm Reset

Panel Emulation Feature

When starting the Panel Emulator, the Panel Emulator screen appears. This screen enables emulating some of the features of the panel mounted on the actual device in which RICOH SmartSDK and Web Browser NX run on.



Panel Emulator (SOP-G1)



Panel Emulator (SOP-G2)

Screen

When starting the Panel Emulator, home screen appears. The home screen shows the shortcut icons of RICOH SmartSDK applications and Web Browser NX. When clicking a shortcut icon of a RICOH SmartSDK application on the home screen, the screen switches to a screen of a RICOH SmartSDK application. When clicking a shortcut icon of Web Browser NX, the screen switches to a screen of Web Browser NX Emulator.

Note:

The images and icons other than the background image, the icons of RICOH SmartSDK application, and the icon of Web Browser NX are dummy images/icons. When clicking one of these dummy icons, the actual application does not start; the screen shows the message to notify that the screen has changed.

System Keys

- Home key

Switches the screen to the home screen.

- Back key

Switches the screen to the previous screen.

- Menu key

Displays the standard Android menu screen.

- Stop key

Clicking “Stop” notifies a key event. This key does not provide the function to stop jobs.

Note:

The hard keys other than described above do not work.

LED Off

The Panel Emulator does not provide the feature to turn the LED off.

Display Language

Display language can be switched Japanese or to English by the following procedure:

1. To switch from English to Japanese, select [Menu] > [Setting] > [Language & Keyboard] > [Select Language] > [Japanese].
2. To switch from Japanese to English, select [Menu] > [Setting] > [Language & Keyboard] > [Select Language] > [English].

Energy Saver

When clicking Energy Saver key, the machine switches to Energy Saver mode.

When clicking Home key or panel screen, the machine recovers from Energy Saver mode.

Priority Application Setting

A priority application can be set in the following procedure.

1. Click the All Apps button on Home screen to open All Apps screen.
2. On the All Apps screen, open Priority Application Feature.
3. On priority application setting screen, select an application to be set as a priority application.



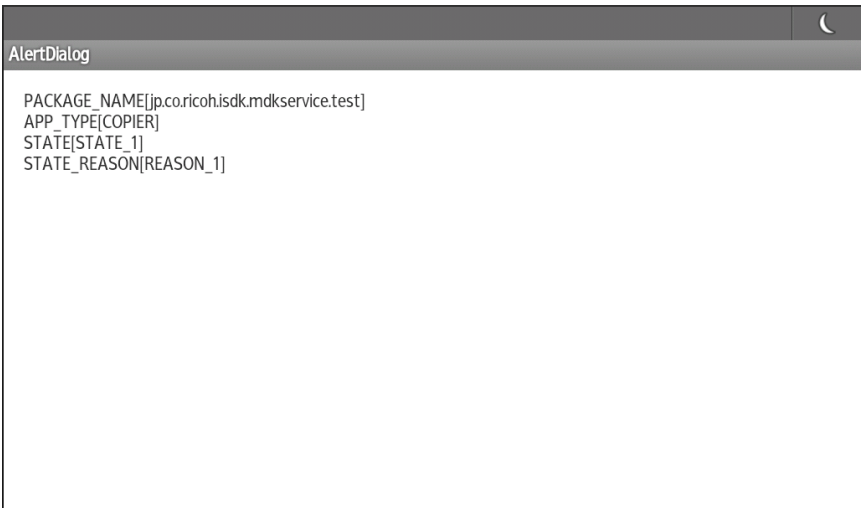
Priority application setting screen

ConfigurableLauncher Function

A created home application can be installed and a customized home screen can be used.

System Warning Screen Display

When an application requests SDK Service to display an error dialog, SDK Service displays a warning screen instead of an error dialog. A system warning screen shows parameter details for the request to display error dialog.



System warning screen

RICOH SmartSDK Emulation Features

This release emulates some of the interfaces provided by RICOH SmartSDK API. Some emulation features provide the same features as the actual device and some emulation features only provide certain behaviors. Details are given in the section for each feature.

Transaction Features

- /rws/transaction

Method	Behavior
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POST	Generates transaction URI. - A fixed value (request success) is returned as response. Note that transaction URI is not actually generated.
------	---

- /rws/transaction/{transactionID}

Method	Behavior
DELETE	Ends transaction. - A fixed value (request success) is returned as response.

Copier Features

- /rws/service/copy/capability

Method	Behavior
GET	Obtains the values that can be used for copy conditions. - Returns fixed values.

- /rws/service/copy/jobs

Method	Behavior
POST	Starts a copy job. - Error generates if jobSetting does not exist.

