Apeos Connect

Product Introduction

Introduction: Apeos Connect

Apeos Connect is a software development kit for using Apeos iiX framework that links multifunction device/printer[*1] with the software that runs on a server, and eXtensible Customize Platform that allows installing Java-based plug-ins on multifunction device/printer to customize the functionalities of multifunction device/printer.

> *1: Compatible models include Apeos/ApeosPrint/ApeosPro series and Revoria Press series. For details about the product models, please contact us.

By participating in Apeos Connect membership, you are provided with technical information on printing, software development kits and access to inquiry supports. In addition, you can use a development and testing environment at free of charge that helps implementation of swift and easier development process to create the linkage and the customized functions.

To use Apeos Connect, customers such as developers and solution venders are requested to submit the application form from our official website.
Once you have submitted the application form, we check if you are eligible as a Apeos partner. Please be aware that it will take us at least one month to complete the contract procedure before you can start to use.
Post-sales support will be provided through our official website or email.

■ Apeos Connect application page
https://apeos-connect-application.fujifilm.com/ne/index.html(Link)

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1. What is Apeos Connect?

Apeos Connect is a development support kit that helps third-party developers and solution vendors to create or develop a linkage service and system in shorter period and at lower cost by making use of the service linkage framework Apeos iiX[*1] whose specifications are open to use. Apeos series devices have adopted a Web service as a tool to connect multiple systems. Using the Web service through standard technologies, XML and the SOAP (protocol), enhances the compatibility with external services and reduces the time and effort that used to be a bottleneck when trying to connect a multifunction device/printer to the mission-critical systems. Furthermore, we disclose a XCP [*2] framework that enables customisation of the built-in functions of the multifunction device/printer by simply installing additional Java plugins without making changes to the firmware of the multifunction device/printer.

*1: Apeos internet integration framework based on XML
*2: eXtensible Customizing Platform, which enables customization of multifunction device/printer's functions by installing the plug-ins created using Java language
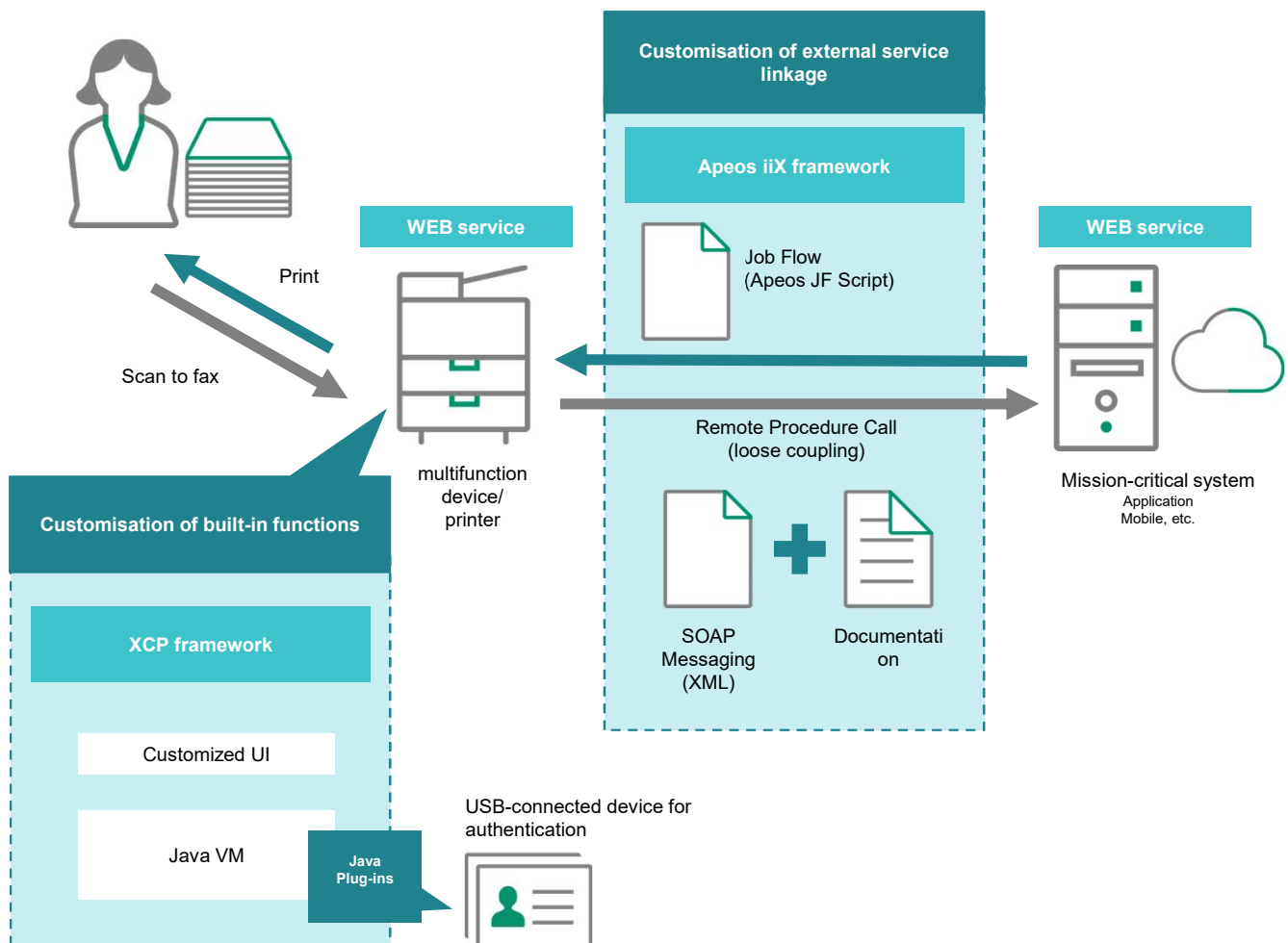
1.1 About Apeos iiX Framework

