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ApeosWare Management Suite 2 Features Guide Flow Management Option

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1 Overview of Flow Management

Getting to Know Flow Management

Flow Management is software that can automatically process, distribute and manage documents. This section describes the features of Flow Management.

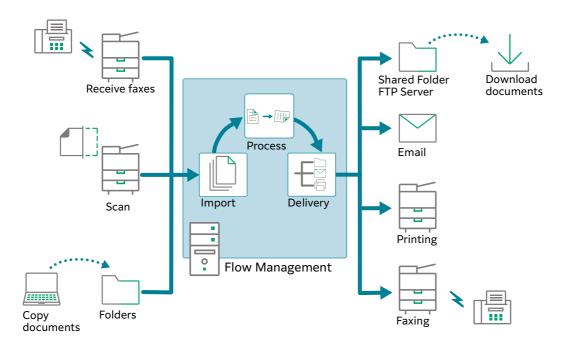
Handling Documents Automatically

Flow Management allows you to automatically process, organize and sort a lot of daily documents such as faxes, paper documents or electronic files.

Once you register the flow of procedure in Flow Management, you can import, process and distribute documents automatically by just receiving faxes, scanning with a device or copying to a folder.

You can select a printer, fax, or e-mail for the delivery destination according to your document. In addition, you can specify the shared folder on network or the folder on an FTP server as well as local folders to save your documents.

This automation process enables to handle a lot of daily documents efficiently and precisely.



Registering the procedure of importing, processing or distributing documents is referred to as "Flow".

Processing Images

Image processing, such as Skew Correction, Noise Reduction, Auto Rotation, or Edge Erase can be used for the document imported to Flow Management.

In addition, the document imported to Flow Management can be converted to PDF or DocuWorks document format, and the textual data can be extracted using OCR (Optical Character Recognition). The textual data extracted using OCR can be pasted to DocuWorks documents as annotations, or can be used as a document name.



- There are two methods to perform the OCR process; to use the [OCR] function of DocuWorks or to use the [OmniPage(R) OCR] function that uses OmniPage (by Kofax, Inc.).
- To use the [OCR] function, DocuWorks is required. In addition, the Japanese version of DocuWorks 9.0.1 or later, and the English version of DocuWorks, Chinese version of DocuWorks, Korean version of DocuWorks, and Thai version of DocuWorks require an optional license.
- [OmniPage(R) OCR] only supports English, Chinese and Korean. Japanese is not supported. An optional license is required to use the function.

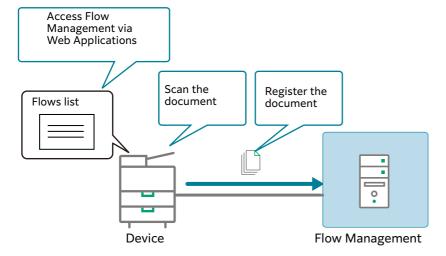
Link to Web Applications

Documents can be handled by linking to the Web Applications function in a device.

When you access Flow Management via the Web Applications screen in a device, and scan a document by selecting a flow, the document is handled according to the selected flow.

This function allows you to register your documents to Flow Management with any devices that support the Web Applications function.

Therefore, you do not need to create a folder, or manage the flow for each device.

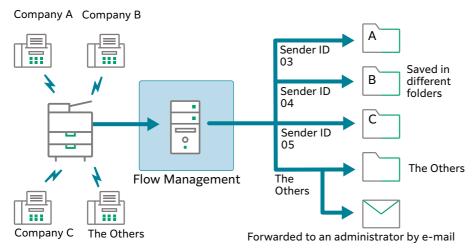


Setting Delivery Conditions

The storage location and delivery destination can be changed according to the document specific information or the time stamp.

For example, you can save the received fax documents in different folders according to the ID's of Fax senders. You can also select the operation according to when the document is received, such as sent to a printer for the weekdays, or saved as electronic data for the weekends.

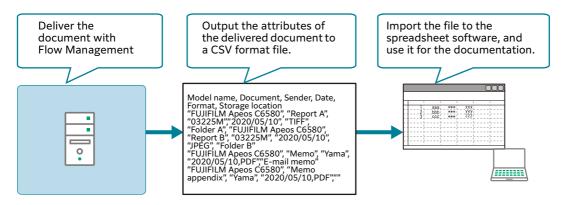
Setting the delivery condition of the document allows you to create more flexible flows that match the complicated delivery operation.



Document and Attributes Table Output

The specific attributes are added to the document during import, processing or delivery activities. The attribute includes the information, such as the telephone number of a sender, received device, received date, number of handled pages, or recipient e-mail address.

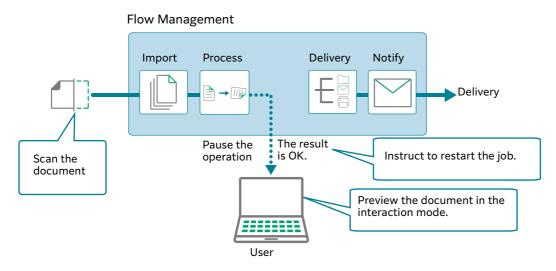
These attributes can be saved to a file in CSV format. You can import the file to a spreadsheet software and manage the document separately.



Interaction Mode

During the image processing, you can pause the operation and check the document information. This operation is referred to as "Interaction mode".

In the interaction mode, you can preview the document on the screen of a Web browser to check the document result, or to change the document attribute. After checking the document, when you instruct to restart the job, the remaining processes are started. If there is a problem in the result, you can delete the job.



Refer

"About Interaction Mode" (P.24)

Notify

When the user is in interaction mode and delivering documents has been completed, or an error occurs, a notification is sent to the specified address by e-mail.

Users can be notified of the progress status while they are engaged in other tasks by setting the notification function. This enables users to deal with the error quickly.

Form Analysis

Handwritten paper can be used to interface with PCs "Paper UI" by using Paper Form function.

"Form", special paper, is used to instruct PCs. When handwritten form is faxed or scanned with document, Flow Management analyses the instruction written on the form. Analysis report can be used for destination sorting and document name

Refer

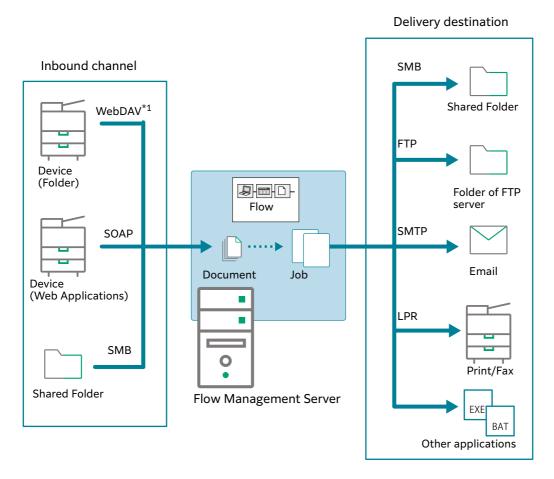
"6 Paper Form Function" (P.220)

Features of Flow Management

This section describes the structure and processing mechanism of Flow Management.

Structure of Flow Management

This section describes the structure of Flow Management.



*1 For the devices that do not support WebDAV, use Network Scanner Utility 2 for the communication.

Flow Management server

A personal computer with Flow Management installed will manage flows, flow jobs, imports and processes, or deliver documents.

Inbound Channel

Location where the documents are processed by Flow Management. Device folders, link to web applications and folders can be specified.

Delivery Destination

Location where documents are processed by Flow Management are outputs.

The folder, e-mail, print and fax can be specified. In addition, documents can be passed to other applications.

Flow

Documents are processed according to the pre-registered flow in Flow Management. The following information can be set for the flow.

• From which you obtain the document (Inbound channel)

- How you correct the image or convert the format (Processing method)
- Where you distribute the document (Delivery destination)
- On which conditions you distribute the document (Delivery conditions)
- You are notified when the operation is completed or an error occurs (Notification)
- Who manages or handles the flow and job (Role settings)



Flow Job

The unit of the process executed according to the flow is referred to as "Flow job" or "Job".

A job is created after the document is imported to Flow Management. One job is created per one import session.



The job is created when Flow Management completes the import process, not when the document is entered in the inbound channel. It may take time before a job is created after document entry depending on the monitor interval of the inbound channel.



Document

A unit of data which is passed between the source and target is referred to as "Document". There are the following two types of documents in Flow Management.

• Document in a file format

One document is composed of one or more files.

This is a standard format.

• Document in a folder format

One document is composed of one or more files stored in a folder.

For example, if you convert a TIFF document of multiple pages to [TIFF (Single Page)] or [JPEG] using the [Format Conversion] function, the document in a folder format is created.



Document in a file format



Document in a folder format

"Document name" is attached to the document. The document name is a name to identify the documents in Flow Management. The methods to determine the name are shown in the following table.

Import Method	Document Name
Folders	Entered file name
Folder	Determined from the IP address or host name, folder number, document number, or document received date and time
Link to Web Applications	Created from the device model name and serial number

However, you can change the document name to any name you choose while the document is delivered.

Processing Mechanism

This section describes the processing mechanism of Flow Management.

Import and Flow Process

The process of Flow Management is largely categorized into the following two types.

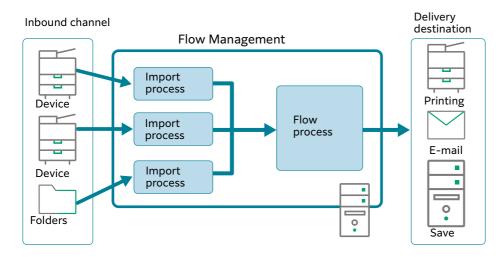
Import process

Flow Management monitors the device folders and folders set for the flow regularly. When a document is put in the folder, Flow Management imports the document and creates a For link to web applications, the image data scanned by a device is transferred to Flow Management, and a job is created.

When a document is put in the folder, Flow Management imports the document and creates a job. For link to web applications, the image data scanned by a device is transferred to Flow Management, and a job is created.

• Flow process

The job created by import is processed and delivered according to the flow settings.





History data of completed jobs is deleted by "Delete Job History" after it is retained for a certain period.



"Suppressing the Database File Size" (P.72)

Start and Stop of the Process

The job process of Flow Management starts automatically when you start the Flow Management server. It stops automatically when you shut down the Flow Management server.

The remaining jobs due to Flow Management server shutdown are saved unchanged, and when the Flow Management server restarts, they are processed in order.



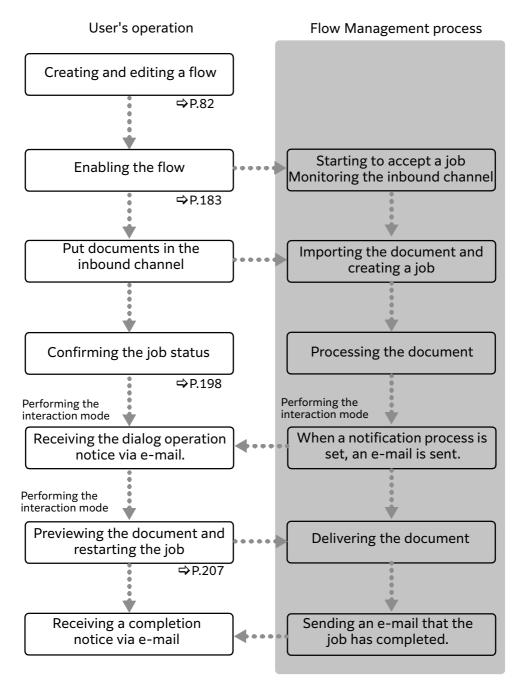
- There are points to note for the job that is executed upon start of the Flow Management server. For details, refer to the release note.
- You can start or stop the Flow Management service using a batch command.



"Starting or Stopping the Flow Management Service" (P.70)

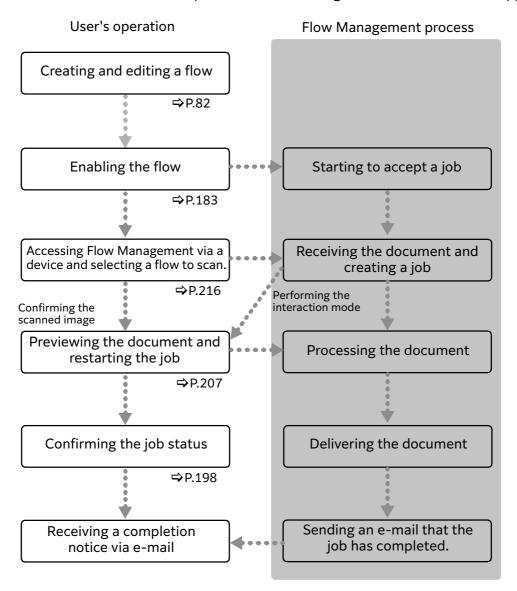
Processing Flow (For Importing from Device Folders or Folders)

This section illustrates the main process of Flow Management when documents are imported from device folders or folders.



Processing Flow (For Link to Web Applications)

This section illustrates the main process of Flow Management when link to web applications is used.



About Flows

This section describes the flow of Flow Management.

Functions Comprising the Flow

Each program, such as inbound channel, processing method, delivery destination and error notification in Flow Management is referred to as "Function". You can create a flow that supports a variety of operations by combining the necessary functions.

Some functions are set for the whole flow and some are related to the added individual functions. The following functions can be added to a flow.

Items	Function Added to the Flow	Function Related to the Added Function
Inbound channel	 Folder Folders Link to Web Applications*1 	-

Items	Function Added to the Flow	Function Related to the Added Function
Processing method	 Image processing Format conversion OCR Document name QR Code reader OmniPage(R) OCR OmniPage(R) barcode Reader Attribute mapping Form analysis Load attributes Database query Separate CSV attributes Join CSV attributes 	 Interaction process*1 Notification E-mail (Notification settings)*2
Delivery destination	 Save to folder Email Printer output Link to Application Save form analysis to file Save attributes to file 	Delivery conditions Preprocessing Format conversion Document name Postprocessing Notification E-mail (Completion notification) Document and attributes table output
Error notification	Notification e-mail	-

^{*1} Only one function can be added to one flow.

^{*2} This can be set only when the [Interaction Process] function is added.



Note

The [Format Conversion] function and [Document Name] function can be set for the processing method, as well as for the added delivery destination. If they are set for the processing method, all documents imported to the flow are targeted. If they are set for the delivery destination function, only the documents delivered to the destination are targeted.



Details of the Flow Functions → "Details of the Flow Functions" (P.25)

Maximum Number of Flows and Features

The number of flows which can be configured, and the number of features which can be added for one flow are as follows. They differ depending on the OS of the Flow Management server.

OS	Number of Flows Which Can Be Set	Number of Features Which Can Be Added for One Flow
Windows Server 2012Windows Server 2012 R2Windows Server 2016Windows Server 2019	1,000 item(s)	Up to 500 items including Inbound channel, Processing Method, Delivery Destination, and Error Notification.
• Windows 8.1 • Windows 10	200 item(s)	Up to 100 items including Inbound channel, Processing Method, Inbound Channel, and Error Notification.



- The maximum number of features that can be set in one flow is 500 items, 100 sets. The operational maximum number that can be set in the server OS is also 100 items. If the number of flows exceeds 100 when the flow is created, edited or uploaded, a warning message to warn that too many features are set appears. If one or more flow job which has many features is executed, it may not run, even though the number of features is 100 and fewer because of the lack of memory space. When you design a flow, therefore, refer to "Setting the [Attribute Mapping] Function" (P.130) and set 100 and fewer features.
- The number of pages processed by a flow per hour is about 500 pages for black & white and 400 pages for color.

Flow Status

You can switch from [Enabled] to [Disabled] for the status of the flow. [Enabled] is a status that accepts a job. [Disabled] is a status that does not accept a job.



The status of the newly created flow is [Disabled]. To accept a job, switch the status to [Enabled]. To edit or delete a flow, switch the status to [Disabled].

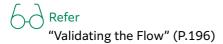


Validating a Flow

You can validate whether the created flow operates properly.

Flow Management checks whether the inbound channel, processing method, delivery destination and notification functions set to the flow are available, and indicates which function encountered the error, and the error cause.

Validate the flow when you created a flow, or a job terminated abnormally to solve the problem.



About Attributes

This section describes the attributes of Flow Management.

Document Attribute and Job Attribute

The specific information of the document is referred to as "Attribute". There are the following two types of attributes.

- Document attributes
- Job attribute

The document attribute is obtained based on the job process result. For example, this includes the information obtained when a document is imported using the [Folder] function, such as the recipient telephone number or sender ID, as well as the text information read by the [OCR] function.

The job attribute is the specific information of the job. This includes User ID of the job flow and job received date and time.



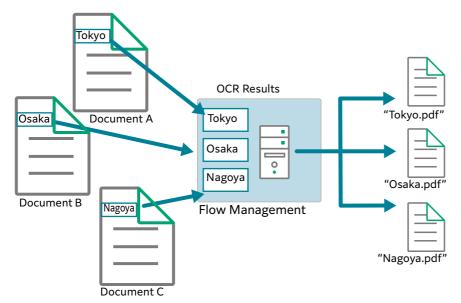
Flow Using Attributes

These attributes are used for the various situations in each function. The following table shows the example of processing using attributes.

Features	Example for Using Attributes
Format Conversion (PDF)	Document information
Format Conversion (DocuWorks document)	Text pasted as annotations, properties of documents, header and footer
Document name	File name to save a document
Save to Folder	Conditions when documents are sorted in sub-folders
Email	E-mail address, CC, BCC, subject, body
Link to Application	Parameters passed to executable files
Notification e-mail	E-mail address, CC, BCC, subject, body
Delivery Conditions	Sorting documents by delivery destination using the attribute as a condition.
Document and Attributes Table Output	Exporting a list of document attributes to a CSV format file

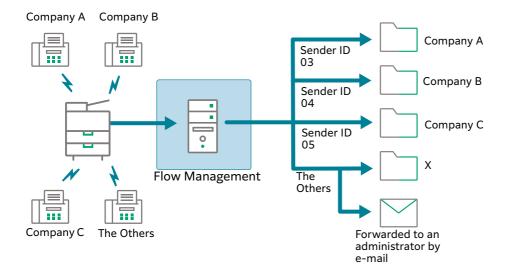
Example 1:

OCR the text in the first row of the first page in the scanned document, and append the text to the document name.



Example 2:

Sort the documents received via fax by sender ID, and save the documents in folders. If any document does not match the condition, it is forwarded to an administrator by e-mail.