- /rws/service/copy/jobs/{Job ID}

Method	Behavior
GET	Obtains copy job data. - jobStatusReasons supports [scanner_jam / wait_for_next_original_and_continue / plotter_jam / no_paper / no_toner / cannot_detect_original_size] only. - printingInfo trayInUse returns fixed value. - For {job ID}, set the ID returned by /rws/service/copy/jobs. If other values are set, an error is returned.
PUT	Resumes/continues/cancels a copy job. - <jobStatus=processing> continues a stopped copy job. - <scanningInfo jobStatus=completed> ends the stopped copy job. - <jobStatus=canceled> cancels a copy job. - For {job ID}, set the ID returned by /rws/service/copy/jobs. If other values are set, an error is returned.

- /rws/service/copy/status

Method	Behavior
GET	Obtains the copy application state.

Note:

- For the copying processes of this emulator, scanner and printer activate individually (asynchronous operation). Therefore, the number of scanned pages and the number of printed pages may differ depending on the copy job timing.
- Timeout of a stopped job is not supported.

Printer Features**- /rws/service/printer/capability**

Method	Behavior
GET	Obtains the values that can be set for printer conditions. - Returns fixed values.

- /rws/service/printer/jobs

Method	Behavior
GET	Obtains the printer job information list.
POST	Prints the specified file (print data). - Error occurs if jobSetting required parameters do not exist.

- /rws/service/printer/jobs/{Job ID}

Method	Behavior
GET	Obtains the information of the specified print job. - Does not support user codes. - For { jobID}, set the ID returned by /rws/service/printer/jobs. If other values are set, an error is returned.
PUT	Updates the specified print job. - Does not support user codes. - For { jobID}, set the ID returned by /rws/service/printer/jobs. If other values are set, an error is returned.

- /rws/service/printer/status

Method	Behavior
GET	Obtains printer state. - printerStatusReasons supports [media_jam / toner_empty / media_empty] only.

- /rws/service/printer/supportedPDL

Method	Behavior
GET	Obtains the supported PDL. - Returns fixed values.

- /rws/service/printer/file

Method	Behavior
POST	Sends the file to print. - Returns fixed values.

Scanner Features

- /rws/service/scanner/capability

Method	Behavior
GET	Obtains the values that can be used for the scanner condition. - Returns a fixed value.

- /rws/service/scanner/jobs

Method	Behavior
POST	Starts a scanner job. - Error occurs if required parameters of jobSetting do not exist.

- /rws/service/scanner/jobs/{Job ID}

Method	Behavior
GET	Obtains the scanner job information. - jobStatusReason supports [scanner_jam/wait_for_next_original_and_continue/wait_for_original_preview_operation / cannot_detect_original_size / user_request] only. - For {job ID}, set the ID returned by /rws/service/scanner/jobs. If other values are set, an error is returned.
PUT	Resumes/continues/stops/cancels scanning the scanner job. - <scanningInfo jobStatus=processing> Continues scanning the scanner job being stopped. - <scanningInfo jobStatus=completed> Ends scanning the scanner job being stopped and starts the next process (e.g. send data). - <scanningInfo jobStatus=processing_stopped> Temporarily stops the scanner job being stopped to wait for the next document to be set. - < jobStatus=canceled> Cancels the scanner job. - For {job ID}, set the ID returned by /rws/service/scanner/jobs. If other values are set, an error is returned.

- /rws/service/scanner/jobs/{Job ID}/file

Method	Behavior
GET	Obtains the scan image file. - Returns a fixed value. - For {job ID}, set the ID returned by /rws/service/scanner/jobs. If other values are set, an error is returned.

DELETE	Deletes the scan image file. - Image file is not deleted even if the request succeeds. - For {job ID}, set the ID returned by /rws/service/scanner/jobs. If other values are set, an error is returned.
--------	---

- /rws/service/scanner/jobs/{Job ID}/thumbnail

Method	Behavior
GET	Obtains the document preview image. - Returns a fixed value. - For {job ID}, set the ID returned by /rws/service/scanner/jobs. If other values are set, an error is returned.

- /rws/service/scanner/jobs/{Job ID}/ocrdata

Method	Behavior
GET	Obtains the OCR data. - Returns a fixed value. - For {job ID}, set the ID returned by /rws/service/scanner/jobs. If other values are set, an error is returned.

- /rws/service/scanner/status

Method	Behavior
GET	Obtains the scanner application state.

Note:

-
- Sample images can be changed by replacing the following files stored to the folder "C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\SmartSDKEmulator\images\original":
- Timeout of a stopped job is not supported.