Apeos iiX framework on multifunction device/printer serves as a client for external Web services in the data distribution system and as a server for external Web services in the data management system.
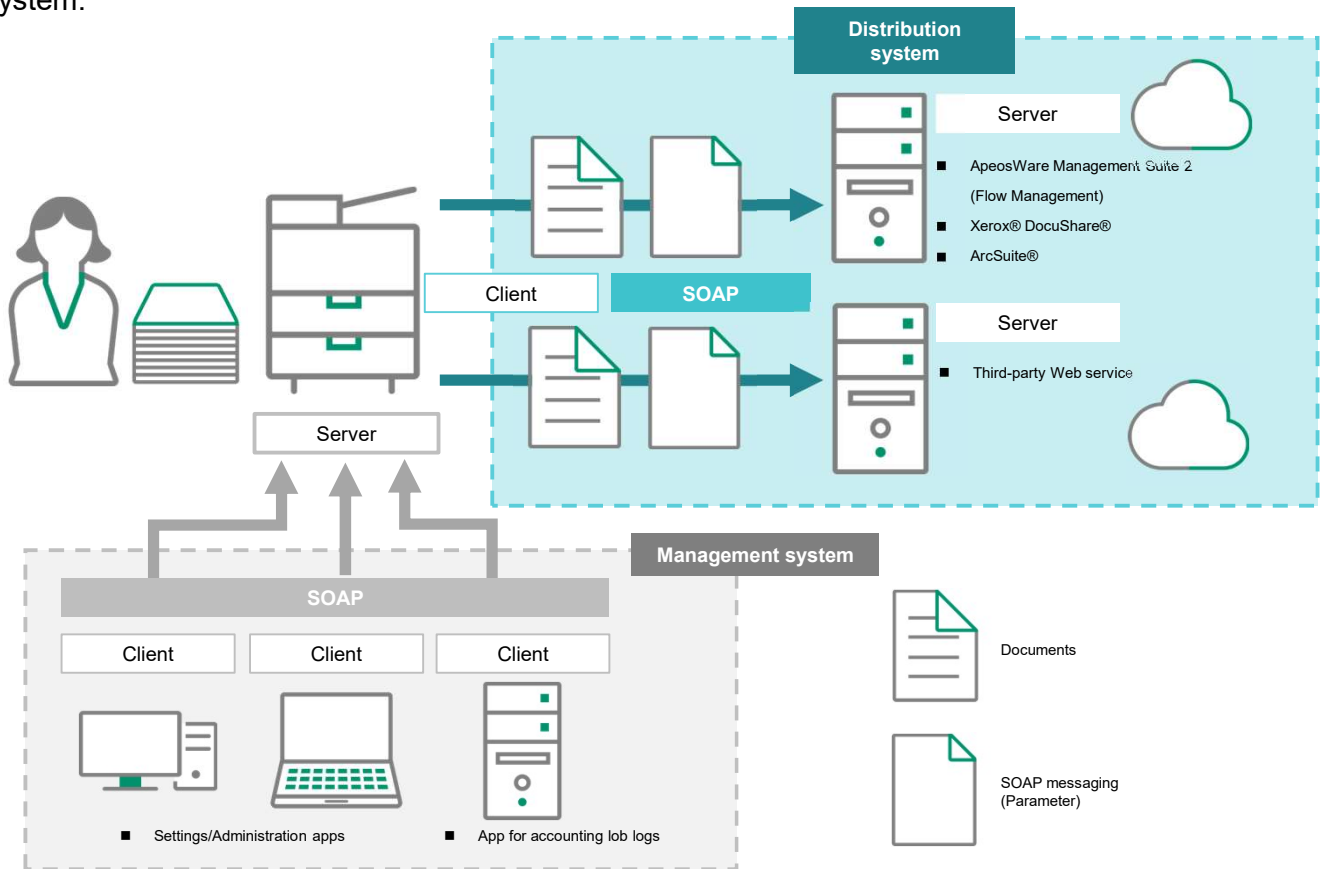
We disclose the I/F specifications* for management, file uploading and scanning among the services embedded in a multifunction device/printer in addition to the functions such as print, accounting, authentication and presentation.
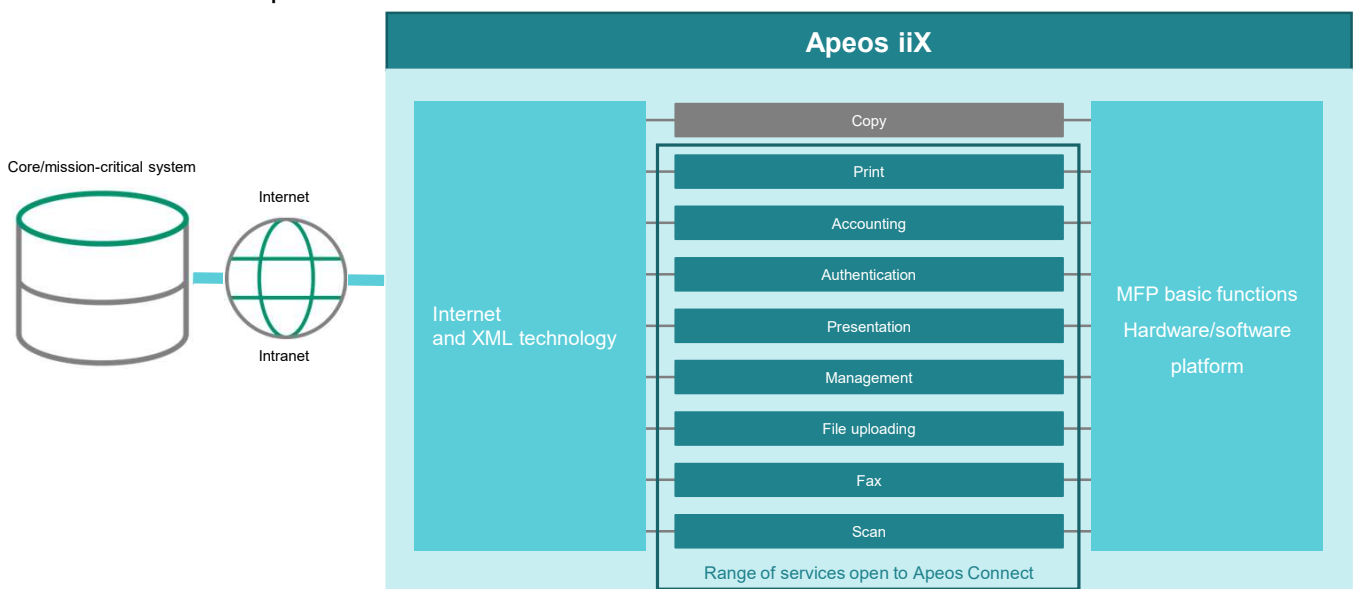