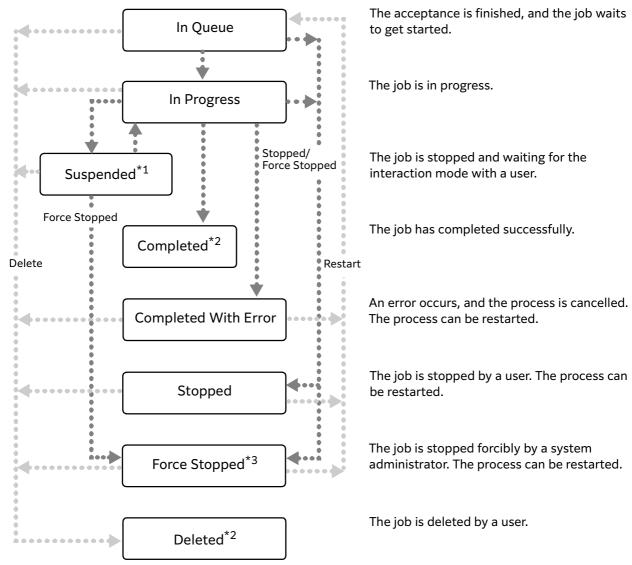


About Jobs

This section describes the job of Flow Management.

Shift of the Job Status

The following flow shows the shift of the job status in Flow Management.



- *1 When you select the [Retain Job Order] check box during the flow creation, the subsequent job is not executed until the interaction mode is completed.
- *2 The job histories can be stored during the specified time range.
- *3 The job can be stopped forcibly, only when you log in as the system administrator (User ID: Apeos_Admin) which is automatically created at installation.

Job Operation

You can perform various operations according to the status of job.

You can prioritize a job in queue over other jobs, and stop a job in queue or in progress temporarily. In addition, you can delete unnecessary jobs.

The job completed with errors during the process can be restarted. For how to restart the job, you can select whether to start from the beginning of the processing or start from the unprocessed operation.



"Job Statuses and Available Operations" (P.199)

Downloading Original Documents

The document before format conversion or image processing is referred to as "Original document". You can download this original document to the folder you specified.

When the job cannot be restarted or original data are missing, you can download to use the original data.



"Downloading Original Document" (P.204)

Storing the Completed or Deleted Jobs

You can store the completed or deleted jobs for a certain period of time and check the job histories. You can also download the original document for the completed job within the storage period.

After the retention period has expired, jobs are deleted automatically from Flow Management. Once the job is deleted, you cannot check the job history and download the original document.



"Setting the Retention Period for the Completed or Deleted Jobs" (P.62)

Retain Job Order

When multiple jobs are executed simultaneously, you can select the following two options for the execution order. To retain the job order, select [Retain Job Order] on the [Create New Flow] page or [Edit Flow] page.

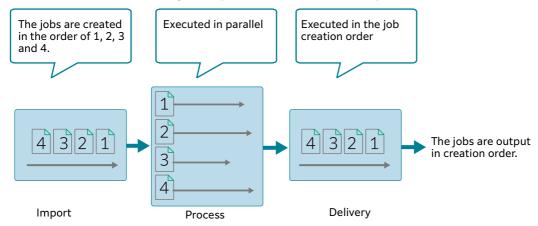
Retaining the job order

After you import the document, processing the document is executed in parallel, and delivering the document is executed in the job creation order.

When there is a job in the [Suspended] status, the subsequent jobs in the same flow wait until the job in the [Suspended] status restarts.



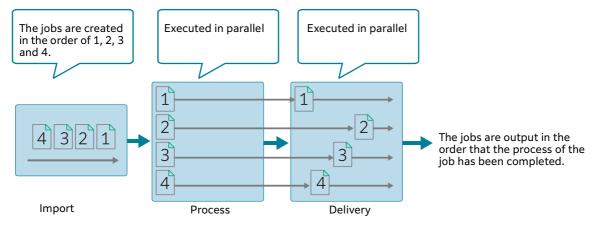
- The jobs only in the same flow wait the [Suspended] status job. The jobs in the different flow are not affected.
- The document imported from the same source only can retain the order. If multiple sources are set to one flow, the order of the jobs imported from the distinct import source is not retained.



Not retaining the job order

After you import the document, processing and delivering the document is executed in parallel, regardless of the job creation order. Since the job is output in the order that the process of the job has been completed, the document entered first may be output later than the document entered last.

The subsequent jobs are executed without waiting for the job in the [Suspended] status to restart.



The relation between the job operation and the job order retained is:

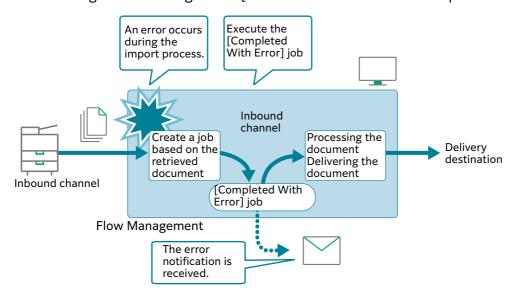
- The prioritized job is executed first since the job order is not retained.
- The stopped job is out of the target range for retaining the job order, and the subsequent jobs are executed first.
- The restarted job is executed as a job without retaining the order.
- The job failed with an error is out of the target range for retaining the job order, and the subsequent jobs are executed first.

Executing the Job when the Document Has Errors on Import of Device Folders

For the error while the document is imported from the device folder, you can set whether to create a job from the document in the imported device folder to execute the process.

If an error occurs during the import process, Flow Management creates a job based on the retrieved document, and handles the job as the [Completed With Error] job. When you set [Perform Job Execution for Imported Document Even for Inbound Document Error (Processing Error or Corrupt Document)], the job created from the imported document is executed. And if you set the error notification function, the process is executed after the error notification.

You can configure this setting on the [Device Folder - Device Folder Input Settings] page.





When the imported image data is not perfect, one of the following errors occur.

- "Disconnected from network scanner. Image data may be corrupt."
- "Image data is corrupt."
- "Unable to create image data. Check that the disk and the network are working properly." In that case, incorrect image data may be included in the imported document. As a result, an error may occur in the subsequent process, and some part of the document may be missing, even if the job has completed successfully.

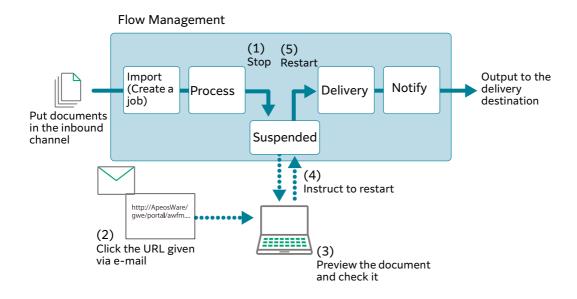
About Interaction Mode

Before processing and delivering the document, you can preview the document in the interaction mode. The interaction mode is available in the following two flows.

- Flow where the [Interaction Process] function is set
- Flow where [Preview] of the [Link to Web Applications] function is set

Flow Where the [Interaction Process] Function Is Set

When documents are put in the inbound channel, Flow Management imports the documents and create a job. The following figure shows the job operation.



(1) The job operation stops and the status changes to [Suspended].

You can check the job in the [Suspended] status on the [Suspended Job List] page in your Web browser.

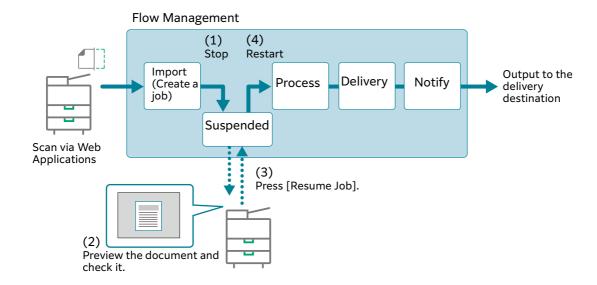
- (2) A user is notified of the interaction mode via e-mail when required by setting the notification function. Clicking the URL in the e-mail displays the [Operate Suspended Jobs] page.
- (3) You can preview the document or change the document attributes on the [Operate Suspended Jobs] page.
- (4) A job is instructed to restart on the [Operate Suspended Jobs] page.
- (5) The operation of the job is restarted.



"Operating the Job with the [Suspended] Status" (P.207)

Flow Where [Preview] of the [Link to Web Applications] Function Is Set

When you access Flow Management on the Web Applications screen of the device, and scan a document by selecting a flow, the scanned document is sent to Flow Management and a job is created. The following figure shows the job operation.



- (1) The job is switched to the [Suspended] status.
- The preview screen is displayed on the device control panel.
- (2) Confirm that the document is scanned successfully on the preview screen.
- (3) Press [Resume Job] on the preview screen.
- (4) The operation of the job is restarted.



- You can also confirm and restart the job on the [Operate Suspended Jobs] page of your Web browser.
- For the linked to web applications, you cannot change the document attributes in the interaction mode.



"5 Link to Web Applications" (P.216)

Details of the Flow Functions

This section describes the details of the functions provided by Flow Management.

Inbound Channel



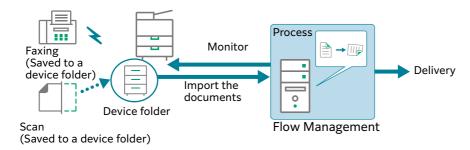
The document imported from the device folder or using link to web applications cannot be opened by the Windows standard viewer, such as Windows Picture and Fax Viewer without changing the format. To view the document, convert it to another format using the [Format Conversion] function, or use our TIFF viewer.

[Device Folder] function

The device folder registered in a device is monitored regularly to import the scanned or fax received document to Flow Management.

For some devices, Network Scanner Utility 2 may be required to access Flow Management and a device.

The imported document is rendered as a TIFF format with multiple pages.





- For the document attributes that can be retrieved ⇒ "Document Attributes List" (P.308)
- For the supported formats or compression methods ⇒ "Supported Input Formats" (P.321)

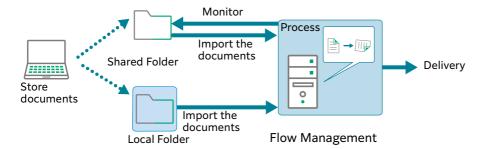
[Folder] function

The folders are monitored regularly, and when documents are stored in the folder, the documents are also imported to Flow Management.

You can specify the local folder or shared folder on a network for the input folder. You can also store documents from removal media with read and write capabilities. The file system supports NTFS, FAT and FAT32.

The [Folder] function can handle all documents except documents in a format that does not allow changes. However, the folders with hidden file attributes are not processed.

The documents in the folder are automatically deleted after the import process.





This function does not support read-only removable media, such as a CD-ROM.



"Setting Prohibited Formats" (P.63)

[Link to Web Applications] function

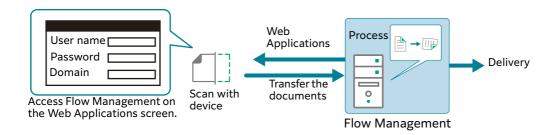
The scanned document is imported to Flow Management using the Web Applications function of a device.

When you access Flow Management on the Web Applications screen, and scan documents by selecting a flow, the scanned documents are transferred to Flow Management.

You can select whether to preview the document. When you select to preview the document, the preview screen is displayed after the scan so that you can check the document orientation and output color.

The imported document can be output in following formats: PDF, DocuWorks Document, and TIFF format with multiple pages.

You can set only one [Link to Web Applications] function for one flow.



Note

- You can use this function only when a device supports Web Applications and the optional Web Applications kit is installed. For devices that support Web Applications, see "Readme".
- If the output format is either PDF or DocuWorks Document, preview function is not available but OCR function can be performed on scanned documents. If the output format is TIFF, color documents and photos can also be handled. Therefore, select TIFF if the documents are required to be in PDF or DocuWorks Document.
- You can also output as PDF and DocuWorks Documents using [Format Conversion] function. The [Link to Web Applications] function uses the functions on the device, so the workload on the Flow Management server can be reduced. Use [Format Conversion] function if advanced settings on the output document are required.



- "5 Link to Web Applications" (P.216)
- "About Interaction Mode" (P.24)
- "[Format Conversion] function" (P.28)

Processing Method

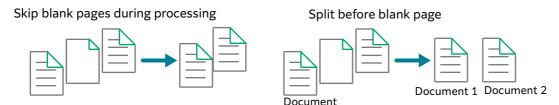
[Image Processing] function

The image of the document is processed and output. The following items can be selected for the image processing.

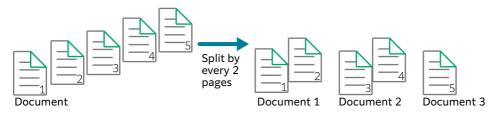
Items	Descriptions
Skew correction	The skew is corrected automatically by evaluating the text line, line segment or figure in the image. Plus or minus 10 degrees can be detected.
Noise reduction *1	Noises (black isolated point) in the image are removed.
Auto rotation	The text in the image is recognized and the image is automatically rotated to the correct orientation.
Rotate	The image is rotated 90 degrees clockwise or counterclockwise, or 180 degrees.
Adjust size	Changes the image size based on the standard size.
Edge erase	The edge of the image or the shadow of the binding margin is erased. The image in the specified width for top/bottom, left/right, or center is erased.
Convert to high resolution *1	The resolution is upgraded when the image resolution is lower than the specified resolution. The jaggies in the image are smoothened.
Covert to lower resolution	The resolution is degraded when the image resolution is higher than the specified resolution.
Split before blank page *1	The document is split before the blank page. You can specify the area not considered as blank.
Skip blank pages during processing *1	The blank pages in the document are deleted. You can specify the area not considered as blank.

Items	Descriptions
Split by specified pages	The document is split by specified pages.

^{*1} This item can be used only for the black and white page.



Split by specified pages





"Formats Supported by the [Image Processing] Function" (P.322)

[Format Conversion] function

You can convert the format of the document. The format can be converted to TIFF, JPEG, TIFF/JPEG Mixed, DocuWorks Document or PDF.

• DocuWorks document

You can paste any attribute, such as OCR result information as text annotations or sticky notes. You can also store the OCR'd character information in the DocuWorks document as "OCR result" by using together with the [OCR] function. In addition, you can set the security that restricts the operation for automatically creating page numbers and headers.

For the compression method, you can select either standard DocuWorks or high compression DocuWorks (MRC compression). When you select high compression DocuWorks, the size of the colored document is reduced.



To convert to DocuWorks document, DocuWorks is required.

PDF

You can set a title, sub-title, creator and keyword. In addition, you can set attributes, such as OCR result information for document information.

For the compression method, you can select PDF, high compression PDF, or searchable PDF. When you select high compression PDF, the size of the colored document is reduced.

Searchable PDF can search strings in content by adding character information recognized by OCR processing. You can create PDF which enables both good print quality and a small file size.



Refer

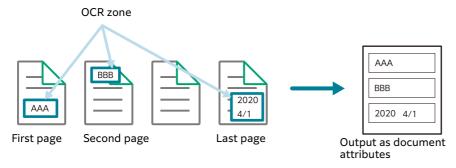
"Formats Supported by the [Format Conversion] Function" (P.323)

[OCR] Function

The text is extracted from the image and output as document attributes. You can use the extracted text for various purposes, such as the document name, e-mail address or delivery condition.

You can select all pages, specified pages, or any zone for OCR. In addition, you can specify the range by using DocuWorks annotations, and import the file to use for specifying the range.

When using the Japanese version of DocuWorks, you can select to use the DocuWorks Built-In OCR or WinReader PRO as the OCR software.





- To use this feature, DocuWorks is required. Moreover, the option for other language is required as shown below:
- In case of Japanese version of DocuWorks 9.0.1 or later: ApeosWare Management Suite 2 OCR for DocuWorks Japanese Option
- English version: (OCR) for DocuWorks English Option
- Chinese, Korean, and Thai versions: OCR for DocuWorks Multi Language Option
- To use WinReader PRO, WinReader PRO version supported in DocuWorks Japanese version must be installed.
- WinReader PRO is an OCR software developed by NTT DATA NJK Corporation.



Refer

"Input Formats Supported by the [OCR] Function" (P.328)

[Document Name] function

The name to store documents is set.

You can set attribute information, such as OCR result or received date and time in combination with any text.

[QR Code Reader] function

The QR code in the document is read and output as document information. The characters decoded from the QR code can be split by the specified delimiter, and some part of the characters can be extracted.

You can select the recognition scope for the QR code from all pages or specified pages. You can also split documents before the page with QR code, and delete the pages with QR code.

Extract characters from QR code

Split documents by QR code





To use this feature, Paper Form & QR Code Reader Option is required.



- "Input Formats Supported by the [QR Code Reader] Function" (P.329)
- "Specifications of QR Code Reader" (P.338)

[OmniPage(R) OCR] function

The text is extracted from the image and output as document attributes. Additionally, the extracted text information is converted to the specified format. OmniPage is used as the OCR software.

You can select all pages, specified pages, or any zone for OCR. In addition, you can specify the area by using PDF annotations in advance and then importing the file to specify the area.



To use this feature in separate composition, Scan OCR Option is required at the flow server.

"OmniPage" is manufactured by Kofax.



"Formats supported by [OmniPage(R) OCR] feature" (P.329)

[OmniPage(R) Barcode Reader] feature

Reads one-dimensional barcodes from documents and outputs the barcodes as document attributes. OmniPage is used as the software for processing the barcodes.

The scope of recognition can be selected from All Pages, Specified Pages, and Zone OCR. Based on the barcode which is read. the file can also be split.



To use this function, OmniPage Barcode Reader Option is required.

"OmniPage" is manufactured by Kofax.

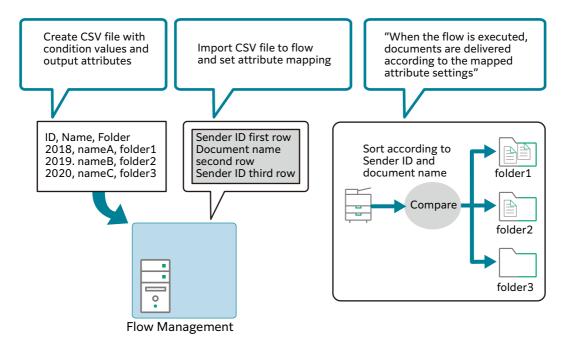


"Supported Formats of the [OmniPage(R) Barcode Reader] Function" (P.331)

[Attribute Mapping] function

You can create and import a CSV format file containing conditional values and output attributes to a flow. By doing so and configuring the corresponding conditions and attributes makes it possible to distribute documents with specific conditions.

Using the [Attribute Mapping] function, complicated flows with conditional branching can be easily configured without having to specify individual conditions.



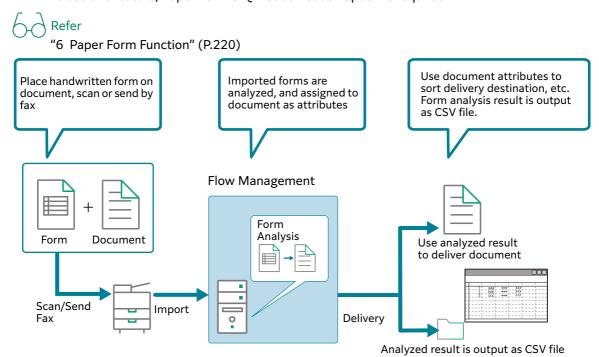
[Form Analysis] function

If a form with instructions specified is placed on the first page, and scanned or faxed, the instructions will be analyzed and output as attributes.