File name	Where the file is used
sample_jpeg.jpg	- The scanned image obtained by rws/service/scanner/jobs/{Job ID}/file - The preview image obtained by rws/service/scanner/jobs/{Job ID}/thumbnail
sample_pdf_multi.pdf	The scanned image obtained by rws/service/scanner/jobs/{Job ID}/file
sample_tiff.tiff	The scanned image obtained by エラー! 参照元が見つかりません。

Fax Features

- /rws/service/fax/capability

Method	Behavior
GET	Obtains the values that can be set for fax conditions. - Returns fixed values.

- /rws/service/fax/jobs

Method	Behavior
POST	Starts a fax job. - Error occurs if jobSetting required parameters do not exist.

- /rws/service/fax/jobs/{Job ID}

Method	Behavior
GET	Obtains fax job information. - jobStatusReason supports [memory_over/scanner_jam / wait_for_next_original_and_continue / wait_for_original_preview_operation / cannot_detect_original_size / plotter_jam / no_paper / no_toner] only.
PUT	Resumes/continues/cancels a fax job. - <jobStatus=processing> Continues scanning of a stopped fax job. - <jobStatus=completed> Ends scanning of a stopped fax job. - <jobStatus=canceled> Cancels the fax job.

- /rws/service/fax/jobs/{Job ID}/thumbnail

Method	Behavior
GET	Obtains the document preview image. - Returns a fixed value. - For {job ID}, set the ID returned by /rws/service/fax/jobs. If other values are set, an error is returned.

- /rws/service/fax/log/communication

Method	Behavior
GET	Obtains communication logs. - Returns fixed values.

- /rws/service/fax/transmissionStandbyFile

Method	Behavior
GET	Obtains the list of waiting documents. - Returns fixed values.

- /rws/service/fax/transmissionStandbyFile/{Waiting document number}

Method	Behavior
PUT	Changes the time the specified waiting fax document is sent. - Even if the request succeeds, the time of the waiting document is not changed. - Any text can be set to {waiting document number}.

POST	Immediately sends the specified waiting fax document. - Even if the request succeeds, the document is not sent. - Any text can be set to {waiting document number}.
DELETE	Deletes the specified waiting fax document. - Even if the request succeeds, the fax document is not deleted. - Any text can be set to {waiting document number}.

- /rws/service/fax/recentDestinations

Method	Behavior
GET	Obtains the last 10 destination logs. - Returns fixed values.

- /rws/service/fax/status

Method	Behavior
GET	Obtains the fax state.

Note:

- Timeout of a stopped job is not supported.

Device State Features

- /rws/status/system

Method	Behavior
GET	Returns the system state. - System states can be set on the “Status” tab “System” on the RICOH SmartSDK Emulator parameter settings screen. - Reasons only supports [service_call/toner_empty/jam/paper_all_end/others].

- /rws/status/trays

Method	Behavior
GET	Returns the input tray state. - Tray states can be set on the “Status” tab “Trays” on the RICOH SmartSDK Emulator parameter settings screen. - paperSize only supports [sz_A3/sz_A4/sz_A5]. - status supports [ready/unload/error] - paperRemain only supports [0/100]. - Other keys return fixed values.

- /rws/status/supplies

Method	Behavior
--------	----------

GET	<p>Returns the supply state.</p> <ul style="list-style-type: none"> - Supply states can be set on the “Status” tab “Toner” on the RICOH SmartSDK Emulator parameter settings screen. Fixed value is returned for waste toner bottle state, staple state, and for punch waste state. - color only supports [black/yellow/cyan/magenta]. - remain only supports [0/100]. - status only supports [empty/ existence].
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Counter Features

- /rws/counter/chargeCounter

Method	Behavior
GET	<p>Obtains the charging counter of the machine.</p> <ul style="list-style-type: none"> - Returns fixed values.

- /rws/counter/manageCounter

Method	Behavior
GET	<p>Obtains the administrator counter values.</p> <ul style="list-style-type: none"> - Returns fixed values.

- /rws/counter/userCounter/{User ID}

Method	Behavior
GET	<p>Obtains the counter information by user.</p> <ul style="list-style-type: none"> - Returns fixed values. - Any text can be set to {user ID}.

- /rws/counter/ecoCounter/{User ID}

Method	Behavior
GET	<p>Obtains the eco counter information by user.</p> <ul style="list-style-type: none"> - Returns fixed values. - Any text can be set to {user ID}.

Device Information Features

- /rws/property/deviceinfo

Method	Behavior
GET	<p>Returns the machine configuration information.</p> <ul style="list-style-type: none"> - Returns a fixed value.