* The range of specifications we have disclosed is not all of I/Fs on the multifunction device/printer.

1.2 About XCP Framework

XCP framework facilitates the customisation of functions of a multifunction device/printer by simply installing Java plugins without making changes to the firmware of the device. It also allows creating the custom UI screen for custom services.

➢ Can proceed from design to testing of the apps without multifunction device/printer as the environment to simulate is available on PC.

➢ Can eliminate the need for developing apps individually from product to product thanks to Java adoption.

➢ Can install or update the apps on multiple devices in a batch, minimizing operational workload.
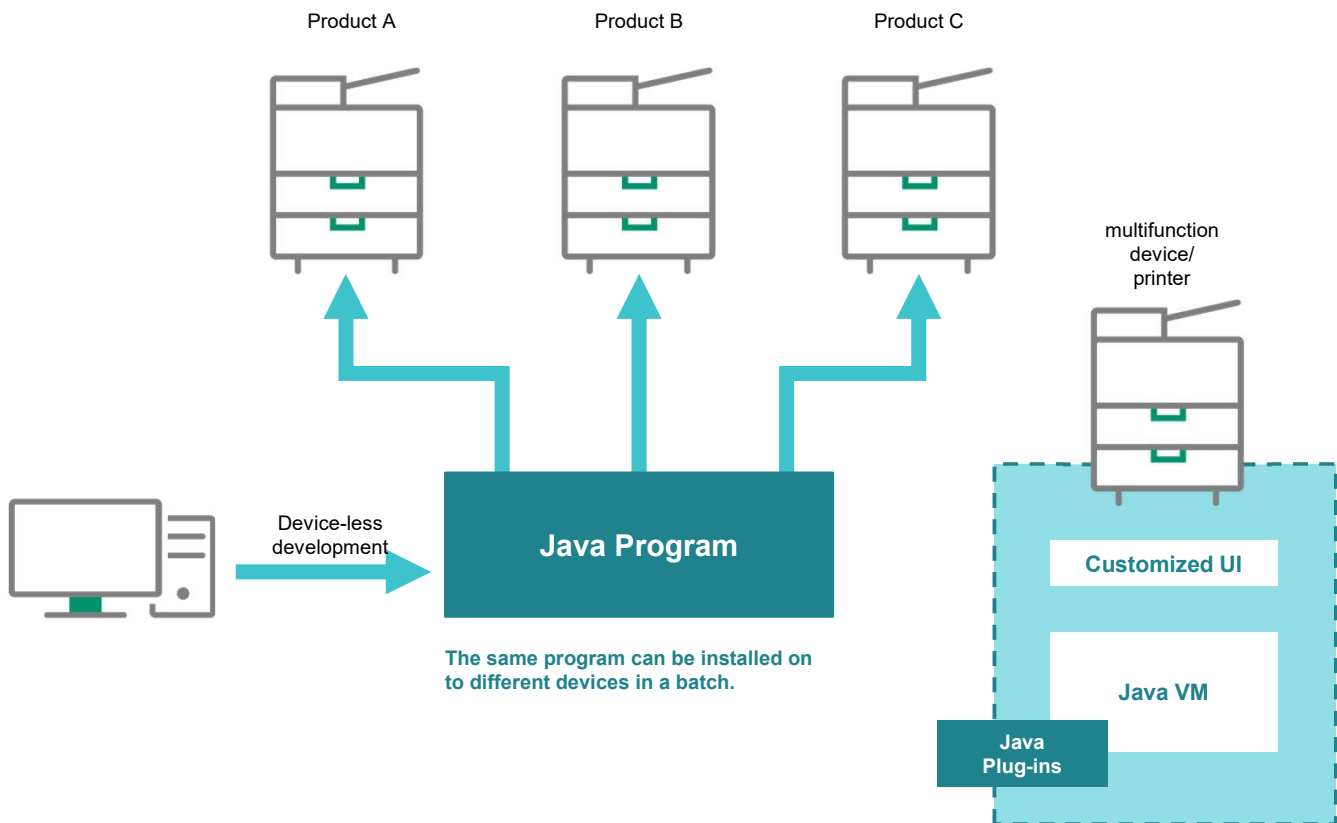
1.3 About Embedded Web Browser V6