The form analysis result can be used to sort delivery destination, or as the document name, or print out the file for use by other software.



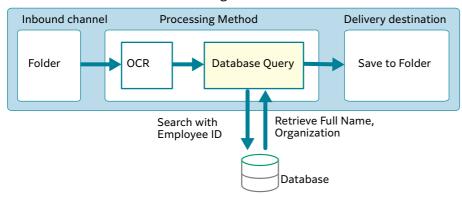
To use this feature, Paper Form & QR Code Reader Option is required.



[Database Query] function

Queries external database, and outputs the retrieved results as document attributes. You can also query the database by making an attribute value, retrieved earlier by another feature, into a key. For example, you can search the database using "Employee ID" extracted with the [OCR] feature as the key, and output the results of "Full Name", "Organization" as attributes.

Flow Management

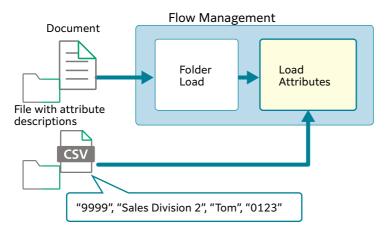




This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Database Query Option is required.

[Load Attributes] feature

Loads the file containing attribute information during page processing, and outputs that attribute information as document attributes. With the use of this feature, any attributes can be added for the file loaded.



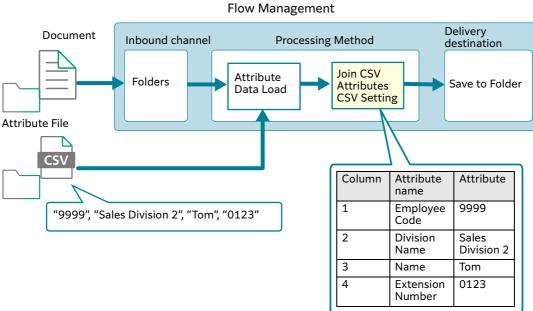


This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.

[Separate CSV Attributes] function

Retrieves the CSV attribute data from another feature processed earlier, and outputs only the data of a specified column as document attributes.

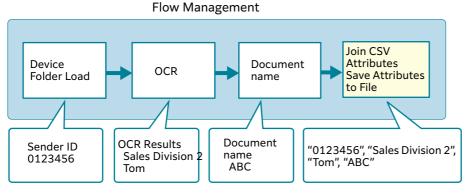
For example, with the [Load Attributes] feature, you can load the attribute information from a file, retrieve data of a specific column, and use it as the name of the storage folder.



This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.

[Join CSV Attributes] function

Retrieves multiple attributes from another feature processed earlier, joins them with commas (,), and outputs them as document attributes.



Note

This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.

[Interaction Process] function

During the image processing, the job operation stops to perform the interaction mode with a user. In the interaction mode, you can preview the document, change the document attributes and delete the jobs.

You can set only one [Interaction Process] function for one flow.



- "Formats Previewed in Interaction Mode" (P.334)
- "About Interaction Mode" (P.24)

[Notification Settings] function

When the interaction mode is required and the job is switched to the [Suspended] status, an e-mail is sent to the specified user. The URL of the [Operate Suspended Jobs] page into a Web browser is attached to the e-mail. You can perform the job in the [Suspended] status by clicking this URL.

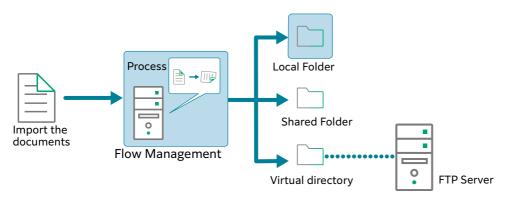
Delivery Destination

[Save to Folder] function

The processed document is saved to a folder.

You can specify the local folder, shared folder on a network or virtual directory (FTP) for the storage location folder. The file system supports NTFS, FAT and FAT32.

You can also save only necessary documents by sorting documents according to the specified attribute, such as sender ID or received date and time.





This does not support removable media.

[Send E-mail] function

The document is attached to an e-mail and sent to a recipient.

When attaching documents, you can split them into any size, or put together multiple documents into one to send. In addition, you can enter the recipient or subject using document attributes.

[Printer Output] function

The processed document is output to a printer or fax.

You can configure the output properties, such as paper size, quantity, reduced print, 2 sided, pages per side or select paper tray.

For fax, you can configure the fax output properties, such as paper size, quantity, reduced print, pages per side or remote folder/relay broadcast.



"Formats Supported by the [Printer Output] Function" (P.334)

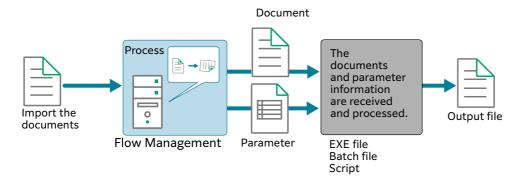
[Link to Application] function

The processed document is processed again by another application and output.

After processing the document, the specified application starts automatically. The application receives the information from Flow Management to process the document.

In the link to application function, the information, such as the storage location or file name of the scanned document can be passed to the application with a macro during execution. In addition, the document attributes can be passed to the application as a parameter.

Only executable files can be linked. These are, for example, EXE files, batch files and script files which can be started from the service.



[Save Form Analysis to File] function

This function is used in conjunction with [Form Analysis] function. The instructions recorded on the form is saved as CSV format in any folder. By saving in the CSV format, it makes it easier to link to other software.



To use this feature, Paper Form & QR Code Reader Option is required.

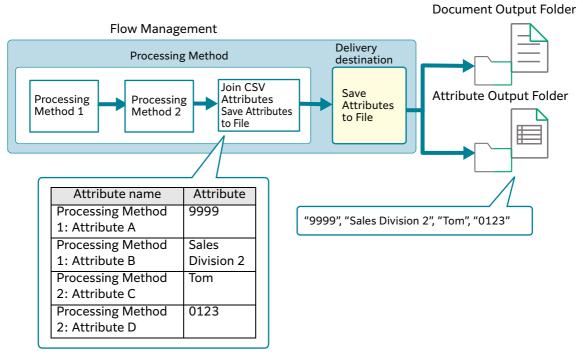


"6 Paper Form Function" (P.220)

[Save Attributes to File] function

Saves the value of any document attribute as text, and outputs to the specified folder.

For example, you can take attributes created with the [Join CSV Attributes] feature, save the file using the [Save Attributes to File] feature, and output to a folder different from that of your documents.





This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.

[Delivery Conditions] function

The documents can be sorted by delivery destination based on the condition when the documents are delivered. You can specify the attribute condition in combination with both time combined with delivery conditions.

Attribute condition

Only documents matched to the conditions are delivered by comparing the specified attribute with other attributes and a keyword.

• Time condition

Only documents matched to the conditions are delivered by comparing the specified time with the document received time and job processing time.

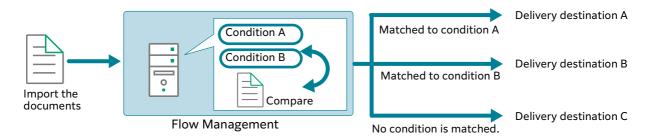
• Combination of attribute condition and time condition

You can set multiple attribute and time conditions and select [Match All Conditions] or [Match Any Condition] for their relations.

• Do not deliver documents selected under other delivery conditions

When setting multiple deliver conditions, you can set not to deliver the already processed document according to other delivery conditions. This is set when you avoid duplication of delivery documents.

Deliver documents not matching all conditions
 The documents do not match all conditions are delivered.



[Preprocessing] - [Format Conversion] function

The document format of the specified delivery destination is converted. This is the same function as in "[Format Conversion] function" (P.28).

[Preprocessing] - [Document Name] function

A name is added to the document of the specified delivery destination. This is the same function as in "[Document Name] function" (P.29).

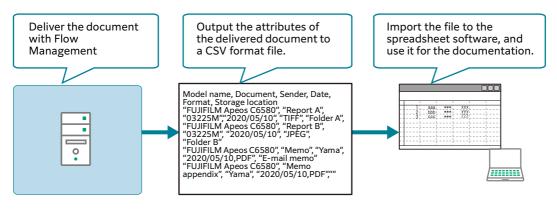
[Postprocessing] - [Completion Notification] function

When the delivery has been completed, an e-mail is sent to the user that you specified. You can select E-mail address, CC, BCC, subject and content from the document attributes.

[Postprocessing] - [Document and Attributes Table Output] function

A list of the attributes for the processed documents is saved in a CSV format file.

You can use the saved file to manage data of delivered documents by importing it to a spreadsheet software.





"Document Attributes List" (P.308)

Error Notification

[Notification E-mail] function

If an error occurs, an e-mail is sent to the user that you specified.

You can select E-mail address, CC, BCC, subject and content from the document attributes.

Roles of Flow Management

To perform the flow and job in Flow Management, roles are required. This section describes the roles of Flow Management.

Types of Roles

There are following types of roles in Flow Management.

System Administrator

A user role that operates and manages Flow Management. This user can register or delete [Flow Composer] and configure the flow environment.

This is the same as the system administrator of ApeosWare Management Suite.

Flow Composer

A user role that creates a flow.

This role is set by the user with the System Administrator role.

Owner

A user role that operates a flow can be set for each flow and with this role perform edit, delete, enable, or disable the flow to which the role is set. This role is set by the user with the [Flow Composer] or [Owner] role. The [Owner] role is automatically assigned to the users with the [Flow Composer] role when a new flow is created.

This role is set by the user with the [Flow Composer] or [Owner] role.

The [Owner] role is automatically assigned to the users with the [Flow Composer] role when a new flow is created.

User (job registration and operation)

A user role that operates a job can be set for each flow and with this role can stop, restart or delete the job to which the role is set, or import the original document for the job.

This role is set by the user with the [Flow Composer] or [Owner] role.

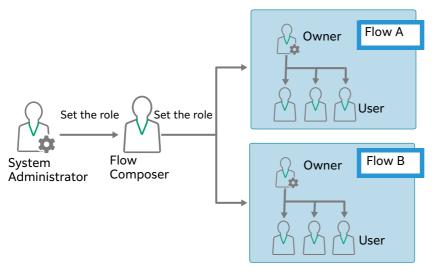
The users with the [Owner] role are automatically assigned to the [User (Job Registration and Operation)] role.

User (job registration)

A user role that registers jobs in a device using the link to web applications function.

When [Grant this role the permission to operate job] is set by the role settings of the flow, the users can display a list of jobs, stop or delete the jobs registered by themselves.

This role is set by the user with the [Flow Composer] or [Owner] role.



Job Owner

A user that can operate jobs is referred to as "Job Owner".

The users with the [Owner] or [User (Job Registration And Operation)] role become the "Job Owner" of the permitted flow job.

The users with the [User (Job Registration And Operation)] role become "Job Owner" of the jobs registered by themselves when [Grant this role the permission to operate job] is set by the role settings of the flow.

Available Operations for Roles

The following table shows the available operations for each role.

All roles except [Flow Composer] are set to the system administrator user (User ID: Apeos_Admin) which is automatically created at installation of ApeosWare Management Suite. Moreover, if [Use built-in administrator] is selected when the software is installed, [Flow Composer] role will also be set.



Hereinafter the user created automatically at installation is referred to as "Apeos_Admin user".

O: Allowed -: Not allowed

Operation		Role				
		System Administrator	Flow Composer	Owner	User (Job Registration and Operation)	User (Job Registration)
Flow management	Displaying system information	0	-	-	-	-
environment settings	Registering flow composers	0	-	-	-	-
	Deletion settings of job histories	0	-	-	-	-
	Common settings of system	0	-	-	-	-

Operation		Role				
		System Administrator	Flow Composer	Owner	User (Job Registration and Operation)	User (Job Registration)
Flow management	Displaying a list of flows	-	-	0	-	-
	Creating a new flow*1	-	0	-	-	-
	Editing a flow*1	-	0*2	O*2	-	-
	Displaying the flow properties	-	-	0	-	-
	Deleting a flow	-	-	0	-	-
	Copying a flow	-	0	0	-	-
	Enable or disable a flow	-	-	0	-	-
	Validating a flow	-	-	0	-	-
	Uploading a flow	-	0	-	-	-
	Downloading a flow	-	-	0	-	-
Job management	Displaying a list of jobs	-	-	0	0	○*3
	Displaying a list of job histories	-	-	0	0	○*3
	Operating jobs (Prioritize, stop, restart, delete)	-	-	0	0	○*3
	Displaying the job properties	-	-	0	0	○*3
	Displaying job details	-	-	0	0	O*3
	Displaying a flow	-	-	0	-	-
	Importing an original document	-	-	0	0	○*3
Job registration	Registering jobs using the link to web applications function	-	-	-	-	0
Interaction	Operation in a device	-	-	0	0	○*3
mode	Operation on a Web browser	-	-	0	0	○*3

^{*1} To add or change devices in the [Device Folder] or [Printer Output] function, either system administrator or device management role is required, as well as the [Flow Composer] and [Owner] role.



System administrator and device management are the roles set by user Management of ApeosWare Management Suite.

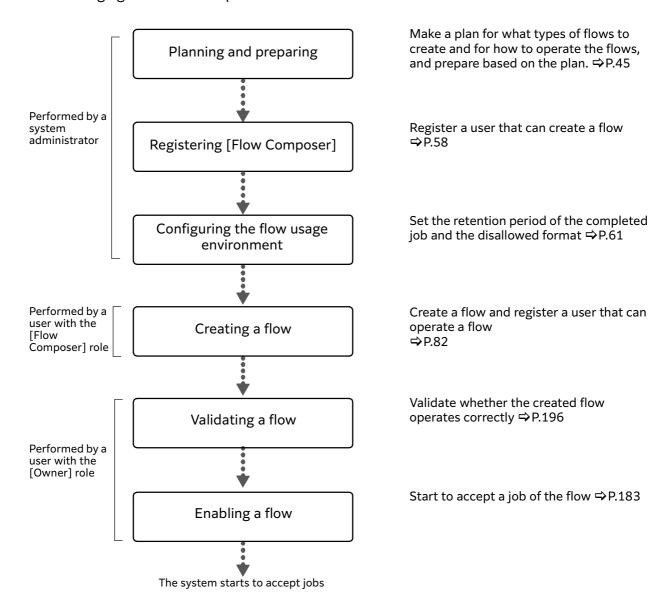
- *2 To add the inbound channel function, both the [Flow Composer] and [Owner] roles are required.
- *3 When [Grant this role the permission to operate job] is set by the role settings of the flow, you can operate only jobs registered by yourself.

Setting Flows and Operation

This section describes the operation to configure Flow Management.

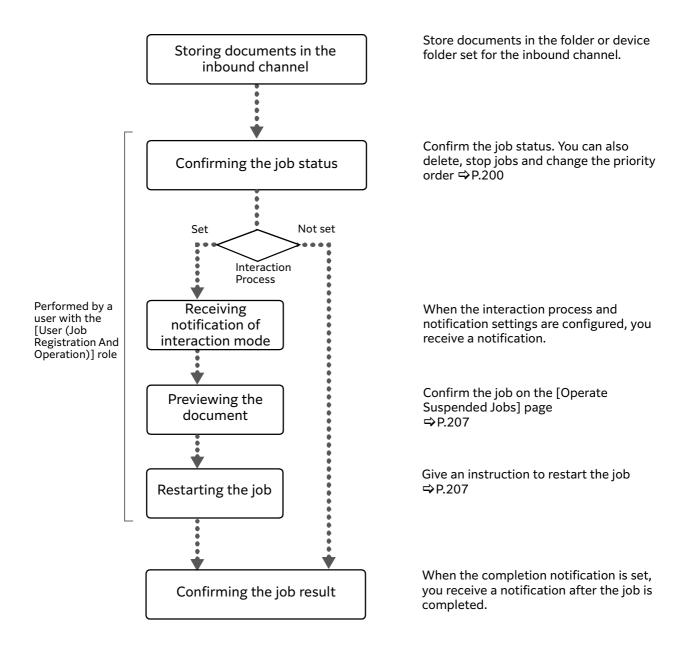
Setting the Flow

The following figure shows the operation to set the flow.



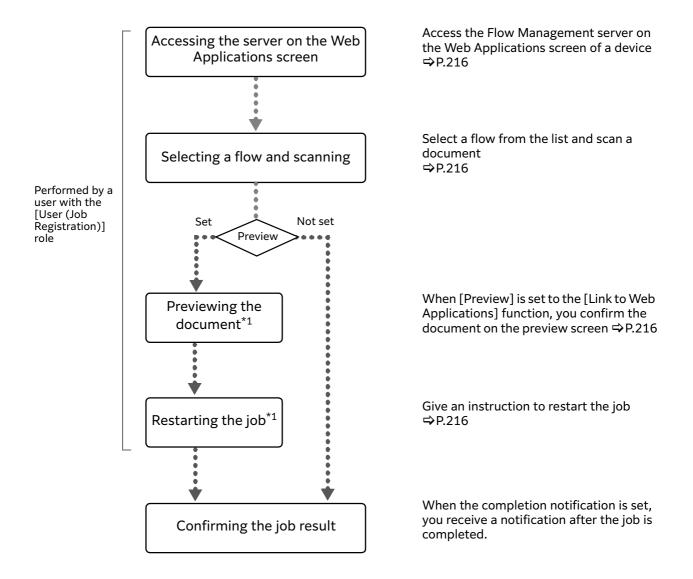
Operating the Flow (Entry in a Folder or Device Folder)

The following figure shows the operation of the flow when documents are stored in a folder or device folder.



Operating the Flow (Link to Web Applications)

The following figure shows the operation of the flow when the link to web applications function is set.



^{*1} This can be performed when the [User (Job Registration and Operation)] role is set to a user, or [Grant this role the permission to operate job] is set in the role settings of the flow.