Machine Settings Functions

- /rws/property/ldap/{num}

Method	Behavior
GET	Obtains the LDAP server information set to the machine. <ul style="list-style-type: none"> - The default value is fixed. - For { num }, set the value within 1 to 5. If other values are set, an error is returned.
PUT	Updates the LDAP server information set to the machine. <ul style="list-style-type: none"> - Updates the information without checking the request. - Does not affect other functions. - For { num }, set the value within 1 to 5. If other values are set, an error is returned.

Address Book Features

- /rws/addressbook/entries

Method	Behavior
GET	Returns all entry data in the address book. <ul style="list-style-type: none"> - Values obtained return the entry data of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator.
POST	Adds new entry data to the address book. <ul style="list-style-type: none"> - Values obtained return added new entry data. - When the request gets successful, entry data will be added. <p>Entry can be added up to 10. An error occurs if new entry is added despite the existence of 10 entries in the address book.</p>
DELETE	Deletes all entry data in the address book. <ul style="list-style-type: none"> - When the request gets successful, all entry data will be deleted.

- /rws/addressbook/entries/{Entry ID}

Method	Behavior
GET	Returns one entry data specified with the entry ID. <ul style="list-style-type: none"> - Values obtained are the entry data that are the same entry ID of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. - Specify [Entry ID] from the entries that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, an error is returned.
PUT	Updates one entry data specified with the entry ID. <ul style="list-style-type: none"> - Values obtained return the updated entry data. - When the request gets successful, the entry data will be updated. - Specify [Entry ID] from the entries that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, errors may occur.
DELETE	Deletes one entry data specified with the entry ID. <ul style="list-style-type: none"> - When the request gets successful, the entry data will be deleted. - Specify [Entry ID] from the entries that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, an error is returned.

- /rws/addressbook/tags

Method	Behavior
GET	<p>Returns the address book title information.</p> <ul style="list-style-type: none"> - Values obtained return the title information of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator.

- /rws/addressbook/tags/{Tag ID}

Method	Behavior
GET	<p>Returns the address book title information specified with tag ID.</p> <ul style="list-style-type: none"> - Values obtained are the title information that are the same tag ID of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. - Specify [Tag ID] from the titles that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, an error is returned.
PUT	<p>Updates the address book title information specified with tag ID</p> <ul style="list-style-type: none"> - Returns fixed values. - The title information is not updated even if the request succeeds. - Any text can be set for {tag ID}.

- /rws/addressbook/groups

Method	Behavior
GET	<p>Returns the address book group information.</p> <ul style="list-style-type: none"> - Values obtained return the group information of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator.
POST	<p>Sets one group information to address book.</p> <ul style="list-style-type: none"> - Returns a fixed value. - Group information is not added even if the request succeeds.
DELETE	<p>Deletes all address book group information.</p> <ul style="list-style-type: none"> - Group information is not deleted even if the request succeeds.

- /rws/addressbook/groups/{Group ID}

Method	Behavior
GET	<p>Returns the address book group information specified with group ID.</p> <ul style="list-style-type: none"> - Values obtained are the group information that are the same group ID of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator - Specify [Group ID] from the groups that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, an error is returned.
PUT	<p>Updates the address book group information specified with group ID.</p>

	<ul style="list-style-type: none"> - Values obtained are the group information that are the same group ID of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. - Even if the request gets successful, the group information will not be updated. - Specify [Group ID] from the groups that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, an error is returned.
DELETE	<p>Deletes the address book group information specified with group ID.</p> <ul style="list-style-type: none"> - Even if the request gets successful, the group information will not be deleted. - Specify [Group ID] from the groups that exist in "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator. If other values are set, an error is returned.

- /rws/addressbook/status

Method	Behavior
GET	<p>Returns the address book state.</p> <ul style="list-style-type: none"> - Returns a fixed value.

- /rws/addressbook/capability

Method	Behavior
GET	<p>Obtains the maximum number of data that can be saved.</p> <ul style="list-style-type: none"> - Returns a fixed value.

Note:

- Following entry information are not supported; smtpAuthData, ldapAuthData and folderAuthData.
- The query parameter "includeGroups" (used for entry search) is not supported.
- The way of searching "hasEmail", "hasFolder" or "hasFaxNum", which are Query Parameters of "/rws/addressbook/entries(GET)", is as follows. Note that it differs from the way in the case of actual device.

Query Parameter	Search method
hasEmail	Search results will only be entries involving the strings in "mailData.mailAddress".
hasFolder	Search results will only be entries involving the strings in "folderData.serverName".
hasFaxNum	Search results will only be entries involving the strings in "faxData.faxNumber".
isUser	Search results will only be entries involving the strings in "userCodeData.loginUserName".