Web browser function enables you to develop external apps that has intuitive operations like a smartphone, reducing development time and cost for such apps.
We offer the following four features with Apeos iiX framework.

Compatible with standard browsers
• Supports pinch-in/pinch-out and scrolling • JavaScript support up to ES2021 • Video playback is possible within the browser[1]

| Outline/Unicode Font adopted |
| --- |
| • Improvement to text expression such as font sizes
• Can develop the screen consist of multiple language mixed |

Supports print integration from MFP
• Using only server-side HTML code, files stored on the server can be printed via MFP

Supports scan integration from MFP
• Using only server-side HTML code, files scanned by MFP can be uploaded[2]

*1: For supported video formats, refer to "EWB external specification V6 Edition".
*2: Sample creation and functionality verification are available in the Training course.

WEB service
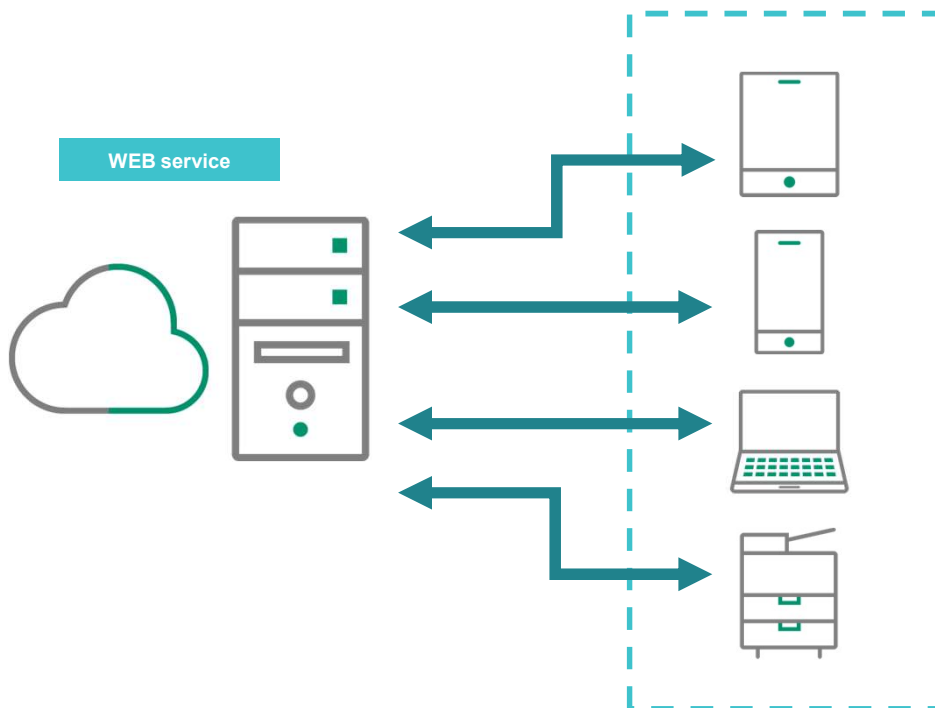
2. Apeos Connect: Plans/Price

- Apeos Connect is a developer support program for third-party developers and solution vendors, supporting the FUJIIFLM Business Innovation multifunction device/printer[1].

- Apeos Connect has the basic plan and the option plan. The basic plan provides technical information [2] and inquiry support for technical information, while the option plan provides the software development kit (SDK) [3], cloud simulator [4] and inquiry support for those options.

  [1]:Compatible models include Apeos/ApeosPrint/ApeosPro series and Revoria Press series. For details about the product models, please contact us.