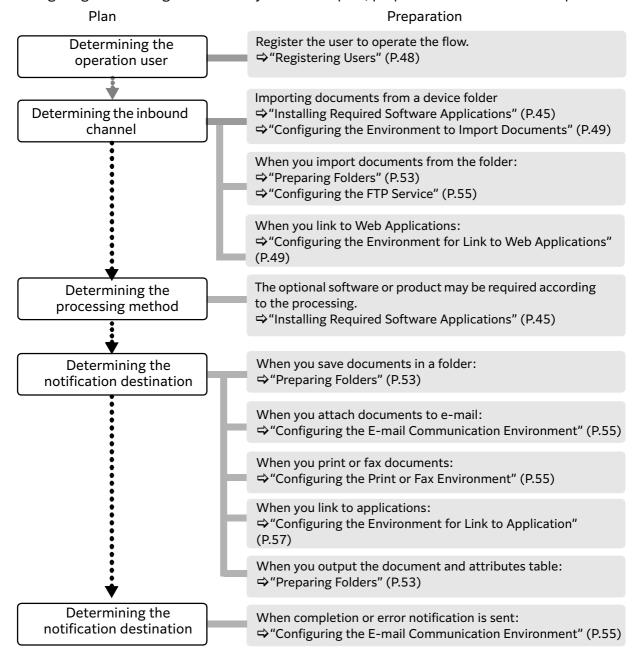
2 Configuring the Flow Environment

Initial Settings

This section firstly describes the settings you need to configure before creating and operating the flow with Flow Management.

Planning and Preparing

You need to make a plan for what types of flows to create, and for how to operate the flows before configuring Flow Management. Once you create a plan, prepare based on the created plan.



Installing Required Software Applications

To perform the following operations, the applicable software or optional license is required. When the following software applications or licenses are not installed, install them.



- After installing Flow Management, when installing DocuWorks or Network Scanner Utility 2, please
 restart the Flow Management server, or stop Flow Management and start again. Flow loading and
 processing cannot be performed properly without restarting the server or service.
- Please stop Flow Management service before updating DocuWorks or Network Scanner Utility 2. Performing actions during Flow processing may prevent the update from being completed properly.

[Folder] Function:

Name	Note
Network Scanner Utility 2	Application manufactured by FUJIFILM Business Innovation. This is required for loading documents from devices not compatible with WebDAV.

[Format Conversion] Function:

Name	Note
DocuWorks 8.0 or later	Application (optional) manufactured by FUJIFILM Business Innovation. This is required for format conversion format to DocuWorks.

[OCR] Function:

Name	Note
DocuWorks 8.0 or later	Application (optional) manufactured by FUJIFILM Business Innovation. This is required for OCR processing.
ApeosWare Management Suite 2 OCR for DocuWorks English Option	An option license of ApeosWare Management Suite. This is required when using the English version of DocuWorks.
ApeosWare Management Suite 2 OCR for DocuWorks Multi Language Option	An option license of ApeosWare Management Suite. This is required when using the Chinese, Korean or Thai versions of DocuWorks.
ApeosWare Management Suite 2 OCR for DocuWorks Japanese Option	An option license of ApeosWare Management Suite. This license is required when Japanese version DocuWorks 9.0.1 or higher is used.

[OCR] Function - WinReader Pro:

Name	Note
WinReader PRO	WinReader PRO v.12.0 WOW64 supported network verification or a later version is required

If a version older than WinReader PRO v13.0 R2 is used, the following must be performed after WinReader PRO is installed.



Below is an example sequence of steps. The steps may be different for other operating systems.

- 1. Open the [Component Services] window from the Administrative Tools.
- 2. Select [Component Services] > [Computers] > [My Computer] > [DCOM Config].
- 3. Right-click the [Wrpro.Application] object and display the [Security] tab from the properties.
- 4. Select [Customize] under [Launch and Activation Permissions] and click [Edit].
- 5. Select [NETWORK SERVICE] and click [OK].
- **6.** Close the [Component Services] window.

For X64 systems, the following steps are also required.

- 7. Open the [Component Services] window from the Administrative Tools.
- 8. Select [Component Services] > [Computers] > [My Computer] and display the properties.
- 9. Display the [COM Security] tab.
- 10. Click [Edit Default] under [Access Permissions] and allow [Local Access] for NETWORK SERVICE.
- 11. Click [Edit Default] under [Launch and Activation Permissions] and allow [Local Launch] and [Local Activation] for NETWORK SERVICE.
- 12. Close the [Component Services] window.

[QR Code Reader] Function:

Name	Note
ApeosWare Management Suite 2 Paper Form & QR Code Reader Option	An option license of ApeosWare Management Suite.

Using the [Form Analysis] Function:

Name	Note
ApeosWare Management Suite 2 Paper Form & QR Code Reader Option	An option license of ApeosWare Management Suite.



To use the [Form Analysis] function, you need to use the "Paper Form Editor" and "Paper Form Management" tools that come with the Paper Form & QR Code Reader Option, to create and register the form template.



"6 Paper Form Function" (P.220)

[OmniPage(R) OCR] Feature:

Name	Note
ApeosWare Management Suite 2 Scan OCR Option	An option license of ApeosWare Management Suite. When using this feature in Distributed Configuration distributing flow server, install it in the flow server.

Using the [OmniPage(R) Barcode Reader] Feature:

Name	Note
Microsoft .NET Framework 4 Full	Required when processing with OmniPage Barcode Reader.
ApeosWare Management Suite 2 OmniPage Barcode Reader Option	An option license of ApeosWare Management Suite.

Using the [Database Query] Feature:

Name	Note
ApeosWare Management Suite 2 Database Query Option	An option license of ApeosWare Management Suite. Only if the language of the OS on which Flow Management server is installed is Japanese, it can be installed.

Using the [Load Attributes], [Separate CSV Attributes], [Join CSV Attributes], [Save Attributes to File] Feature:

Name	Note
Processing Option	An option license of ApeosWare Management Suite. Only if the language of the OS on which Flow Management server is installed is Japanese, it can be installed.

[Printer Output] Function:

Name	Note
DocuWorks 8.0 or later	Application (optional) manufactured by FUJIFILM Business Innovation. This is required when you print or fax DocuWorks documents.
Printer driver for the supported models	This is required when you print documents.
Fax driver for the supported models	This is required when you fax documents.

If NETWORK SERVICE is not added to the print access permission at the security settings of the printer/fax driver, it will not operate properly.



- After installing a printer/fax driver, or updating the version, restart the Flow Management server. Otherwise, you may not select the printer/fax driver when setting the [Printer Output] function.
- After installing the printer/fax driver, select Properties > [Security] tab and add NETWORK SERVICE user to print access permission.



"Starting or Stopping the Flow Management Service"

Registering Users

To create or edit a flow, and to operate jobs in Flow Management, requires to become a user of ApeosWare Management Suite.

User	Roles to Be Set	
User to create a flow (Flow Composer)	Any role. However, when you set devices in the [Device Folder] or [Printer Output] function, either the system administrator or device management role is required.	
User to operate a flow (Owner)		
User to operate a job (User (Job Registration and Operation))	Any role.	
User to register a job (User (Job Registration))	If both of the following requirements are satisfied, the user using Link to Web Applications is required to be associated with the account. • The environment where Cost Recovery Option is added to Entry Edition in ApeosWare Management Suite or Enterprise Edition in that software is used. • [Authentication/Accounting Mode] in the device using Link to Web Applications is set to [Custom Authentication].	



- "Types of Roles" (P.38)
- Custom Authentication → "Installation and Operation Guide" > "3. Device Management" > "Concerning Authentication/Accounting Settings"

 Operation Permission and Account to be set
 "Installation and Operation Guide" > "4 User Management"

Configuring the Environment to Import Documents

When you import documents from a device folder in the [Device Folder] function, perform the following preparation steps.

(1) Configure devices

Configure the device to import documents from the device folder with the following settings.

Items	Setting Content	
IP address	Static IP address	
SOAP port	Active	
SNMP port	Active • Either SNMP v1/v2c or v3 must be enabled. • For SNMP v3, the "Xdrivers" user must be enabled.	
Salutation port	Set only when you access a device with Network Scanner Utility 2. • Active • Use any of 1605, 1606, 1607 - 1636 for the port number.	
WebDAV port	Set only when you access a device with WebDAV • Active • Use any port number (80 for default, 443 for SSL communication)	

To encrypt the communication with the device using SSL, the settings for encryption, such as importing certificates are also required.

(2) Register the device.

From the menu, select [Service Settings] > [Device Management] to register the device from which documents are imported in the database of ApeosWare Management Suite.



Although devices can be registered while creating a flow, pre-registering devices allows you to select a device from [Add from devices already registered in database] while creating a flow. It makes registering devices easier.

Configuring the Environment for Link to Web Applications

To import the scanned document in the [Link to Web Applications] function, check the authentication method used for Link to Web Applications first.

The following are the authentication methods. The configuration of Link to Web Applications varies depending on the authentication method to be used.

• Authentication by "Machine / Authentication Information" in the device (default)

When operating the device, execute authentication. When Link to Web Applications is used, authentication is not required because the user authenticated by the device is regarded as the user using Flow Management.

When this authentication method is used, configuring the authentication method for IIS of PC (FlowManagement server) with Flow Management installed allows restricting so as to be accessed from the specified device only.

• HTTP Basic Authentication

Regardless of the authentication method by the device, authentication is required in accessing Flow Management by Link to Web Applications. The user information registered in ApeosWare Management Suite is used.



The [Link to Web Applications] function is used when a device supports Web Applications and an optional kit for Web Applications is installed on the device. For devices that support Web Applications, see "Readme".

Configuring IIS authentication

Authentication method in IIS can be configured only when using "Machine / Authentication Information" in the device.

The authentication methods in IIS are as below.

Authentication Method in IIS	Descriptions	Security
Anonymous Authentication	Access the Flow Management as an anonymous user. This Authentication method is set by default.	Low
Basic Authentication	Register the user for access, and access the Flow Management server in IIS Authentication. The authentication information is not encrypted.	Middle
Digest Authentication	Register the user for access, and access the Flow Management server in IIS Authentication. The authentication information is not encrypted.	High

To change the authentication method in IIS to another authentication method, set the following settings in the Flow Management server.

- 1. Log on as a member of Administrators group.
- 2. Register the user to execute authentication.

 Register it as a local user or a domain user of Windows.
- 3. Start Internet Information Service (IIS) Manager.
- 4. Activate basic authentication or digest authentication as an authentication method for "/ApeosWare/FM/ewb", a virtual directory.

When digest authentication is activated in the ISS version 5 or 6, also activate the digest authentication for "/ApeosWareFM", a virtual directory.

- **5.** Deactivate anonymous authentication for "/ApeosWare/FM/ewb", a virtual directory.
- **6.** Confirm that the user created in the step 2 has the reference access permission for "/ApeosWare/FM/ewb", a virtual directory.

If not, add the reference access permission.

Configuring the authentication method for link to web applications

To use HTTP basic authentication, set the following settings in the Flow Management server.

- 1. Log on as a member of Administrators group.
- 2. Display the Windows Command Prompt window.
- 3. Enter the following command, and then press the <Enter> key.

 $cd {installation folder}\FM\awfm\bin$

By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Enter the following command, and then press the <Enter> key.

ewbNBauth.bat 0

"Completed" is displayed and the settings have been completed.

When using Link to Web Applications of Fuji Xerox devices, specify "ewbauth.bat".

5. Restart the Flow Management server or stop the Flow Management service and then start it again. To stop the service, use the batch command.



Refer

"Starting or Stopping the Flow Management Service" (P.70)



Note

Once you, specifying "1" to the argument, resume the command, you can restore the settings to use "Machine / Authentication Information" in the device.

Configuring devices

Configure the following settings for the device on which link to web applications is used.



Note

The menus and item names vary depending on the device. A typical example is explained below. For the operation of the devices, see the guide supplied with the device.

(1) Configure the network environment

During running of your network in a DNS environment, configure the following settings for both the Flow Management server and the device using the link to web applications function.

• Flow Management server

Items	Setting Content
DHCP	Unused
DNS server	Need to set
DNS domain name	Need to set
Computer name	Host name registered in the DNS server

• Device using the link to web applications function

Items	Setting Content
DHCP	Unused
DNS server	Need to set
DNS domain name	Need to set

Using SSL to encrypt the communication between the device and Flow Management, SSL must be available on the Web site used for Flow Management.

(2) Set up the destination server of Web Applications

Select [Web Applications Service Setup] on the [System Settings] screen of the device control panel to set up the destination server. The settings vary depending on the authentication method to be used and the authentication method in IIS in the Flow Management server.



To access Flow Management from the remote access function, it is necessary to register your destination. If you access from Flow Management of ApeosWare Management Suite or the menu screen of the device's control panel, it is not necessary to do so.

Items	Setting Content			
Server Name	Set any description.			
URL*1	http://{host name or IP address}:{port number}/ApeosWare/FM/ewbNB/ This is case sensitive. Enter "https://" for SSL communication. If the default port number is not changed (http: "80", https: "443"), this setting can be omitted.			
Descriptions	Set any description.			
Items	Authentication by "Machine / Authentication Information" in the Device		HTTP Basic	
	Anonymous Authentication	Basic Authentication	Digest Authentication	Authentication
Using User ID for Access	[No]	[Yes]		[No]
User ID for connection	[No]	The user's user ID in authentication" (P.5		[No]
Password of User ID for access	[No]	The user's user ID in "Configuring IIS authentication" (P.50)		[No]
Notify Machine / Authentication	[Yes]			[No]
Notify user permission information	[No]			[No]

^{*1} For Fuji Xerox devices, the URL is as shown below.

http://{host name or IP address}:{port number}/ApeosWare/FM/ewb

In the case of the device of FUJI XEROX ApeosPort VII or later, set the Web Applications Version to [V5], and the URL is as shown in the following.

http://{Host name or IP address}:{Port number}/ApeosWare/FM/ewb/?DisplayMode=9

(3) Configure Web browser settings

Select [Web Browser Setup] on the [System Settings] screen of the device control panel to set the following items.

Items	Setting Content
Web Applications Version	[V5]*1
Clear Cache Upon Closing	[No]
Use JavaScript	[Yes]
Use cash	[Yes]
Accept Cookies	[Yes]
Warn if Forms Submit is redirected	[Warn if re-directed to different host] or [No]

*1 In the case of the devices prior to FUJI XEROX ApeosPort VII provided from Fuji Xerox, set the Web Applications Version to [V3] or [V4].

If [V3] or [V4] cannot be set, add "-v4" after "http" or "https" of the URL specified in [Web Applications] on the device. For example, if the protocol is http, specify as follows:

http-v4://{host name or IP address}:{port number}/ApeosWare/FM/ewb/

In the case of the device of FUJI XEROX ApeosPort VII or later, set the Web Applications Version to [V5], and for example, if the protocol is http, specify as shown in the following.

http://{Host name or IP address}:{Port number}/ApeosWare/FM/ewb/?DisplayMode=9

For Fuji Xerox devices, if Web Applications Version cannot be set to [V3] or [V4], add "-v4" after "http" or "https" of the URL specified in [Web Applications] on the device. For example, if the protocol is http, specify as follows:

http-v4://{host name or IP address}:{port number}/ApeosWare/FM/ewb/

In the case of the device of FUJI XEROX ApeosPort VII or later, set the Web Applications Version to [V5], and for example, if the protocol is http, specify as shown in the following.

http://{Host name or IP address}:{Port number}/ApeosWare/FM/ewb/?DisplayMode=9

(4) Configure proxy server settings

When a device uses a proxy server, select [Connectivity and Network Setup] > [Proxy Server Settings] on the [System Settings] screen of the device control panel, and then specify "localhost" for [Addresses to Bypass Proxy Server].

(5) Set the language for the device

Set [Default Language] and [Language of the Original] to the same language selected when Flow Management has been installed.

Set a default language and a language of the original on the [Specification Setting/Register] window. You can set the default language with [Screen / Button Settings] on [Format & Style], and can set the language of the original with [Scan Defaults] on [Scan Service Settings].

Preparing Folders

Prepare the folder used by the following features.

- [Folder] feature
- [Save to Folder] feature
- [Document and Attributes Table Output] feature
- [Load Attributes] feature
- [Save Attributes to File] feature

The following folders are created by default. If you use these folders, the following steps from (1) to (5) are not required.

- Folder for the [Folder] function {destination folder}\Data\FM\folders\input
- Folder for the [Save to Folder] function {destination folder}\Data\FM\folders\output
- Folder for the [Document and Attributes Table Output] function {destination folder}\Data\FM\folders\attrtable



{storage folder of user data} is specified at installation. It goes by default to "C:\FUJIFILM\ApeosWare MS".

(1) Create a folder.

When you use a folder other than the default folder, create a folder to be used as the inbound channel or storage location. You can specify:

- Local folders on the Flow Management server
- Shared folders on network
- Directory on the FTP server



The selectable folders vary according to the feature.

(2) Prepare an account

Prepare one user account to access the folder.



- On the [Folder], [Save to Folder] or [Document and Attributes Table Output] function detailed settings page, specify the account you have prepared here for [User Name] and [Password].
- If a local folder is used, the NETWORK_SERVICE account can also be used. NETWORK_SERVICE is a built-in account prepared to start the Windows OS services. The service of Flow Management is executed by this account.

(3) Set the access permission.

Set the access permission in the properties of the folder created in Step (1) so that the user in Step (2) can access the folder.

When using local folders and if using the NETWORK_SERVICE account, set the access permissions described above for the NETWORK_SERVICE account.

The following permissions are required.

Function	Required Permission
Importing documents in the [Folder] function	ReadWriteDelete
Saving documents in the [Save to Folder] function	• Read • Write
Outputting the attribute list in the [Document and Attributes Table Output] function	ReadWriteDelete
When loading the attribute file with the [Load Attributes] feature	ReadWriteDelete
When outputting the document or attribute file with the [Save Attributes to File] feature.	• Read • Write

When using shared folders, set the share permissions for the user to access the folder via network.

(4) Set access permission for the destination folder.

Set the following access permissions to the user in Step (2) for "{Data Storage Location Folder}\Data\FM\service\Data" folder.

- Read
- Write
- Modify

Delete



If you use a local folder and NETWORK SERVICE account, this step is not required.

(5) Register the folder (local folder only).

If importing from a local folder or saving to a local folder, from the menu select [Service Settings] > [Flow Management] > [Service Settings] > [Function Settings] and register the folder to Flow Management.



Note

Local folders can also be entered directly when you create a flow but pre-registering local folders allows you to easily select a folder from a list when creating a flow.



"Registering Folders/Files to Be Used in Functions" (P.68)

Configuring the FTP Service

In the [Folder] function, you can monitor the virtual directory using the FTP service, and import documents from other computers.

When you import documents using the FTP service, install Internet Information Services (IIS) and FTP service on the Flow Management Server.



When you import documents using the FTP service, select [Local Folder on Server] in the [Folder] function, and specify the actual path of the virtual directory for the folder location.

Configuring the E-mail Communication Environment

Configure the communication environment, such as SMTP server in the following cases.

- Attach documents to e-mail to send in the [Send E-mail] function.
- Notification is indicated of the interaction process, completion or error in the [Notification E-mail] function.

The e-mail communication environment is set in [Network Settings] common to ApeosWare Management Suite.