- In obtaining the created or updated entry information with POST method or PUT method, all entry information will be obtained and values obtained will be entry default of "AddressBook Management" tab in the parameter setting screen of RICOH SmartSDK Emulator, even if there may be information that have not been created or updated.

Storage Features

- /rws/service/storage/files

Method	Behavior
--------	----------

GET	Obtains the information to display file list. This method is available for API version 1.01 and later. - Returns the content of the following file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\storage\fileInfo.csv
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- /rws/service/storage/files/{File ID}

Method	Behavior
GET	Obtains the file information specified with a file ID. This method is available for API version 1.01 and later. - Returns the content of the following file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\storage\fileInfo.csv - To {File ID}, specify the file ID registered with csv file. If other values are set, an error is returned.
DELETE	Deletes the specified file. This method is available for API version 1.01 and later.

- /rws/service/storage/files/{File ID}/image

Method	Behavior
GET	Obtains the image stored within the machine. - Returns fixed values. - To {File ID}, specify the file ID registered with csv file. If other values are set, an error is returned.

- /rws/service/storage/files/{File ID}/thumbnail

Method	Behavior
GET	Obtains the thumbnail of a file stored within a machine. This method is available for API version 1.01 and later. - Returns a fixed value. - To {File ID}, specify the file ID registered with csv file. If other values are set, an error is returned.

- /rws/service/storage/folders

Method	Behavior
GET	Obtains the list of folders stored within a machine. This method is available for API version 1.01 and later. - Returns the content of the following file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\storage\folderInfo.csv

- /rws/service/storage/folders/{Folder ID}

Method	Behavior
--------	----------

GET	<p>Obtains the information of the folder specified with a folder ID.</p> <p>This method is available for API version 1.01 and later.</p> <p>- Returns the content of the following file:</p> <p>C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\storage\folderInfo.csv</p> <p>- To {Folder ID}, specify the folder ID registered with csv file. If other values are set, an error is returned.</p>
-----	---

How to set obtained data

The information that can be obtained with storage feature can be specified with CSV file.

- Folder information

Line	Name	Required	Input format	Details
1	Folder ID	X	String	1 to 200
2	Folder name	X	String	Single byte: Max. 64 characters Double byte: Max. 32 characters
3	Folder creation date	X	String	Local time indication in RFC3339 format
4	Folder password		String	If set, password existence becomes "true".
5	Folder lock status		Boolean	true: Folder is locked false: Folder is unlocked *If not set, "false" is set.

- File information

Line	Name	Required	Input format	Details
1	Folder ID	X	String	1 to 200: User folder shared_folder: Shared folder fax_received_files: Received fax document folder
2	File ID	X	String	1 to 4294967295
3	File name	*	String	Single byte: Max. 64 characters Double byte: Max. 32 characters
4	File information: User name		String	Single byte: Max. 20 characters Double byte: Max. 10 characters
5	File information: File creation date/time	*	String	Local time indication in RFC3339 format
6	File information: Page number		Number	If not set, 1 is set.
7	File information: Available operation	*	Array[String]	print / scanSend / faxSend To set multiple operations, separate with ":"
8	File information: File		String	Local time indication in RFC3339 format, or

	expiration date			none. If not set, none is set.
9	File information: Password		String	If set, password existence becomes "true".
10	File information: Security lock status		Boolean	true: Security lock enabled false: Security lock disabled *If not set, false is set.
11	OCR information: OCR setting existence		Boolean	true: OCR setting exists false: OCR setting does not exist *If not set, false is set.
12	OCR information: OCR recognition language		String	lang_none: No language lang_jp: Japanese lang_na: US English lang_fr: French lang_gm: German lang_it: Italian lang_sp: Spanish lang_hl: Dutch lang_nw: Norwegian lang_dm: Danish lang_sw: Swedish lang_pl: Polish lang_pg: Portuguese lang_hg: Hungarian lang_fl: Finnish *If not set, lang_none is set.
13	ACL information: Number	X	Number	Only when 1 is set, other items are registered to file information.
14	ACL information: Entry ID	X	String	1 to 4294967039
15	ACL information: Permission information	X	String	read: Read permission edit: Edit permission edit_and_delete: Edit and delete permission fullcontrol: Full control
16	Extension information: Extension information type		String	none: No extension information fax: Fax extension information is stored. *If not set, none is set.
17	Fax reception notification: Line type		String	g3 / g3_2 / g3_3 / isdn / mail / ipfax
18	Fax reception notification: RTI/CSI information		String	

	(sender name)			
19	Fax reception notification: Code information: Code type		String	fcd / di / sub
20	Fax reception notification: Code information: Code details		String	
21	Fax reception notification: Job log ID		Number	
22	Fax reception notification: Received date/time		String	Local time indication in RFC3339 format
23	Fax reception notification: Email subject		String	
24	Fax reception notification: Caller display information		String	

(*): Required when "ACL information: Number" is 1.