  [2]:Includs MIB that is used to retrieve information about the device configuration and operating status of Fujifilm Business Innovation multifunction device/printer, and XPJL and DEVMODE that are used to configure the command to print from Fujifilm Business Innovation multifunction device/printer.

  [3]: Required for using eXtensible Customizing Platform that allows installing Java plug-ins and Apoes iiX framework to customize MFP's function so that you can link the software running on a server with Fujifilm Business Innovation Apeos series products.

  [4]: For testing the application program (referred to as "creation software") that is created with SDK. Compatible only with the Apeos series.

- License Agreement for Apeos Connect covers the following.

  • Use of technical information

  • Creation of "creation software"[5]

  • Use of library, sample code, and tutorials[5]

  • Use of Cloud Simulator (access right granted)[5]

  • Distribution of "creation software", provision of maintenance support[5]

  • Creation of demos, evaluation, education materials and manuals with a test tool that is included in SDK[5]

- During the term of Apeos Connect license agreement, you can download the updated information of Apeos Connect technical information/software development kit or technical inquiries[6].

  [5] : A contract for Option plan is required in addition to Basic plan.

  [6]: Support through web/ e-mail

Plan	Contents	Price	Term of Agreement[7]
Basic	■ Use of Output Specification ■ Use of Output Specification Download Site ■ Use of updated Output Specification ■ Inquiries about Output Specification	Free of charge	5 years
Option	■ Use of SDK ■ Use of SDK download site ■ Use of SDK update information ■ Use of Cloud Simulator[8] ■ Inquiries about SDK and Cloud Simulator	Free of charge	5 years

  [7] : The license agreement for Apeos Connect (basic) and Apeos Connect (option) is for a maximum of five years. If you wish to continue using the software after the license agreement expires, you will need to apply again.

  [8] : Cloud Simulators are limited to 3 units per partner. Compatible only with the Apeos series.

3. Apeos Connect Product Components

■ This product consists of the following.

[License]

- Software development/distribution license
- License to use inquiry support use licensing[*1]
- License to use the development support tools

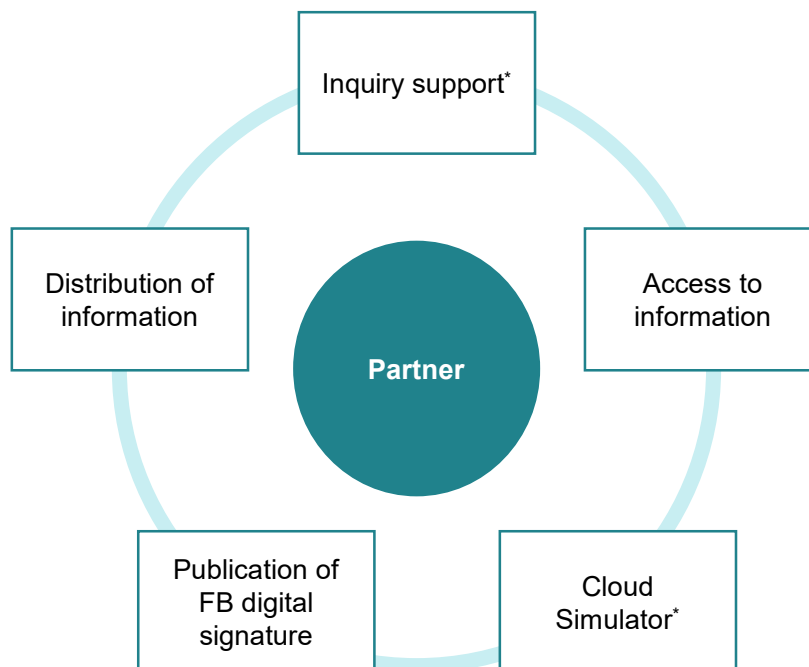   *1:Getting support is limited to 2 members. These members are changeable.

[Specifications/Tools/Libraries]

These materials are available for download at Fujifilm Business Innovation official website "Apeos Connect (for members) " page.

Category	Items	Description
Specifications	Apeos JF SCLIPT Language Specifications	Specifications for Apeos JF SCLIPT.
	Embedded Web Browser External Specification	Specifications for Web browsers installed on MFP.
	Apeos iiX Service Management I/F Specifications -Management I/F	Interface specifications for the function to change the settings of MFP via network.
	Apeos iiX Service Management I/F Specifications -Authentication I/F	Interface specifications for managing MFP's user information with the authentication agent server.
	Apeos iiX Service Management I/F Specifications -Log I/F	Interface specifications for the function to retrieve usage logs on MFP
	XCP Developer's Guide	Specifications for XCP plugins.
	Custom Service Script Specification	Specifications for creating a custom UI screen of XCP plug-in
Tools	EWB simulator	The software for simulating Embedded Web Browser on PC.
	External Application Linkage Service Test Tool	A tool that can simulate the linkage for the scan function by using Apeos JF SCLIPT on PC.
	XCP emulator (for Linux OS) XCP library XCP Class Library Specification (HTML form)	Includes development tools and class libraries for XCP Plug-ins.
	Content signing tool Custom service installer	A tool used to create the installer that incorporates the created XCP Plug-in into MFP.
Libraries	EWB extension library	JavaScript library that provides Embedded Web Browser with functions to retrieve the version info of the browser or transitioning between browsers.
	External application collaboration services construction support JavaScript library	A set of JavaScript libraries that are helpful for creating more user-friendly external application collaboration services.
Supplemental resources	Apeos iiX Service Management Interface	Describes how to use Apeos iiX Service Management Interface and caveats.
	Apeos JF SCLIPT	Contains Apeos JF SCLIPT schema file.
	MS.NET Extensions	Contains implementation samples for SOAP Extensions for using SwA with Internet Information Service.
	Authentication Agent	Gives additional information regarding Authentication Agent.
	Quality confirmation sheet/checklist	Contains guidelines and check sheets that help improve the quality of the device linkage software.