Settings for sending email →"Network Settings" in "Features Guide"

Configuring the Print or Fax Environment

To output documents to printer or fax in the [Printer Output] function, perform the following preparation steps.

(1) Configure devices

Configure the device with the following settings.

Items	Setting Content
SNMP port	Active
LPR port	Active

(2) Register the device.

From the menu, select [Service Settings] > [Device Management] to register the device used for print or fax in the database of ApeosWare Management Suite.



Although devices can be registered while creating a flow, pre-registering devices allows you to select a device from [Add from devices already registered in database] while creating a flow. It makes registering devices easier.

(3) Register the fax recipient.

To output documents to fax, select [Service Settings] > [Device Management] from the menu to register the fax recipient in the database of ApeosWare Management Suite.



Although fax recipients can be registered when you create a flow, pre-registering fax recipients allows you to create a flow efficiently.

(4) Install printer or fax drivers.

Install the printer or fax driver of the device set for the delivery destination in the Flow Management server by using [Add Printer] in Windows, or the driver installation tool provided by our company.

(5) Set the properties of the printer or fax driver.

Open the properties of the printer or fax driver installed in step (4) and add the NETWORK SERVICE user to access permission for print in the [Security] tab.

Also change the output method in [Printing Defaults] on the [Advanced] tab as necessary.



When the same items are set on the detailed settings page in the [Printer Output] function of the flow and on the properties of the printer or fax, the settings in the [Printer Output] function of the flow have priority over the printer or fax properties settings.

(6) Configure the authentication information with the printer or fax driver.

When using the device in local authentication mode, open the properties of the printer or fax, and configure the following settings on the [Configuration] tab.

Items	Setting Content
Account Mode	Administrator
User Details	User ID/Account ID

Click [Detailed User Settings] and configure the following settings.

Items	Setting Content
Specify Job Owner Name	Enter Owner Name
Job Owner Name	Job Owner Name of local authentication user
Password	Password of local authentication user



When you do not use the device in local authentication mode, the settings described above are not required.

(7) Restart the Flow Management server.

After installing a printer/fax driver, or updating the version, restart the Flow Management server.

Configuring the Environment for Link to Application

To pass documents to another application in the [Link to Application] function, perform the following preparation steps.

(1) Prepare an account.

Prepare one user account to access the executable files and folders.



- Specify the [User Name] and [Password] of the account prepared here in the Detailed Settings page of the [Link to Application] function.
- If a local folder is used, the NETWORK_SERVICE account can also be used.
 NETWORK_SERVICE is a built-in account prepared to start the Windows OS services. The service of Flow Management is executed by this account.

(2) Set up an executable file.

Install the executable file to be linked in the Flow Management server. Only executable files started from a service can be used for the link to application function. These are, for example, EXE files, batch files and script files.

(3) Set the access permission.

User in Step (1) sets the access permission in the file properties to start the executable file set up in Step (2). Also set the access permissions for the folder containing the executable file. The following permissions are required.

Read & Execute



When using local folders and if using the NETWORK_SERVICE account, set the access permissions described above for the NETWORK_SERVICE account.

(4) Create a working folder.

Create a working folder on the Flow Management server.

A working folder is a folder in which a document file to be passed to an executable file is copied and stored temporarily.

(5) Set the access permission.

Sets the access permission in the properties of the folder so that the user in Step (1) can access the working folder set up in Step (4). The following permissions are required.

Modify



When using local folders and if using the NETWORK_SERVICE account, set the access permissions described above for the NETWORK_SERVICE account.

(6) Register the executable file and working folder.

From the menu select [Service Settings] > [Flow Management] > [Service Settings] > [Function Settings] and register the executable file in step (2) and the working folder in step (4) in Flow Management.



"Registering Folders/Files to Be Used in Functions" (P.68)

Setting [Flow Composer]

You can set a user that can create a flow.

Adding [Flow Composer]

Can set the [Flow Composer] role for a user.

The users with the [Flow Composer] role can create a new flow. The users can also edit or delete the flow since the [Owner] role is set by default for the flow created by themselves.

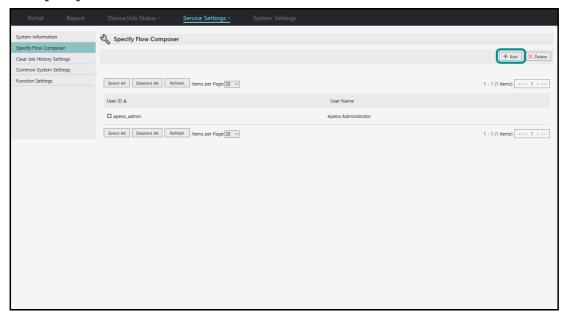


To create a flow, at least one user with the [Flow Composer] role must be set.

Refer

"Roles of Flow Management" (P.38)

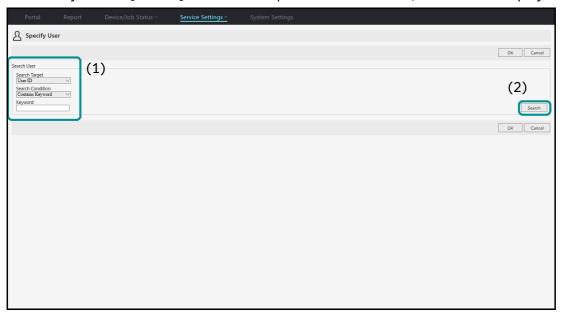
- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Specify Flow Composer].
- 3. Click [Add].



- 4. Perform the following steps.
 - (1) Enter the search condition.

(2) Click [Search].

When you click [Search] with default options of Search User, all users are displayed.



(3) In the user list, select the check box for the user to set the [Flow Composer] role. The user group cannot be set for the flow composer.

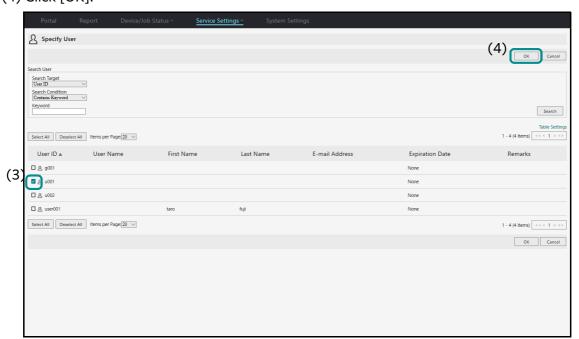


The display order of [Last Name] and [First Name] displayed in the user list varies according to [Display Settings] in [Common settings].

Refe

[Display Settings] → "2 System Settings/Server Monitoring" in "Features Guide"

(4) Click [OK].



The selected user is added to the flow composer list.

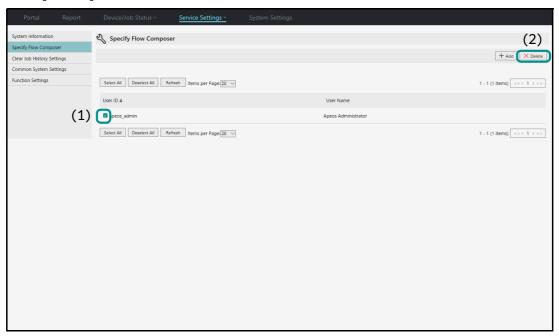
Deleting [Flow Composer]

Can delete the [Flow Composer] role from a user.



The [Flow Composer] role cannot be deleted from Apeos_Admin users.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Specify Flow Composer].
- 3. Perform the following steps.
 - (1) Select the check box for the user to delete the role.
 - (2) Click [Delete].



4. On the [Delete Flow Composer] page, click [Delete].
The selected user is deleted from the flow composer list.

Configuring the Flow Usage Environment

You can configure the usage environment of Flow Management.



Selecting the menu of Flow Management Option when its license is invalid will result in a HTTP 500 error. In this case, check the license status on the portal page.

Configuring Language

The strings used when executing each feature must only consist of characters found in the languages that are set in Flow Management Option Server's [Control Panel] > [Regional and Language Options] > [Advanced] tab > [Language for non-Unicode programs]. The settings will not be saved on each feature's settings screen if they contain characters other than those in [Language for non-Unicode programs]. In addition, the name of the feature will not be displayed correctly if the string of the name, attribute value of each feature contains characters other than those in [Language for non-Unicode programs]. In addition, attributes will not be used correctly

Set Language in the Environment Where Multilingual User Interface Language Packs Is Applied.

When Flow Management Option is installed in an environment where Multilingual User Interface Language Packs are applied, please configure the following settings.

• Set the same region and language for [Country or region], [Format], and [Language for non-Unicode programs] on the control panel.

Please set the following when using the [OCR] feature.

• Specify the settings on the "Welcome screen" in [Welcome screen and system accounts].

Set the Power Supply Settings and System Standby.

When the PC running Flow Management Option is in system standby or hibernation, services will be stopped, and jobs will not be processed.

In this case, please select [None] for [System standby] and [Turn off hard disks] from [Control Panel] > [Power Options] > [Power Schemes] Tab. Any option may be selected for [Turn off monitor].

Set Antivirus Software.

In environments with anti-virus software installed and On-access Scan enabled, Flow Management Option may not operate correctly. Configure the following folder to exclude it from On-access Scan targets of the anti-virus software.

- {Installation Folder}\FM
- {User Data Folder}\Data\FM

However, the Flow Management Option may not operate correctly even when the folder is excluded due to the influence of the antivirus software.

Setting the Retention Period for the Completed or Deleted Jobs

Can confirm the completed or deleted jobs in the job history list since they are retained for a given period of time. You can specify the retention period and the time to delete jobs.

After the retention period has expired, jobs are deleted automatically from Flow Management.



If you need to suspend Flow Management service on a regular schedule for backup and such, make sure the time for service suspension does not conflict with the time to delete jobs.

If jobs are not deleted, job history information keep being accumulated in the database. Set the retention period appropriately according to the operation.

Even if jobs are deleted, a large amount of job history accumulates in the database according to the specified retention period and processed job amount.

If data cannot be stored in the database, document submission and job processing are stopped, and the database is broken depending on the timing.

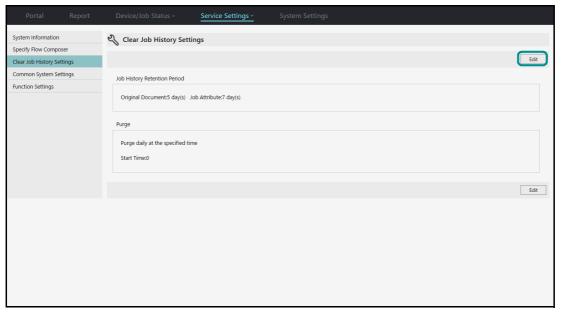
If the SQL Server is Express, the database size is limited to 10 GByte.

If the SQL Server is Express, when Flow Management detects that the database size exceeds 9.5 GByte, it disables the flow and cancels document submission.



"Operating Job Histories" (P.206)

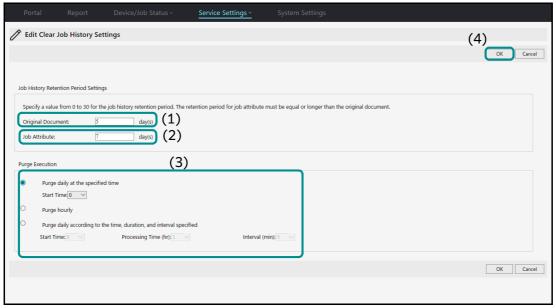
- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Clear Job History Settings].
- 3. Click [Edit].



- 4. Perform the following steps.
 - $\begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular} \beg$
 - The original document is document data before format conversion or image processing. You can download the original document for the completed job within the retention period.
 - (2) Specify the retention period for the job attribute.

 The job attribute is job information, such as the date/time received of the property of the property
 - The job attribute is job information, such as the date/time received or status. This is displayed on the [Job History] page.
 - (3) Specify the time to delete jobs after the retention period.

(4) Click [OK].



The deletion method of job history is set.



When you specify [Purge daily according to the time, duration, and interval specified] and [Processing Time (hr)] has elapsed since [Start Time], the process ends even if the deletion has not been completed yet. The remaining jobs are deleted at the next [Start Time].

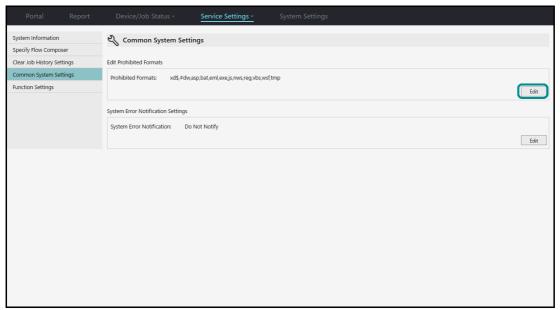
Setting Prohibited Formats

Can set the format extension to be prohibited.

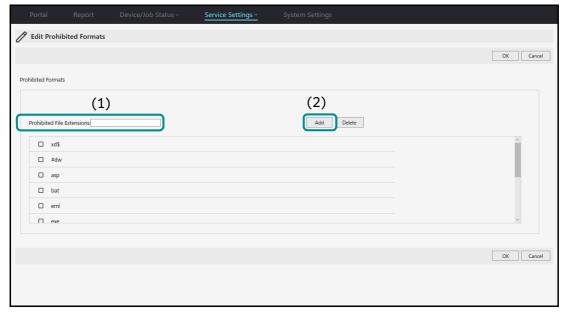
The document with the prohibited format is removed from the import target for the [Folder] function. In addition, when a document is converted to the prohibited format in the [Format Conversion] function, the job is completed with errors, and the subsequent process is not executed.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Common System Settings].

3. Click [Edit] in [Edit Prohibited Formats].



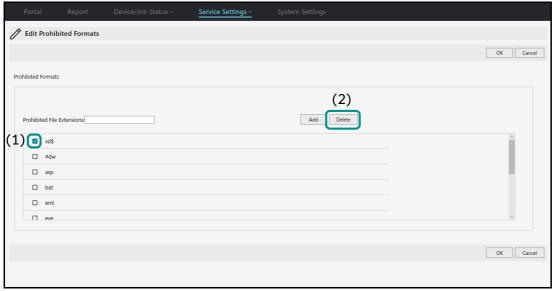
- 4. Perform the following steps.
- For adding a prohibited format
 - (1) In [Prohibited File Extensions], enter the format extension to be prohibited.
 - (2) Click [Add].



The specified format extension is added to the list.

- For deleting a prohibited format
 - (1) Select the check box for the format extension to cancel the prohibit.

(2) Click [Delete].



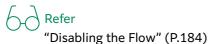
The selected format extension is deleted from the list.

5. Click [OK].

The prohibited format is set.



When you apply this setting to the existing flow in which [Folder] is set for the inbound channel, disable the flow and then enable it again.



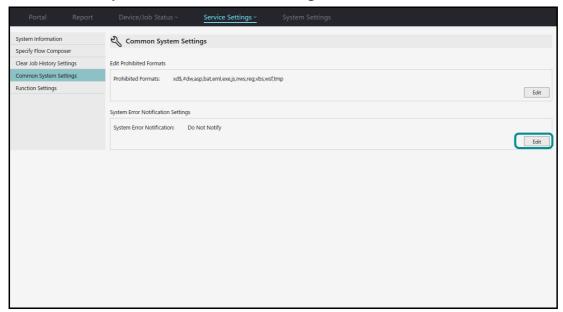
Notifying System Error

When an error requiring immediate action occurs, an e-mail notification can be sent to the specified user. You can set the address and subject for the notification destination.

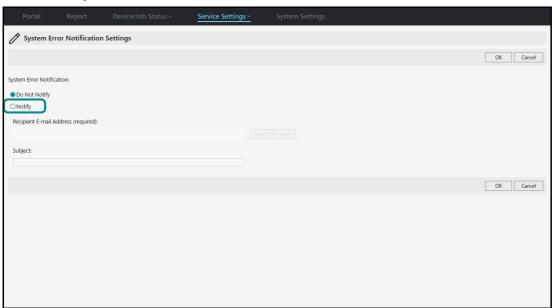
To use this function, you must configure the communication environment, such as SMTP server. The e-mail communication environment is set in [Network Settings] common to ApeosWare Management Suite.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Common System Settings].

3. Click [Edit] in [System Error Notification Settings].



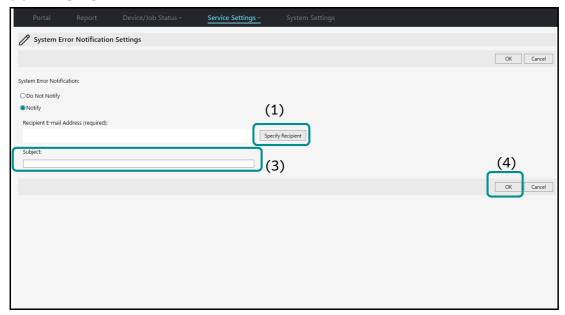
4. Select [Notify].



- 5. Perform the following steps.
 - (1) Click [Specify Recipient].
 - (2) On the [System Error Notification Settings Recipient Settings Recipient Settings] page, specify the e-mail address and click [OK].

You can either enter the e-mail address directly, or select the e-mail address set to the user.

- (3) In [Subject], enter the e-mail subject.
- (4) Click [OK].



Confirm the contents and click [OK]. The system error notification is set.

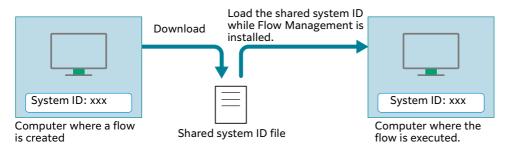
Downloading the Shared System ID File

A system ID is assigned to encrypt the information such as the password of the flow in Flow Management.

A system ID is a unique number for Flow Management. When you install Flow Management to another computer or reinstall Flow Management, a new system ID is assigned.

Since the flow includes this system ID information, you cannot upload the flow to Flow Management with a different system ID. To use the created flow in Flow Management of another computer, or in Flow Management after reinstallation, you must share a system ID.

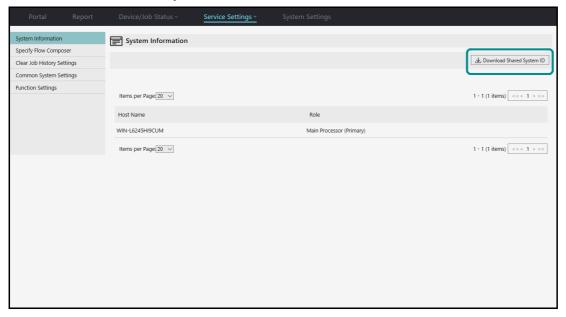
The shared system ID file is a file to share system IDs. After downloading the shared system ID file, it is copied to the computer in which a flow is executed, and loaded to Flow Management during the installation.



Refer
"Uploading the Flow" (P.193)

- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [System Information].