The sample images that can be obtained for storage features can be changed by replacing the following files stored to the folder

"C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\images\original".

File name	Where the file is used
sample_Jpeg.jpg	Obtained when specifying <format=singleTiffJpeg> for the query parameter of - /rws/service/storage/files/{File ID}/image - /rws/service/storage/files/{File ID}/image
sample_multiTiff.tiff	Obtained when specifying <format=multiTiff> for the query parameter of.- /rws/service/storage/files/{File ID}/image
sample_pdf_single.pdf	Obtained when specifying <format=singlePdf> for the query parameter of.- /rws/service/storage/files/{File ID}/image
sample_pdf_multi.pdf	Obtained when specifying <format=multiPdf> for the query parameter of.- /rws/service/storage/files/{File ID}/image
thumbnail_list_sample.jpg	Obtained when specifying <type=list> for the query parameter of.- /rws/service/storage/files/{File ID}/thumbnail
thumbnail_prev_sample.jpg	Obtained when specifying <type=preview> for the query parameter of.- /rws/service/storage/files/{File ID}/thumbnail

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Log Features

- /rws/log/printerlog/devicelog/joblog.json

Method	Behavior
GET	Obtains job logs. - The obtained value returns contents of the following log file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\log\joblog.json.

- /rws/log/printerlog/devicelog/accesslog.json

Method	Behavior
GET	Obtains access logs. - The obtained value returns contents of the following log file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\log\accesslog.json

- /rws/log/printerlog/devicelog/ecolog.json

Method	Behavior
GET	Obtains Eco logs. - The obtained value returns contents of the following log file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\log\ecologylog.json

- /rws/log/printerlog/devicelog.json

Method	Behavior
GET	Obtains machine logs. - The obtained value returns contents of the following log file: C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\log\devicelog.json

Note:

- By replacing the contents of the log files saved to the C:\RICOH_SmartSDK_Emulator_v1.04\SmartEmulator\domains\domain1\applications\resource\log directory, the logs to be obtained can be replaced.
- The format of a log file is JSON.
- Even if a log file includes firstLink and nextLink, the obtained log does not contain firstLink and nextLink.
- Log search is not supported.

Validation Features

- /rws/system/validate

Method	Behavior
POST	Obtains session tokens. This method is available from API version 1.02. - Returns a fixed value.

Priority Application Remote Setting Feature

- /rws/sop/serverservice/funcpriority

Method	Behavior
GET	Obtains the list of applications that can be specified as a priority function and the information of the application currently specified as a priority function. This method is available from API version 1.03.
POST	Specifies a certain application as a priority function. This method is available from API version 1.03. - Request header Priority-Func-Authorization is not supported. - POST parameter with-locked is not supported.

Web Application Features

- /rws/sop/*

Enables accessing to a web application. Set URL of the web application to "".

Error Specifications

This release emulates some of the errors provided by RICOH SmartSDK. For details of each error, refer to the specification document of RICOH SmartSDK.

<Protocol-level error>

“X”: Supported

Status Code	Status	Description	Support
301	Moved Permanently	The request has been sent in plaintext while a request in SSL is required.	X
400	Bad Request	The request URI is too long.	X
404	Not Found	- Cannot find the resource for the URI. - The method called is not allowed by the resource.	X
405	Method Not Allowed	The method called is not supported by the device.	X
500	Internal Server Error	A fatal error occurred within the server (device).	
503	Service Unavailable	System (device) is temporarily busy.	