4. About Apeos Connect Support

During the contract period for using Apeos Connect, Developer Support Program (Apeos Connect) offers support as follows.

* Available only for validity duration of the license agreement.

Item	Description
Inquiry support	By participating in Apeos Connect members, inquiry support is available. You are allowed to request support during the valid duration of the license agreement applicable to the product. Method of inquiry: website or e-mail
Access to information	Cumulative Q&As are available for download as a file.
Distribution of information	You can get a notification of new product or bug information.
Publication of FB digital signature	We issue a digital signature that should be embedded in the contents that use the XCP framework plug-in. The digital signature will be issued at request basis. After creating your contents, please request a digital signature as needed. How to request: At the contact page on the Apeos Connect portal site (for members only), make a request per product. (See *4-1. Digital Signature Issuer Service*)
Cloud Simulator	A contract for Apeos Connect (Option) is required to use this simulator. You can use during the valid duration of support. Up to 3 simulators are allowed for use per partner. (See *4-2. About Development/Testing Environment*)

4-1. Digital Signature Issuer Service

The XCP framework plugin must be attached with a digital signature to prevent installation of unauthorized contents on multifunction device/printer.

We offer a tool that adds a digital signature and a service that issues a digital signature. It is not allowed to install any contents without our digital signature.

Target customer	Target service	Offered items	How to obtain/apply	Description
Customers who have a contract for Apeos Connect	XCP framework plug-ins	Content Signature Tool	Download the latest version of Apeos Connect from the Apeos Connect members page on FUJIFILM BI Direct website.	A tool to add the digital signature of Fujifilm Business Innovation.
		Service for issuing the digital signature with Fujifilm Business Innovation certificate	Send a request to Apeos Connect Support by email.	A service to issue the digital signature of Fujifilm Business Innovation. You can then embed the digital signature by using Content Signature Tool.

Usage of the contents that has the digital signature attached
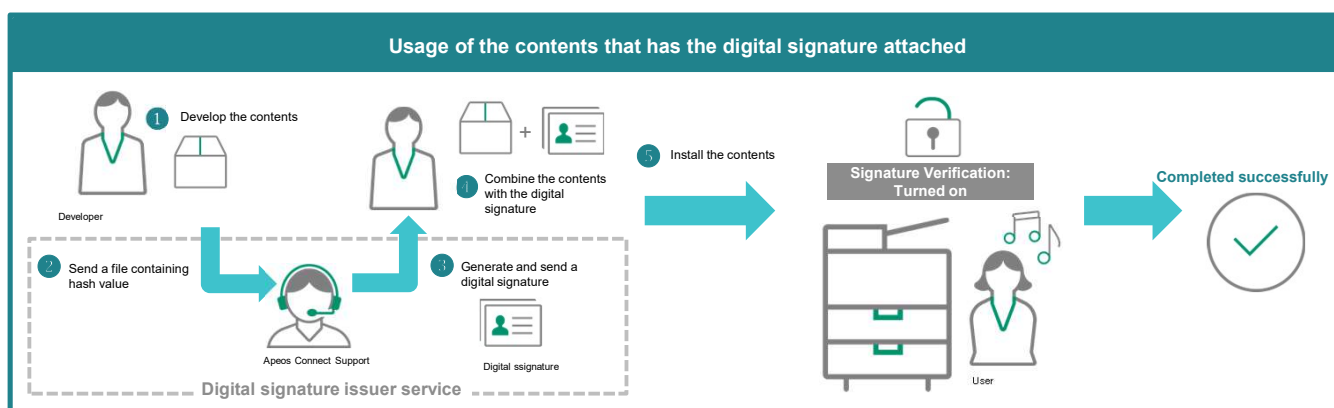
Procedure for using service to issue a digital signature
(1) Partner: Develops the contents.
(2) Partner: By using the tool for digitally signing the contents, retrieves the hash values and send them to Apeos Connect Support by email[*].
(3) Fujifilm Business Innovation: Generates a digital signature and provide it to the partner by e-mail.
(4) Partner: Uses Content Signature Tool to combine the developed content with the digital signature.
(5) Partner: Creates an installer from the contents that have the digital signature combined. Use the installer to incorporate the content into the device.

What is "Content SignatureTool"?
Content Signature Tool is a tool that gives Fujifilm Business Innovation's digital signature to contents developed by partners (using XCP plug-ins/custom services).
By giving the Fujifilm Business Innovation's digital signature, we permit to install your created contents into the devices sold under Fujifilm Business Innovation brand.
Content Signature Tool provides tools for generating hash values and for combining digital signature with your created contents.