 The computers running Flow Management are displayed on the [System Information] page.
- 3. Click [Download Shared System ID].



- 4. On the [Download Shared System ID File] page, click [Download].
- **5.** In the dialog box to confirm that the file is downloaded, click [Save].
- 6. In the [Save As] dialog box, specify the storage location of the file and file name to be downloaded, and then click [Save].

The download files are stored in the specified folder.



If the file name is not specified, the file is created with the name of "AWFMSystemIdDownload_{YYYYMMDDHHMMSS}.ini"

7. Click [Back].

Registering Folders/Files to Be Used in Functions

Register in Flow Management, the local folder to use as the storage location or inbound channel of the document, or components, such as the file used by each feature.

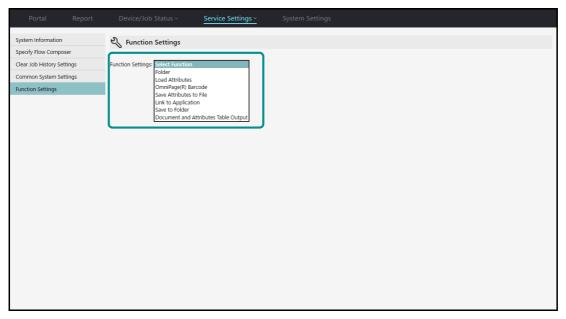
Folders and files registered here can be referred to and selected on the Advance Setting pages for each features at flow creation.

Inbound and storage local folders can also be entered directly when you create a flow but preregistering local folders allows you to easily select a folder from a list and creat a flow quicker.



- Shared folders and virtual directories (FTP) cannot be registered with the steps below. They need to be directly specified at the detailed settings page of each function.
- As the path cannot be entered directly during flow creation for the executable file and working folder used by the [Link to Application] feature, and the zone file used by the [OmniPage(R) Barcode Reader] feature, it is required to register them here beforehand.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Function Settings].
- 3. Select the function to be set.



- 4. Perform the following steps.
 - (1) Enter the folder/file path to be used in functions.

You can enter the path in either of the following formats.

URI format

file:///{folder/file path}

Example: file:///C:/folder1/sub1, file:///C:\folder1\sub1

• UNC format

{folder or file path}

Example: C:\folder1\sub1, C:/folder1/sub1

Use Yen (\), or slash (/), as the delimiter of the folder.

The yen character (\) and slash (/) can be used together. Example: file:///C:\folder1/sub1

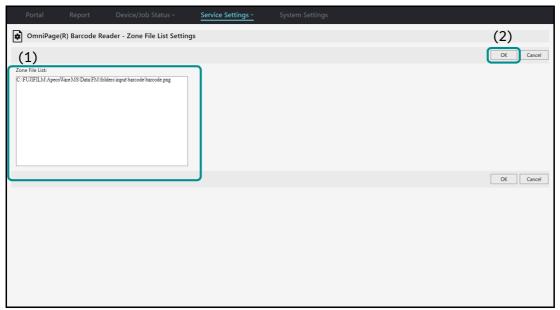
Note that the yen character (¥) cannot be used in file:/// in the URI format.

To enter multiple folders and files, separate each with a line feed.

Up to 1,000 files/folders can be registered.

At the folder selection page, the yen character (\) is displayed in UNC format as a delimiter. In the example above, "C\folder1\sub1" is displayed in all instances.

(2) Click [OK].



Starting or Stopping the Flow Management Service

This section describes how to start or stop the Flow Management service manually.

Starting the Flow Management Service

The service of Flow Management starts automatically when you start the Flow Management server. To start the Flow Management service manually when it stops due to any reason, start the service in Administrative Tools of Windows.

The service name is:

- Display name
 ApeosWare Management Suite Flow Management Service
- Service Name AWSFMSvc

You can also start the Flow Management service by executing the following batch command.

- Command name awfmsrv_start.bat
- Storage location {installation folder}\FM\awfm\bin



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

Stopping the Flow Management Service

The service of Flow Management stops automatically when you shut down the Flow Management server.

To stop the Flow Management service manually for installation or restoration, use the following patch command.

- Command name awfmsrv_stop.bat
- Storage location {installation folder}\FM\awfm\bin



- You cannot stop the Flow Management service in Administrative Tools of Windows.
- By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".
- If there is a running job when the service is stopped, the process of the job is restarted from where it was stopped at the next service restart.
 - However, the job may complete with an error depending on the circumstances of the stop. In some cases, the job that completed with an error may have already been delivered. When you restart the job, check the delivery destination, and then select [From start of processing] on the [Restart Job] page.
- The job whose retention period has expired will be deleted according to the schedule set in "Setting the Retention Period for the Completed or Deleted Jobs" (P.62). If the Flow Management service is suspended at the specified time, the jobs will not be deleted. If you need to suspend Flow Management service on a regular schedule for backup and such, make sure the time for service suspension does not conflict with the time to delete jobs.

If retained jobs keeps building up without deleted due to the service suspension, Flow Management will not be able to function.

Setting the Operation Schedule Using a Batch Command

Can set the operation schedule of Flow Management using Windows Task Scheduler. The following items are to be set for the task scheduler.

Items	Setting Content
Execution program	Specify the following commands as necessary: • Start command: {installation folder}\FM\awfm\bin\awfmsrv_start.bat
	• Stop command: {installation folder}\FM\awfm\bin\awfmsrv_stop.bat
	Note Note
	By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".
Execution schedule	Either of the following can be specified: • Daily Execute the specified time every day.
	Execute once at the specified time every day. • Weekly
	Execute once on the specified day and time of every week.
	One time only Execute once on the specified date and time.
User account to execute the task	Specify the user name and password for the account with Administrator role.



- · When a task is executed, the command prompt window is displayed. Do not close this window during task execution. If you close it, the Flow Management service does not start or stop properly.
- You can check the execution result of task scheduler on the Windows Event Viewer. You can also view the start or stop of Flow Management from the Flow Management logs.

The Flow Management log is created automatically on the following location. {destination folder}\Data\Logs\FM\awfm-geronimo

The file name is "AWFM-system-{year-month - day}.log"

• The task execution time is based on your computer time.

Suppressing the Database File Size

The section below explains how to suppress the database file size.



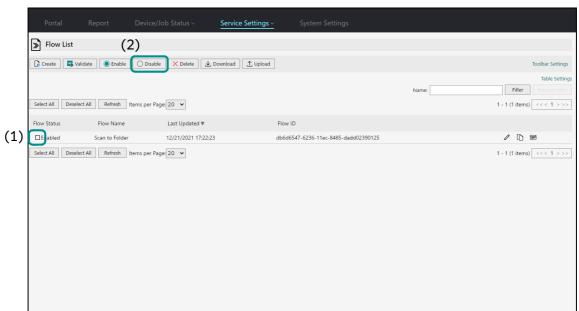
Job Histories are discarded so as to avoid too much data being stored in the Flow Management Option database. Discarding is configured by default to be performed at midnight, (0:00).

When stopping Flow Management Option and performing maintenance, change the time setting for deleting job histories so that discarding of job histories will not be performed at the same time as maintenance.

Disabling the Flow

First, disable the flow.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Perform the following steps.
 - (1) Select the check box for the flow to be disabled.
 - (2) Click [Disable].



3. On the [Confirm Disable Flow] page, confirm the flow to be disabled, and click [OK]. The flow is disabled.

Changing [Job History Retention Period Settings]

It is necessary to set [Job History Retention Period Settings] shorter than the currently set period. Change the period setting according to the following steps.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Service Settings].
- 2. From the side menu, select [Clear Job History Settings].
- 3. Click [Edit].
- 4. In [Job History Retention Period Settings], perform the following procedure.
 - (1) Change the retention period for original document to a shorter period than the currently set period.
 - (2) Change the retention period of job attribute to a shorter period than the currently set period.
 - (3) Click [OK].



Refe

Details of original document and job attribute ⇒ "Setting the Retention Period for the Completed or Deleted Jobs" (P.62)

Compressing the Database File Size

Subsequent to changing [Job History Retention Period Settings], after the deletion processing of job history is carried out (on and after the next day), compress the database file according to the following steps.

- $oldsymbol{1}$. Log on to the Flow Management server with the user in the Administrators group.
- 2. Check the size of "db database file" (mdf file) contained in the following storage location.
 - Storage location {Installation folder}\FM\db\{mdf file}
- 3. Open the command prompt as [Run as administrator] to display the Windows Command Prompt window.
- 4. To stop the Flow Management service, enter the following command, and then press the <Enter> key.
 - $> cd {Installation folder}\FM\awfm\bin$
 - > awfmsrv_stop.bat

This stops the Flow Management service.

- 5. To compress the database file, enter the following command, and then press the <Enter> key.
 - $> cd {Installation folder}\FM\awfm\bin$
 - > CompressdbFileSize.bat
- 6. Again, confirm that the size of "db database file" (mdf file), you have checked in step 2, is compressed.
- 7. To start the Flow Management service, enter the following command, and then press the <Enter> key.
 - > cd {Installation folder}\FM\awfm\bin
 - > awfmsrv_start.bat

This resumes the Flow Management service.

3 Configuring Flows

Things to Know before Creating Flows

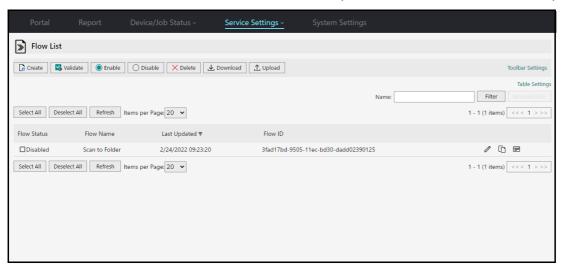
This section describes the basic structure of pages to create a flow, and the order of functions on the flow settings page.



- If spaces are continuously entered for the flow name on the [Create/Edit New Flow] page or for feature settings on the Detailed Settings page of the feature, only one space will be displayed on the screen.
- If certain Unicode characters or symbols are used in a feature name within a flow, information in the job details may appear garbled with "?".

Flows List Page

The flows registered in Flow Management are displayed on the [Flow List] page. You can create, validate, edit, enable, disable, delete, download or upload the flow on the [Flow List] page.



Only the flows in which the logged in user is set to [Owner] are displayed on the [Flow List] page. When you log in as Apeos_Admin user, all flows are displayed.



"Roles of Flow Management" (P.38)

Flow Settings Page

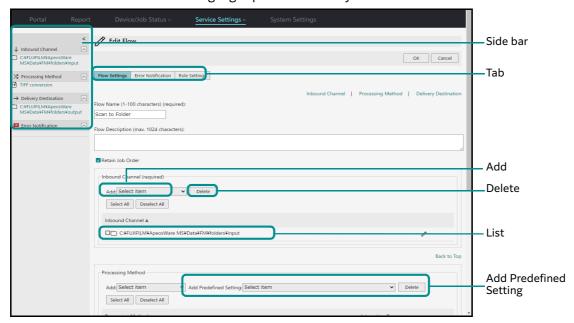
A page where a flow is set is referred to as "flow settings page". There are the [Create New Flow] page and [Edit Flow] page in the flow settings page.

The main structure of the flow settings page is shown below.



While setting the function of the flow, enter the characters of a language specified as the locale on the system on the Flow Management server.

Settings will not be saved if the characters are entered with a language other than the one specified as the system locale. Moreover, the attribute is not used properly if the string attribute of each function has the character other than the language specified as the system locale.



Side bar

Already created functions, such as Inbound Channel, Processing Method, Delivery Destination and Error Notification are displayed. Clicking a function displays the detailed settings page to edit the information.

Tab

You can set the items on each tab.

Tab	Setting Content
Flow Settings	Enter flow names and descriptions. Add the functions for inbound channel, processing method and delivery destination.
Error notification	Add the functions for error notification.
Role settings	Set users to be owners of flows and to be users of flows.

Add

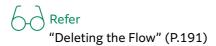
The functions added are displayed in the drop-down list box.

Selecting a function displays the detailed settings page. When you set items and click [OK], the function is added to the flow.



Delete

Delete the functions selected in the list.



• Add predefined setting

The combinations of functions are displayed in the drop-down list box.

The add predefined setting function is a function in which commonly used functions are predefined and set as a combination. When you select the add predefined setting function, you can omit some or all procedures.



[Add Predefined Setting] is not displayed in the inbound channel.



"3 Creating Flows Using the Predefined Setting Function" (P.179)

List

The functions selected from [Add] or [Add Predefined Setting] are displayed.

Clicking / (Edit) displays the page to check or edit the settings.

The order of functions displayed in the list becomes the order of job processing.

You can change the order using [Move Up] or [Move Down] in the processing method and delivery destination lists. However, the order of some functions cannot be changed.

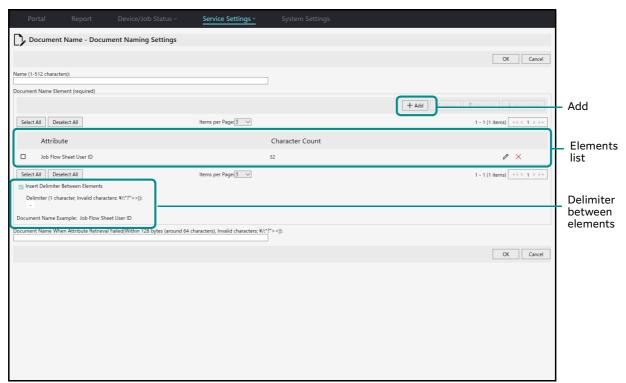


Attributes and Elements Settings Page

Can use attribute values output as processing results for other functions in Flow Management.For example, appending the fax sender name to the document name, or attaching the OCR result to email. You can specify the attribute on the detailed settings page of each function.

How to Specify Attributes

This section describes how to specify attributes using the example of the [Document Name] function.



Add

Clicking this icon displays the element settings page. You can specify any attribute or text.



• Elements list

The added elements are displayed. Clicking (Edit) displays the page to check or edit the settings. The order of elements displayed in the list becomes the order of attributes referred to. You can change the order using [Move Up] or [Move Down].

• Insert Delimiter Between Elements

When adding multiple elements, you can set a character to delimit elements. The delimiter cannot be set for some functions. When it cannot be set, a single byte space is set. For example,

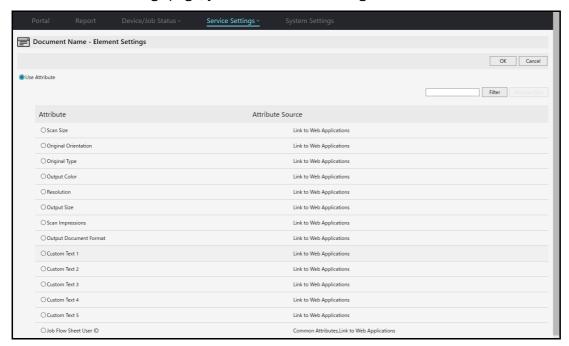
Element: "Company", "Questionnaire", "2020"

Delimiter between elements: hyphen (-) are specified.

The document name becomes "Company-Questionnaire-2020".

Element Settings Page

On the element settings page, you can set the following items.



• Use attribute

The available document and job attributes are displayed in the list.

The attributes displayed here are the attributes of the function that you have set before. Therefore, you need to preset the function for the attributes to use.

For example, if you use the OCR result as the document name, first you set the [OCR] function, and then you set the [Document Name] function in the processing method list.

However, all function attributes and job attributes for the delivery destination are displayed in the [Notification E-mail] function of the error notification and in the [Document and Attributes Table Output] function.

Limit character count/Byte limit

Specify the number to limit the character length (or byte) for the attribute to be used.

For example,

Attribute name: [Sender ID] in the [Folder] feature

Limit character count: "2"

the value of the element is shown below.

When the sender ID of the document imported from the device folder is "0A1234", the value becomes "0A"

When the sender ID of the document imported from the device folder is "0B9999", the value becomes "0B"

Entering text

Enter any string when you do not specify the attribute.

Changing Function Order

Can change the order of functions in the processing method and delivery destination lists. However, there are the following restrictions.

Processing Method

• The functions of processing method are executed in the following order. You cannot change this order. When multiple [Notification E-mail] functions are added, the functions are executed on a first-come, first-served basis. You cannot change the order between [Notification E-mail] functions.

Execution order



Each function of the processing method Interaction Process Notification E-mail (Notification settings)

Delivery destination

• The functions of delivery destination are executed in the following order. You cannot change this order. When multiple [Notification E-mail] functions are added, the functions are executed on a first-come, first-served basis. You cannot change the order between [Notification E-mail] functions.

Execution order



Delivery Conditions
Format Conversion
Document name
Each function of the delivery destination
Notification E-mail (Completion notification)
Document and Attributes Table Output

• The delivery destination function in which [Deliver documents not matching all conditions] is set as [Delivery Conditions] is added at the end. You can change the order between the delivery destination functions in which [Deliver documents not matching all conditions] is set. For example, when the following delivery destinations are set, "Delivery destination 3" and "Delivery destination 4" cab be switched, but "Delivery destination 1" and "Delivery destination 3" cannot be switched.

Execution order



Delivery destination 1 Delivery conditions - Time conditions

Delivery destination 2 Delivery conditions - Attribute conditions

Delivery destination 3 Delivery conditions - Deliver documents not matching all conditions.

Delivery destination 4 Delivery conditions - Deliver documents not matching all conditions.

The delivery destination function in which [Use Existing Delivery Conditions] is set as [Delivery Conditions] is added after the delivery destination function with the same [Delivery Conditions].
 You can change the order between the delivery destination functions with the same [Delivery Conditions].

When the same [Delivery Conditions] is used for multiple delivery destination functions, and the order of one of the delivery destination functions is changed, the delivery destination functions with the same [Delivery Conditions] are changed together.

For example, when the following delivery destinations are set,

Delivery destination 1

Delivery destination 2 Delivery conditions A

Delivery destination 3 Delivery conditions A - Use existing delivery conditions.

When you select "Delivery destination 2" and switch it with "Delivery destination 1", the execution order is shown below.

Execution order



Delivery destination 2 Delivery conditions A

Delivery destination 3 Delivery conditions A - Use existing delivery conditions.