<Web service application-level error>

“X”: Supported

Status Code	Status	Message ID	Description	Support
400	Bad Request	error.no_indispensable_header	Required request header does not exist.	
		error.invalid_header_value	Request header value is invalid. This error includes the case the header exists but there is no value.	
		error.body_too_large	The body is too large.	
		error.not_match_body_size	The size of the request body does not match the value of Content-Length.	
		error.parse_error	Parsing failed for body format error.	
		error.no_indispensable_param	Required parameter does not exist in body.	X
		error.invalid_param_value	The format of the parameter value in body is invalid.	X
		error.no_indispensable_query	Required query parameter does not exist in body.	X
		error.under_lower_limit	Specified parameter in query is under the lower limit (only when the specified parameter is in numeric value).	X
		error.over_upper_limit	Specified parameter in query is above the upper limit (only when the specified parameter is in numeric value).	X
		error.suppression_character	Specified parameter in query contains illegal character.	
		error.invalid_query_value	The format of the parameter value in query is invalid.	X
		error.cannot_accept_now	Not ready to accept operations.	X
		error.exclusive_job_settings	Conflicting job condition setting exists.	X
		error.unsupported_job_setting	Specified job condition is unsupported.	X
		error.invalid_apikey	API key is invalid.	
		error.non_installed_pdl	Specified PDL is not installed.	X
		error.invalid_destination_settings	Invalid character exists in fax number, email address, or folder path.	
401	Unauthorized	error.login_failed	Authentication has failed.	
		error.not_input_authentication	Authentication information (ID and password) does not exist in the request for the resource which requires authentication.	X
		error.addressbook_busy	Authentication cannot be processed since the address book is being modified.	

403	Forbidden	error.invalid_cnm_client_id	Client ID is invalid.	
		error.not_authorized	Resource operation is not allowed with the privilege of the authenticated user.	X
		error.permission_denied	No privilege to operate the job.	X
404	Not Found	error.path_no_exist	Cannot identify the resource due to some error in URL (this includes the case the client ID in the URL is incorrect).	X
405	Method Not Allowed	error.method_invalid	Accessed by using the unsupported method.	
500	Internal Server Error	error.other_internal_error	Other error has occurred within the device.	X
		error.function_invalid	REST function is invalid.	
		error.response_too_much	Cannot send the response data since the data is too large.	
		error.transaction_over_upper_limit	Exceeded the maximum number of transactions that can be created.	
		error.reject_transaction_start	The start of the transaction has been rejected by the owner.	
		error.time_out	No response returned from authentication server for 60 seconds or longer	
		error.account_max	Exceeded the maximum number of users registered	X
		error.account_exist	The user already exists	
503	Service Unavailable	error.system_busy	The device is temporarily unable to receive requests.	X
		error.job_full	The number of jobs the MFP can handle has reached the maximum.	
		error.memory_full	Cannot continue the process since memory is full (including HDD).	X
		error.plotter_unit_error	Error has occurred in plotter device.	X
		error.scanner_unit_error	Error has occurred in scanner device.	X
		error.fax_link	Error has occurred in fax connection.	

Web Browser NX Emulation Feature

Render HTML/CSS/JavaScript on Web Server

The images of the applications that run on Web Browser NX can be checked.

RICOH SmartSDK Web API Emulation Feature

The emulation feature enables emulating the behaviors of the applications that run on Web Browser NX. The

functions that can be emulated are as described in the section "RICOH SmartSDK Emulation Feature."

*Scanner delivery files

Files delivered by scanner are fixed files that are preliminarily prepared by Web Browser NX Emulator.