Digital signature issuer service
How to request: Please send a file of retrieved hash values by email. Contact info of Apeos Connect Support is found in "How to register the license and support information" that is accompanied with your purchased product.
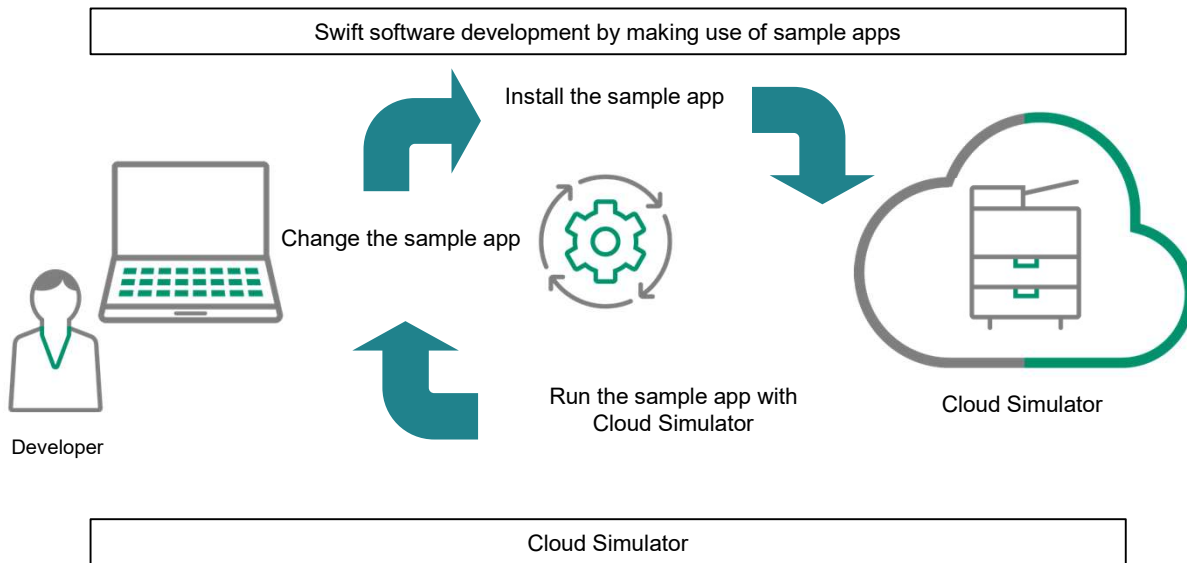Hours of operation: 9:00a.m. - 5:36p.m. in Japan time , Monday to Friday (except national/our business holidays)
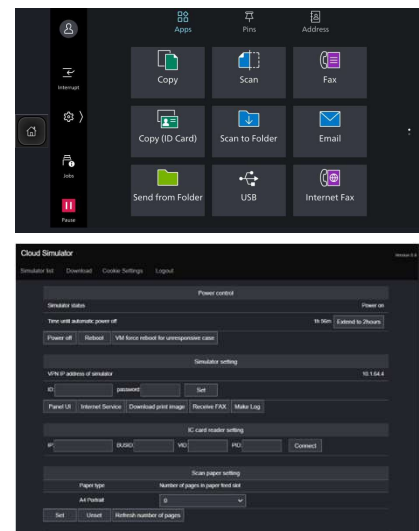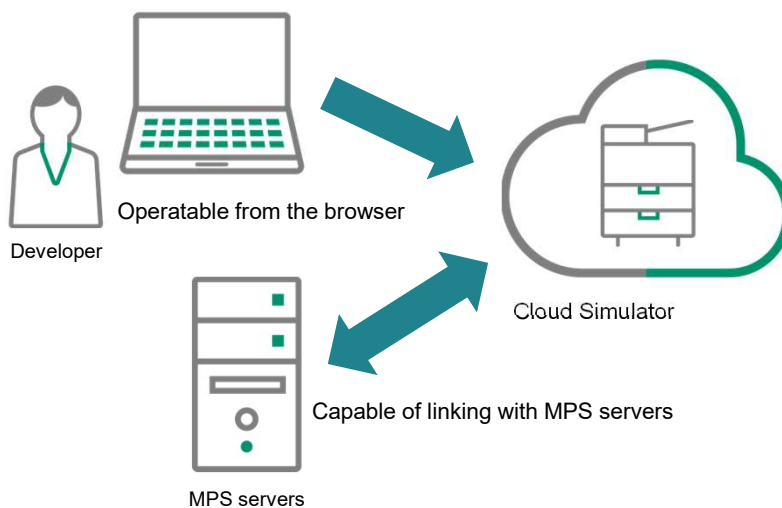
4-2. About Development/Testing Environment

By applying for Apeos Connect, you are provided with technical information on printing, software development kits and access to inquiry supports. In addition, we offer a development and testing environment at free of charge that helps implementation of swift and easier development process to create the linkage or the customized functions

[More agility in developing and testing]

- A variety of libraries, sample codes, and tutorials are available.