Delivery destination 1

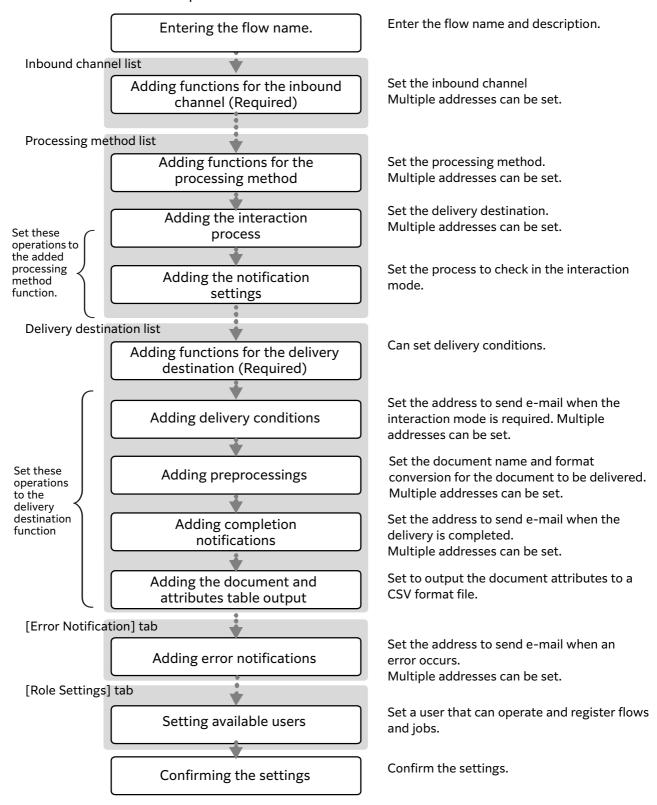
Creating New Flows

You can create a new flow.

This is operated by a user with the [Flow Composer] role.

Setting Flows

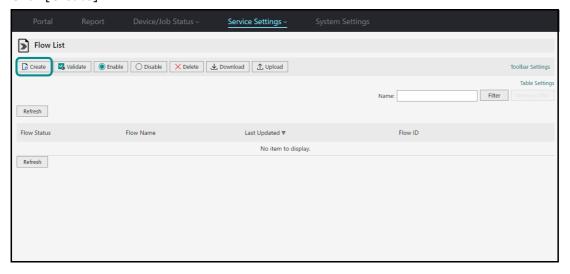
This section illustrates the operation to create a new flow.



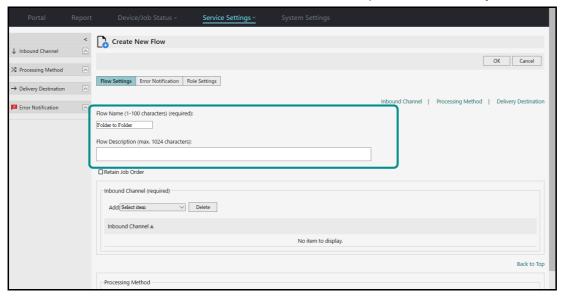
Creating a Flow

Can create a new flow by adding functions.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Click [Create].



3. In [Flow Name], enter the flow name. Enter [Flow Description] as necessary.



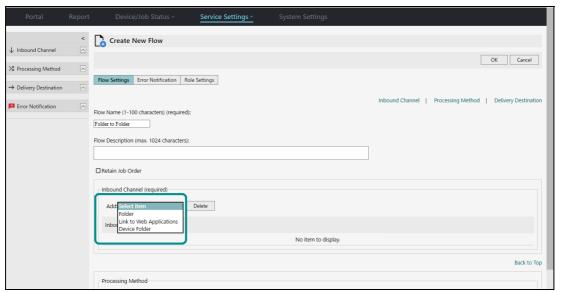
4. When multiple jobs are performed simultaneously, specify whether to retain the job order in [Retain Job Order].

When this is selected, the document is delivered with retaining the import order.

When there is a job in the [Suspended] status, the subsequent jobs in the same flow are not processed until the job in the [Suspended] status is resumed.



- 5. In [Inbound Channel], add the function of inbound channel.
 - (1) Select the functions to add from [Add].

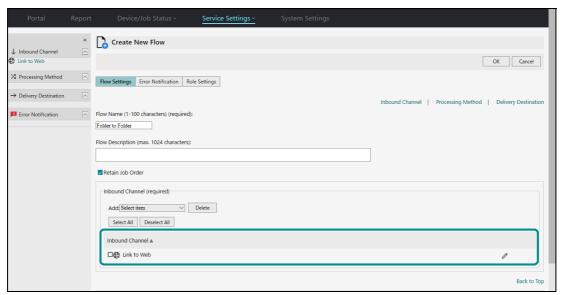


(2) The detailed settings page for the function selected in Step (1) is displayed. Set the items, and click [OK].



- Refer
- "Setting the [Folder] Function" (P.96)
- "Setting the [Link to Web Applications] Function" (P.99)
- "Setting the [Device Folder] Function" (P.93)

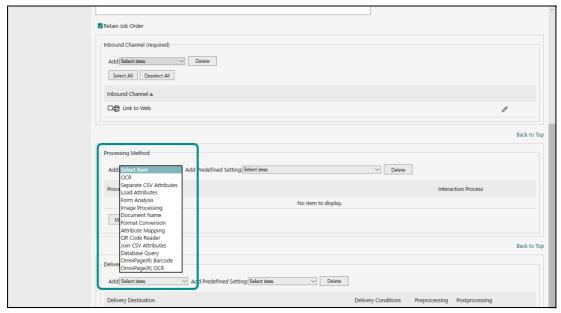
The selected function is added to the list.



- (3) To add multiple inbound channels, perform Step (1) and Step (2) repeatedly.
- 6. In [Processing Method], add the function of processing method.
 You can set the [Interaction Process] and [Notification Settings] functions for the added processing method function. [Notification Settings] can be added only when [Interaction Process] is added.

(1) Select the functions to add from [Add].

The option license is required for configuring [QR Code Reader], [Form Analysis], [OmniPage(R) OCR], [OmniPage(R) Barcode Reader], [Database Query], [Load Attributes], [Separate CSV Attributes], and [Join CSV Attributes]. For details, refer to "Installing Required Software Applications" (P.45).



(2) The detailed settings page for the function selected in Step (1) is displayed. Set the items, and click [OK].



- "Setting the [QR Code Reader] Function" (P.117)
- "Setting the [Format Conversion] Function" (P.106)
- "Setting the [Image Processing] Function" (P.104)
- "Setting the [Attribute Mapping] Function" (P.130)
- "Setting the [OCR] Function" (P.111)
- "Setting the [Document Name] Function" (P.115)
- "Configuring the [Form Analysis] Function in the Flow" (P.250)
- "Setting [OmniPage(R) OCR] Function" (P.120)
- "Setting the [OmniPage(R) Barcode Reader] Function" (P.126)
- "Setting the [Database Query] Function" (P.135)
- "Setting the [Load Attributes] Function" (P.138)
- "Setting the [Separate CSV Attributes] Function" (P.139)
- "Setting the [Join CSV Attributes] Function" (P.141)
- (3) To add multiple processing methods, perform Step (1) and Step (2) repeatedly.
- (4) You can change the function order by clicking [Move Up] or [Move Down] as necessary in the processing method list.

The order of functions displayed in the processing method list becomes the order of job processing.

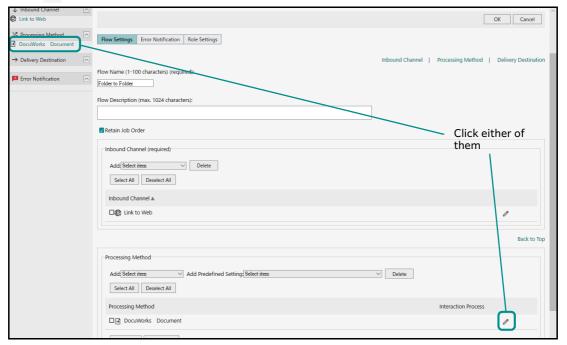


"Changing Function Order" (P.79)

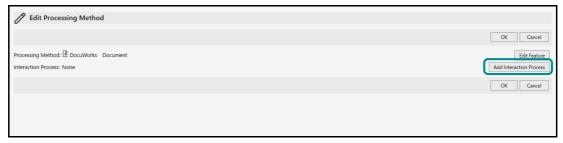
7. To set [Interaction Process] for the processing method function added in Step 6, perform the following procedure.

You can add only one [Interaction Process] function to one flow. When the interaction process has already been set for another processing method function, you cannot add an interaction process function.

(1) Click / (Edit) of the function to set [Interaction Process], or click the function in the side bar.



(2) Click [Add Interaction Process].

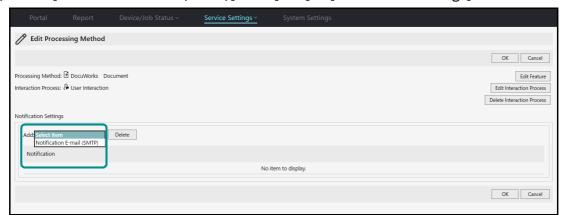


(3) The detailed settings page for the [Interaction Process] function is displayed. Set the items, and click [OK].



"Setting the [Interaction Process] Function" (P.142)

(4) Select [Notification E-mail (SMTP)] from [Add] in [Notification Settings].



(5) The detailed settings page for the [Notification E-mail] function is displayed. Set the items, and click [OK].



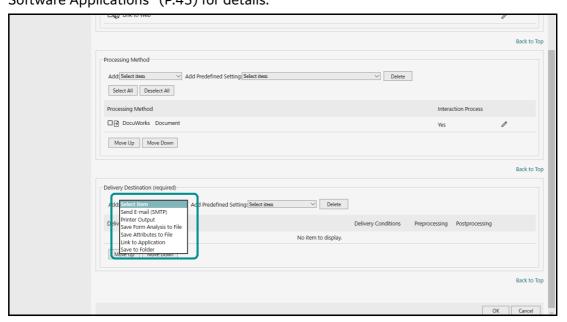
- (6) To add multiple [Notification E-mail] functions to [Notification Settings], perform Step (4) and Step (5) repeatedly.
- (7) Click [OK].



8. Add functions for [Delivery Destination].
You can set the [Delivery Conditions], [Preprocessing] and [Postprocessing] functions for the added delivery destination function.

(1) Select the functions to add from [Add].

The option license is required to configure [Save Attributes to File]. Refer to "Installing Required Software Applications" (P.45) for details.

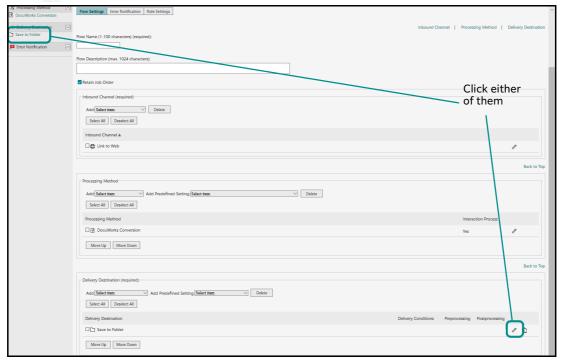


(2) The detailed settings page for the function selected in Step (1) is displayed. Set the items, and click [OK].

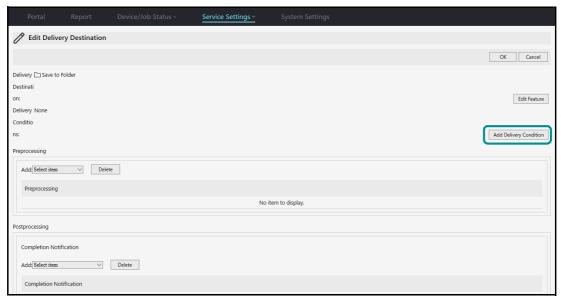


- "Setting the [Link to Application] Function" (P.162)
- "Configuring the [Save Form Analysis to File] Function in the Flow" (P.251)
- "Setting the [Save to Folder] Function" (P.144)
- "Setting the [Printer Output] Function" (P.155)
- "Setting the [Send E-mail] Function" (P.152)
- "Setting the [Save Attributes to File] Function" (P.165)

- **9.** To set other functions by relating to the delivery destination function added in Step 8, perform the following procedure.
 - (1) Click / (Edit) of the function to be set, or click the function in the side bar.



- (2) Perform the following procedure.
- For adding [Delivery Conditions] Click [Add Delivery Condition].



The [Add Delivery Condition] page is displayed. Select the delivery condition, and click [Next] to set the delivery condition.



"Setting the [Delivery Conditions] Function" (P.172)

■ For adding [Format Conversion] or [Document Name]

Select [Format Conversion] or [Document Name] from [Add] in [Preprocessing].

The detailed settings page for the selected function is displayed. Set the items, and click [OK].



- "Setting the [Format Conversion] Function" (P.106)
- "Setting the [Document Name] Function" (P.115)
- For adding [Completion Notification]

Select [Notification E-mail (SMTP)] from [Add] in [Completion Notification] of [Postprocessing]. The detailed settings page for the [Notification E-mail] function is displayed. Set the items, and click [OK].



Refer
"Setting the [Notification E-mail] Function" (P.178)

■ Adding [Document and Attributes Table Output]

Click [Add] in [Document Attribute Output] of [Postprocessing].

The detailed settings page for the [Document and Attributes Table Output] function is displayed.Set the items, and click [OK].



"Setting the [Document and Attributes Table Output] Function" (P.168)

- (3) After adding the functions, click [OK] on the [Edit Delivery Destination] page.
- 10. In [Delivery Destination], perform the following procedure.
 - (1) To add multiple delivery destination functions, perform Step 8 and Step 9 repeatedly. You can copy the delivery destination function. For setting similar functions, copy and edit the already added delivery destination function so that you can create a flow efficiently. To copy the function, click (Copy).
 - (2) You can change the function order by clicking [Move Up] or [Move Down] as necessary in the delivery destination list.

The order of functions displayed in the delivery destination list becomes the order of job processing.



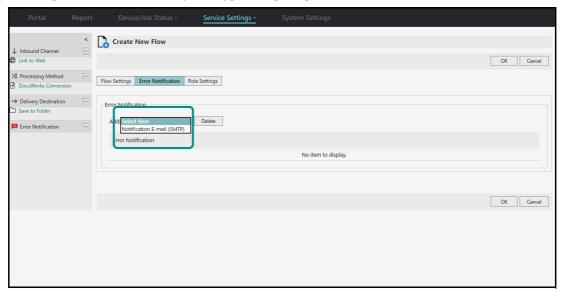
Refer

"Changing Function Order" (P.79)

11. Click the [Error Notification] tab.

12. In [Error Notification], set to send an e-mail when an error occurs in the job.

(1) Select [Notification E-mail (SMTP)] from [Add].



(2) The detailed settings page for the [Notification E-mail] function is displayed. Set the items, and click [OK].

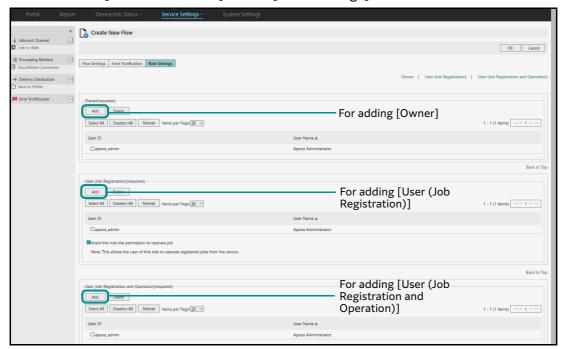


- (3) To add multiple [Notification E-mail] functions to [Error Notification], perform Step (1) and Step (2) repeatedly.
- 13. Click the [Role Settings] tab.
- 14. Add the user that operates flows and flow jobs in the following procedure.
 The Apeos_Admin user and the logged in user are added to all roles by default. When creating a new flow, you cannot delete the default users.



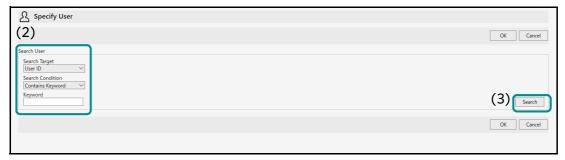
(1) Click [Add] for the role to add a user.

[User (Job Registration)] is displayed only when you have added the [Link to Web Applications] function in [Inbound Channel] on the [Flow Settings] tab.



- (2) Enter the search condition.
- (3) Click [Search].

 When you click [Search] with default options of Search User, all users are displayed.



- (4) In the user list, select the check box for the user to be added.
- (5) Click [OK].



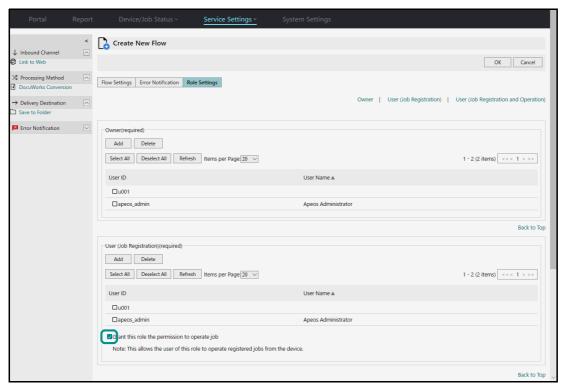
The selected user is added to the role list.

15. When you grant the role to the user who registered the job in the link to web applications function to operate the job, select the [Grant this role the permission to operate job] check box.

To preview the job for a user who registered the job in the link to web applications function, set the [User (Job Registration and Operation)] role for the user, or select the [Grant this role the permission to operate job] check box.

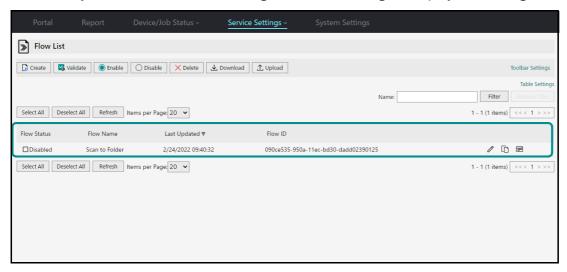
However, if the [User (Job Registration and Operation)] role is set, the user will be able to display the jobs which are registered by other users.

To display only their own registered jobs for the users, select the [Grant this role the permission to operate job] check box, but not set the [User (Job Registration and Operation)] role. This setting allows the users to operate only their jobs without displaying other users jobs.



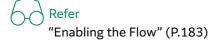
16. After completing all settings, click [OK] on the [Create New Flow] page. The created flow is added to the flow list.

When [Retain Job Order] is enabled by setting the [interaction process], the following message "until previously received suspended jobs have been purged, the job will not be delivered even after a restart. Do you want to continue with registration?" message is displayed. Clicking [OK] creates a flow.





To start the created flow process, enable the flow.



Setting the Details of the Function

This section describes the detailed settings page for the function added on the flow settings page. For the flow settings page, see "Creating a Flow" (P.82).

For more details of each item, see Help.

Setting the [Device Folder] Function

Can set to import documents from the device folder.

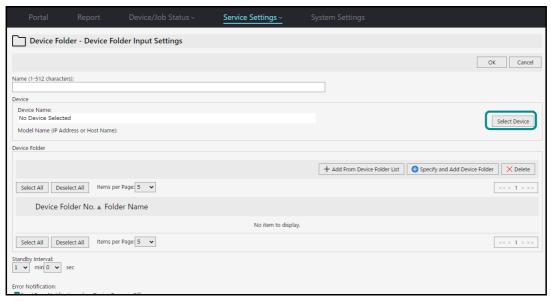
Only one device can be set to one [Device Folder] function. To import documents from multiple devices, add multiple [Device Folder] functions to the flow.