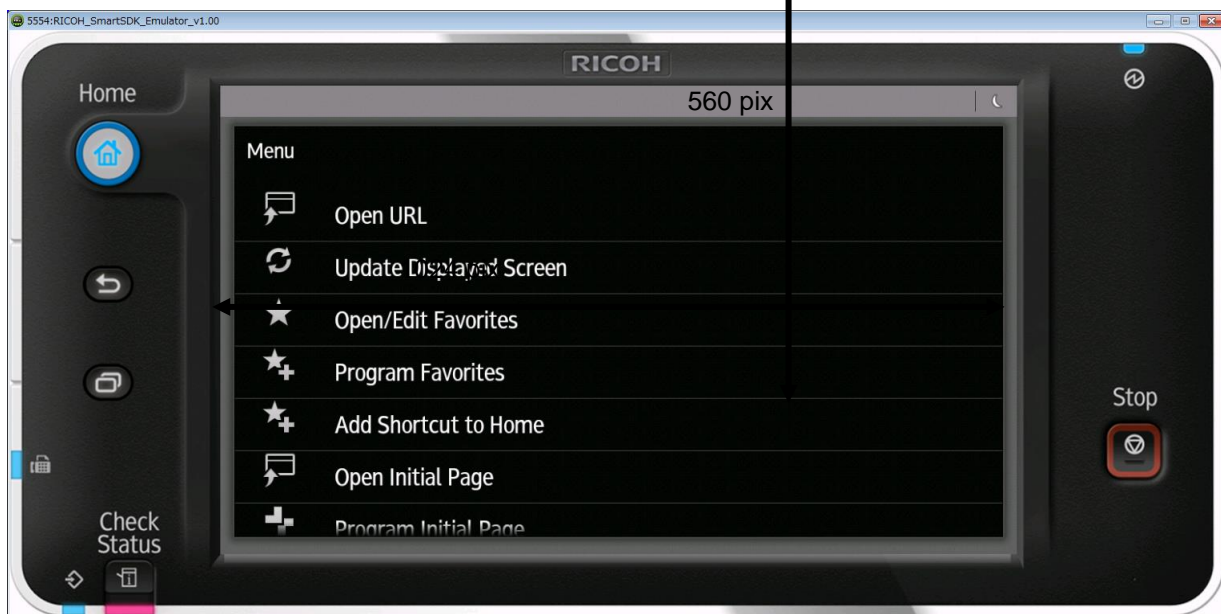
Screen

When clicking the icon of Web Browser NX (Web Browser NX) on home screen, the screen of Web Browser NX appears.

For details on screen size of Web Browser NX, refer to "Important Notes" in Start Guide.

Hardware Keys

Refer to the "Web Browser NX Specifications" of the start guide.



Menu screen

Menu Operations

For details on menu operations, refer to "Web Browser NX Settings" and "Operations" in Start Guide.

How to Obtain Packet

<Between the Emulator operation panel and the device>

1. Start up command prompt.
2. Execute the following command.
adb shell tcpdump -s 0 -v -w /data/tcp.pcap
3. Press Ctrl-C.
4. Execute the following command.
adb pull /data/tcp.pcap
5. Open the tcp.pcap file with general-purpose tools to obtain packet.

*IP address

For Emulator operation panel : 10.0.2.2

For device : Same as computer

< Between the Emulator and the Web Server>

Same way as general-purpose to obtain packet

Note:

- On Panel Type: SOP-G1 of Web Browser NX Emulator, animated GIFs do not work.
- Set "SSL error alert setting" in the security settings to "not verify" for Web Browser NX Emulator.
- The current Web Browser NX Emulator does not officially support screen display of Panel Type: SOP-G2. When we release Web Browser NX Emulator to officially support Panel Type: SOP-G2, screen appearances may differ from the current emulator.

Debugging Features

When starting the Emulator, the following debug log files are saved to the directory

C:\RICOH_SmartSDK_Emulator_v1.04\logs. When clicking "Debug logs" on the parameter setting screen of RICOH SmartSDK Emulator, the screen shows the destination to save log files.

File name	File content
client.log	Panel Emulator debug log
server.log	RICOH SmartSDK Emulator debug log
windows.info	Computer operating environment (including JDK information, set information, netstat information, and the computer's spec)
glassfish.info	GlassFish setting information
android.info	AVD operating environment

Use of HDD Area

The following area can be used when starting the emulator.

/mnt/hdd

Limitations

Limitations

- The functioning of applications on this emulator cannot guarantee the functioning on the actual device. It is required to test applications on the actual device before the product release.
- The installation procedure of RICOH SmartSDK application described in this document is only for RICOH SmartSDK Emulator; the installation procedure for the actual device differs from the procedure in this document.

Connecting physical devices (e.g. USB flash memory, SD card) is not supported.

When disabling the Back key and the Menu hardware keys, the LED indicators of the keys on the actual machine turn off but the indicators of the keys on the Emulator do not change (stay turned on).

- For Panel Emulator, Proxy exception address cannot be set.
- For Web Browser NX Emulator, download/upload functions are supported without proxy.
- The limitation on available HDD area differs from the limitation for an actual machine.
- Validity check function is not supported.

Differences Caused by Limitations on Actual Machine

- Limitations on web application response differ from the actual machine.

Modification Record

Ver. 0.01	First edition
Ver. 0.50	Modifications for the release of Sept. 30: - Added descriptions for Web Browser NX Emulator. - Modified the installation procedure.
Ver. 0.91	Modifications for the release of Oct. 30: - Added descriptions for all functions.
Ver. 0.92	Modifications for the release of Nov. 29 - Modified descriptions for all functions
Ver. 1.00	Modifications for the release of Dec. 24 - Modified descriptions for all functions
Ver. 1.01	Modifications for the release of Mar. 28 - Added descriptions of new features for RICOH SmartSDK v1.01.
Ver. 1.02	Modifications for the release of Jun. 27 - Added descriptions of new features for RICOH SmartSDK v1.02. - Added descriptions of SOP-G2.
Ver. 1.03	Modifications for the release of Sep. 30 - Added descriptions of new features for RICOH SmartSDK v1.03.
Ver. 1.04	Modifications for the release of Oct. 31 - Added descriptions of new features for RICOH SmartSDK v1.04.