- Cloud Simulator can be used with the latest browsers, enabling the same operations with a virtual device in the cloud like operating a real device.

Swift software development by making use of sample apps

Install the sample app

Change the sample app

Run the sample app with Cloud Simulator

Cloud Simulator

Developer

Cloud Simulator

- UI operation, printing, scanning, faxing, authentication, SOAP and SNMP communications can be verified.

    - Evaluation related to HW performance and strict judgment of color/white/black are not possible.

    - OCR function/print fonts are not supported.

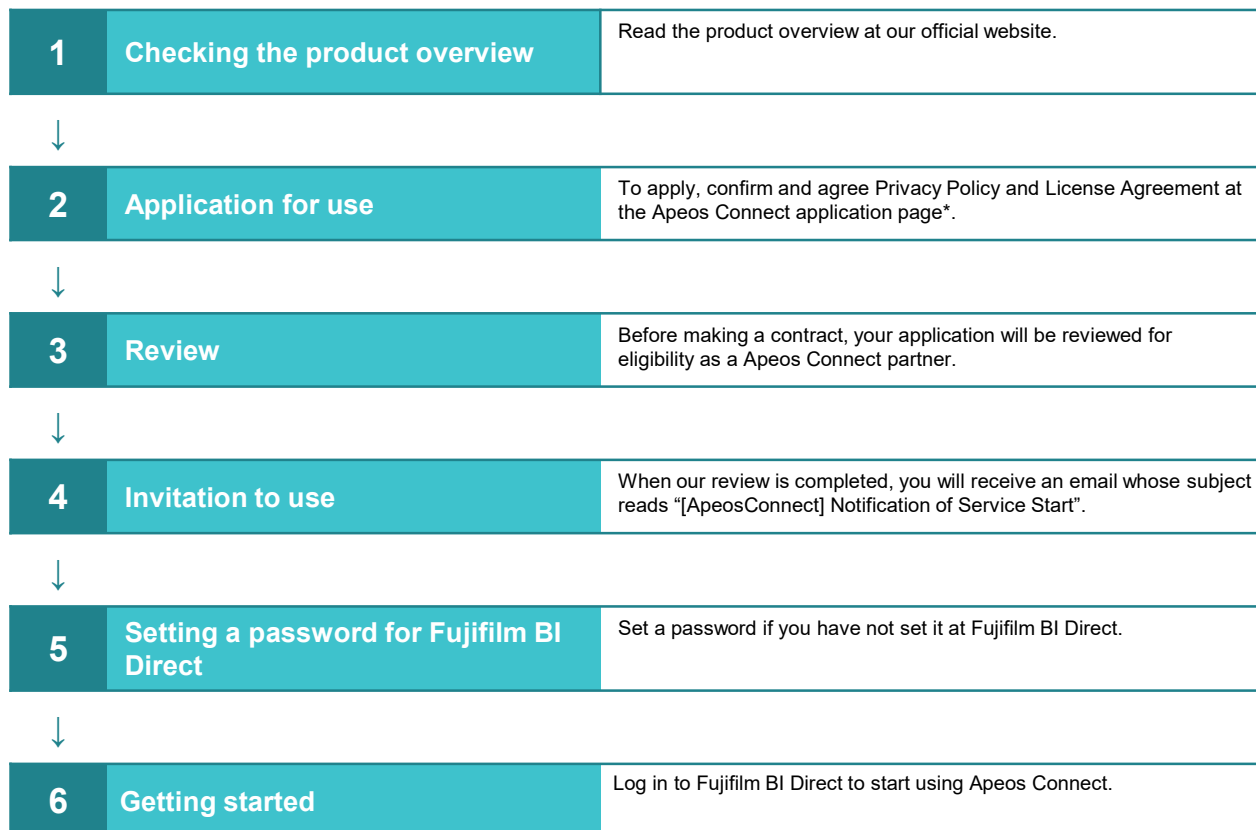   - Compatible only with the Apeos series.

Operatable from the browser

Developer

Cloud Simulator

Capable of linking with MPS servers

MPS servers

Simulator screen

Appendix) Application procedure before getting started with Apeos Connect

To start using Apeos Connect, the following procedure is required.
After receiving the application, we check if you are eligible as an Apeos Connect partner.

1	**Checking the product overview**	Read the product overview at our official website.

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2	**Application for use**	To apply, confirm and agree Privacy Policy and License Agreement at the Apeos Connect application page*.

↓

3	**Review**	Before making a contract, your application will be reviewed for eligibility as a Apeos Connect partner.

↓

4	**Invitation to use**	When our review is completed, you will receive an email whose subject reads "[ApeosConnect] Notification of Service Start".

↓

5	**Setting a password for Fujifilm BI Direct**	Set a password if you have not set it at Fujifilm BI Direct.

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6	**Getting started**	Log in to Fujifilm BI Direct to start using Apeos Connect.

* : Apply for Apeos Connect at the link below.
https://apeos-connect-application.fujifilm.com/ne/index.html(Link)

For inquiry about Apeos Connect, please visit the link below (Apeos Connect members only)
https://direct-fb.fujifilm.com/ap2/contact/ac(Link)

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