To add devices in the [Device Folder] function, either the system administrator or device management role is required.



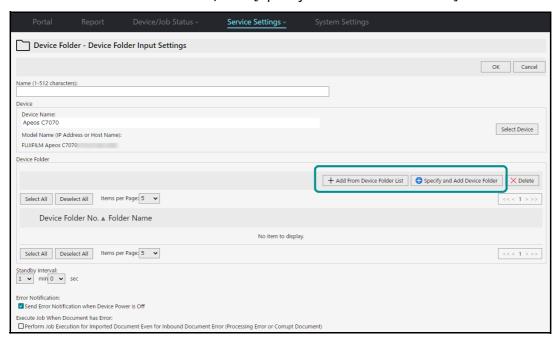
The document imported from the device folder may not be opened by the Windows standard viewer, such as Windows Picture and Fax Viewer without changing the format. To view the document, convert it to another format using the [Format Conversion] function, or use our TIFF viewer.

- 1. Select [Device Folder] from [Add] in [Inbound Channel] on the flow settings page.
- 2. On the [Device Folder Device Folder Input Settings] page, enter the function name in [Name].
- 3. Click [Select Device] in [Device].



- **4.** Specify the target device in the following procedure.
 - (1) Selecting how to add a device, click [Next] in the [Device Folder Device Folder Input Settings] page.
 - (2) When [Add from devices already registered in database] is selected in (1), the device that registered previously in the ApeosWare Management Suite database is displayed. Check the device that you wish to add, and then click [Add].

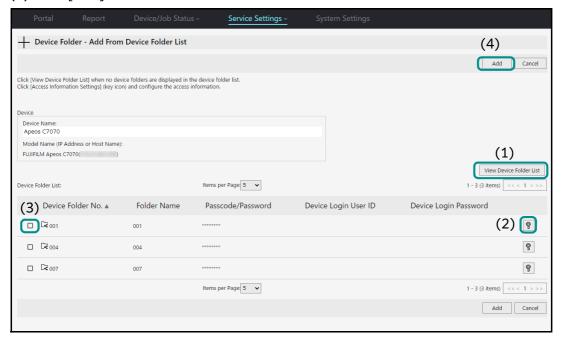
 When selecting [Add by searching network] or [Specify and add IP address/host name directly] to add devices, see Help for each screen.
- 5. Select the method to add the desired device folder in [Device Folder]. When selecting from the device folder list, click [Add From Device Folder List]. When specifying the number to add the device folder, click [Specify and Add Device Folder].



- **6.** Add the target device folder in the following procedure.
- For clicking [Add From Device Folder List]
 - (1) Click [View Device Folder List].

 The device folders registered in the device are displayed in the list.
 - (2) When the passcode or password is set to the device folder to be added, or the device is in the Login mode, click (Access Information Settings). The [Device Folder Access Information Settings] page is displayed. Set the account information and click [OK].

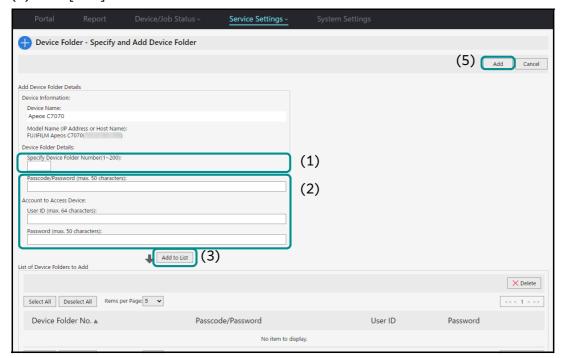
 In [Password], "*******" is displayed regardless of whether the actual password is input or not. When the password is set to the device folder, make sure to click (Access Information Settings) and specify the password.
 - (3) In the list, select the check box for the device folder to be added.
 - (4) Click [Add].



- For clicking [Specify and Add Device Folder]
 - (1) Enter the folder number to import documents. When a password is set for the device folder, enter the password in [Passcode/Password].
 - (2) When the Login mode is set to the device, specify the account information to access the device.
 - (3) Click [Add to List].

 The specified device folder is added to the list.
 - (4) To add multiple device folders, perform Step (1) to Step (3) repeatedly.

(5) Click [Add].



7. In [Standby Interval], specify the interval to monitor the device folder.



[Standby Interval] is common to all flows. If you set different values for the [Device Folder] functions of multiple flows, the value set last is enabled.

- 8. In [Error Notification], specify whether to notify the error, if you cannot access the devicedue to the problems, such as turning off the power.
- 9. When an error occurs during the document import process, specify whether to execute the job. When you select the [Perform Job Execution for Imported Document Even for Inbound Document Error (Processing Error or Corrupt Document)] check box, the process continues and a job is created from the imported document even if an error occurs during the import process.



"Executing the Job when the Document Has Errors on Import of Device Folders" (P.23)

10. Click [OK].

Setting the [Folder] Function

You can set to import documents from the folder. Only one folder can be set to one [Folder] function. To import documents from multiple folders, add multiple [Folder] functions to the flow.

The folder to be specified must be created in advance.



• When characters of a language which is not specified in the system locale ([Language for non-Unicode programs]) on the Flow Management server are included in the file name, this file may not be imported from the folder of the Inbound Channel. When this happens, change all the characters in the file name to the character of the language for the system locale.

- Documents will not be loaded from the following folder or any of the folders nested in the following folder. Specify other than the following folder as the inbound channel.
 - Windows directoryExample: C:\windowsDirectory for program file
 - Example: C:\Program Files

Example (For WOW64): C:\Program Files (x86)

WOW64 is the name of a system emulating the 32-bit program execution environment on a 64-bit OS.

 Directory containing document templates of all users Example: C:\Users\Public\Documents

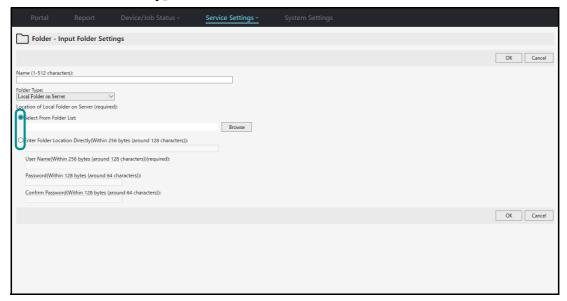
Refer
"Preparing Folders" (P.53)

- $oxed{1}$. Select [Folder] from [Add] in [Inbound Channel] on the flow settings page.
- 2. On the [Folder Input Folder Settings] page, enter the function name in [Name].
- **3.** From [Folder Type], select the folder type to import documents. You can select [Local Folder on Server] or [Shared Folder].



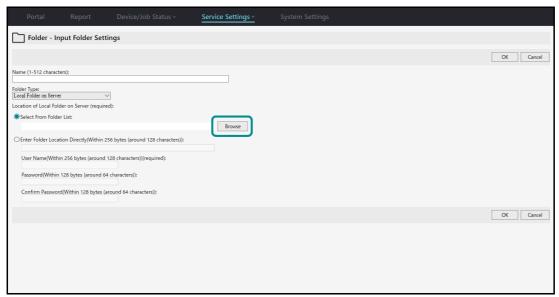
To specify the folder assigned to the network drive, select [Shared Folder]. If you select [Local Folder], a job is completed with errors during the flow process

4. If [Local Folder on Server] is specified from [Folder Type], select [Select From Folder List] or [Enter Folder Location Directly] for the folder selection method.



- 5. Perform the following steps.
- If [Local Folder on Server] is specified from [Folder Type] and [Select From Folder List] is selected If [Select From Folder List] is selected, the [User name] and [Password] cannot be specified. The NETWORK SERVICE account is used to access folders.

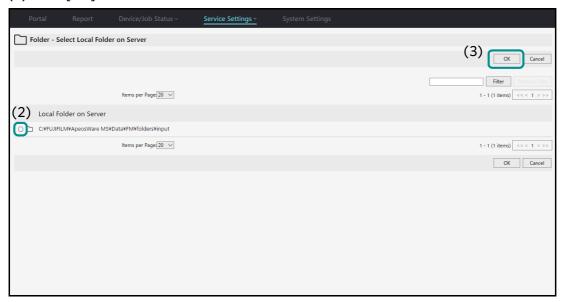
(1) Click [Browse].



The pre-registered folders are displayed on the folder selection page.

If folders do not display, see "Registering folders/functions to be used in functions" (P.74) "Registering Folders/Files to Be Used in Functions" (P.68) and register the folders.

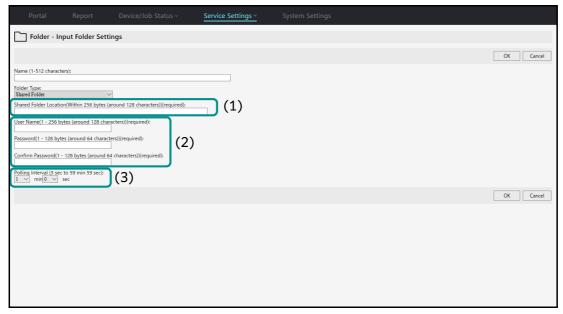
- (2) From the list, select only one folder to be specified for the inbound channel.
- (3) Click [OK].



- If [Local Folder on Server] is specified from [Folder Type] and [Enter Folder Location Directly] is selected
 - (1) Enter in UNC format the absolute path of the inbound channel folder. Use Yen (\), or slash (/), as the delimiter of the folder. Example: C:\folder1\sub1, C:\folder1\sub1
 - (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.
- If [Shared Folder] is specified from [Folder Type]
 - (1) Enter the inbound folder path in [Shared Folder Location] in UNC format starting with $\$ or //. Use Yen ($\$), or slash ($\$), as the delimiter of the folder.

Example: \\hostname\folder1\sub1, //192.0.2.1/folder1/sub1

- (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted. If you are using a domain, specify the user name with the domain. If the domain is not included, the local user account is used. Specify one of the following formats for domain users.
 - {domain name}\{user name}
 - {user name}@{domain name}
- (3) Enter the time interval for monitoring the folder in [Polling Interval].



6. Click [OK].

Setting the [Link to Web Applications] Function

Can set to import documents scanned by the link to web applications function. Only one function can be set for one flow.



If a document imported by the link to web applications function is output in TIFF format, it may not be opened by the Windows standard viewer, such as Windows Picture and Fax Viewer without changing the format. To view the document, convert it to another format using the [Format Conversion] function, or use our TIFF viewer.



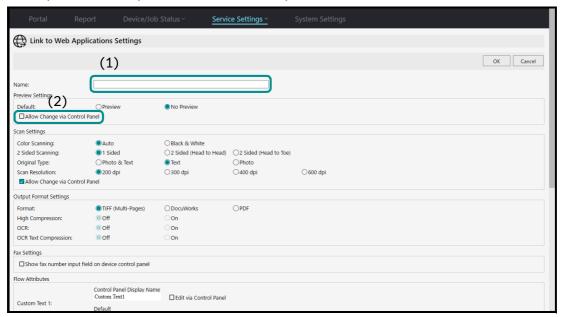
- $oxed{1.}$ Select [Link to Web Applications] from [Add] in [Inbound Channel] on the flow settings page.
- 2. On the [Link to Web Applications Settings] page, enter the function name in [Name].
- 3. In [Preview Settings], perform the following procedure.
 - (1) Select whether to preview the document.

When you select [Preview], you can check the orientation of original on the preview screen of the device after the scan.

You cannot select it if [PDF] or [DocuWorks] is set for [Format].

(2) Specify whether to change the settings of Step (1) on the control panel.

When you select the [Allow Change via Control Panel] check box, you can also change the settings of preview or no preview on the control panel of the device.



- 4. In [Scan Settings], select an item for each settings for scanning.

 When you select the [Allow Change via Control Panel] check box, you can set scan settings on the control panel of the device while scanning.
- **5.** In [Output format], perform the following procedure.
 - (1) Select [Format].

 If you select [TIFF (Multi-Pages)], other settings for output format cannot be changed from [Off].

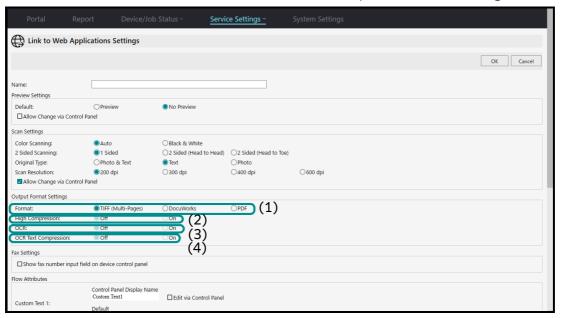
 Proceed to Step 6.
 - (2) If you want to compress and output the scanned documents, select [On].

 This option is selectable when [Auto] is selected for [Color] in [Scan Settings], and a value smaller than 300 dpi for [Scan Resolution].
 - (3) If you want to perform the OCR process on scanned documents, select [On].

 This setting can be selected when the following items are selected: a value smaller than 300 dpi for [Scan Resolution] in [Scan Settings], and [Photo & Text] for [Original Type].
 - (4) If you want to compress the text with OCR processing when the [Format] is [PDF], select whether

to compress the OCR processed text.

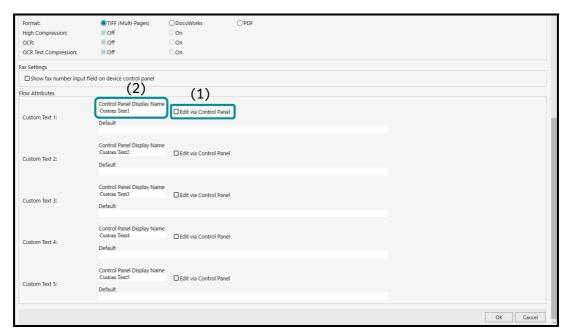
If the document is in a format other than PDF, this option cannot be changed from "Off".



6. It specifies whether to show fax number input field on device control panel in [Fax Settings].



- An option license for "Link to Web Applications" is required to use this function.
- This function is not available in some countries. Please contact our agent for more details.
- Setting of [Link to Web Applications] with a check mark on [Show fax number input field on device control panel] and other functions (ex. [Folder] function) in a flow causes an error, and a flow editing cannot be completed.
- 7. In [Flow Attributes], perform the following procedure.
 - (1) Specify whether to edit the document attributes on the device control panel.
 - While scanning, if you select the [Edit via Control Panel] check box, you can set [Custom Text {1-5}] on the control panel of the device.
 - When you deselect the check box, [Custom Text {1-5}] becomes "None". You cannot set the default value too.
 - (2) When you select the check box in Step (1), enter the name displayed on the device control panel in [Control Panel Display Name]. In [Default], enter the string used as the default value of the document attribute.
 - This setting becomes the name displayed on the device control panel. This is not the attribute name. The attribute name is "Custom Text 1" to "Custom Text 5" (Fixed).



8. Click [OK].

About Flow Attributes

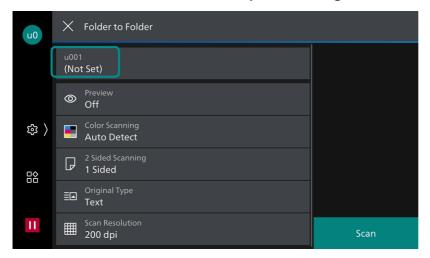
The flow attribute is a document attribute that can be set optionally.

You can set up to five document attributes in the [Link to Web Applications] function.

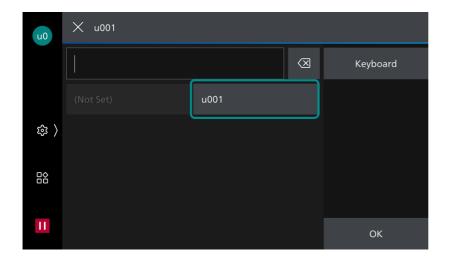
Any string can be specified for the document attribute, such as the employee ID of the scanned user or document details. After the specified information is imported to Flow Management, you can append it to the file name of the delivery document or can set for the document as document information.

The document attribute can be edited on the device control panel during the scan.

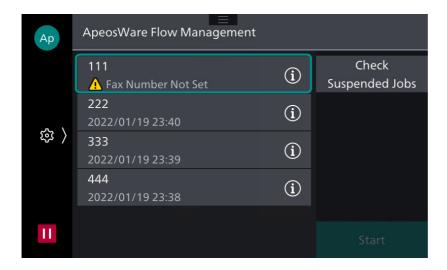
The following screen shot shows a screen example displayed on the device when you scan documents using the [Link to Web Applications] function. Initially, [Control Panel Display Name] and [Default] set in [Flow Attributes] on the [Link to Web Applications Settings] page are displayed. When selecting the [Edit From Control Panel] check box, you can change the flow attribute value on this screen.



When flow attributes are changed, the properties of the logged-in user are displayed as a candidate of the setting value. However, when properties are not set, or the setting value is 32 double-byte characters and 64 single-byte characters or more, nothing is displayed.



When checkmarking [Show fax number input field on device control panel] in [Fax Settings] of the [Link to Web Applications] function, "not set" is indicated in the second line of the flow that require the input of the fax number. When selecting this flow, the input screen for the fax number is displayed.



Setting the [Image Processing] Function

Can set to process the image in the imported document.

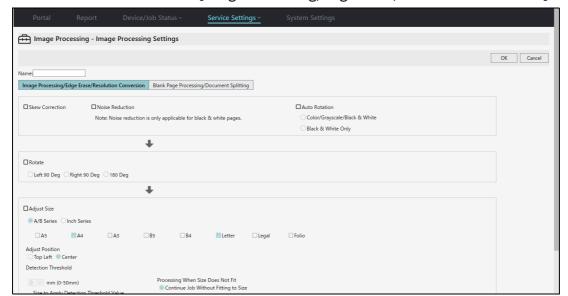
The available settings vary depending on the color of the page or the input format of the document.



- When it is difficult to specify the document orientation due to poor character recognition, many line segments in a specific direction are included in the document, or a great amount of noise is included in the document, you may not get the desired result according to the document image condition.
- If you enter Korean or Thai documents in the flow where auto rotation is set for the [Image Processing] function, auto rotation may not work properly.



- "Formats Supported by the [Image Processing] Function" (P.322)
- 1. Select [Image Processing] from [Add] of [Processing Method] on the flow settings page.
- 2. On the [Image Processing Image Processing Settings] page, enter the function name in [Name].
- 3. Specify Skew Correction, Noise Reduction, Auto Rotate, Rotate, Adjust Size, Edge Erase, and



Resolution Conversion in the [Image Processing/Edge Erase/Resolution Conversion] tab.

- Refer
 - "Adjust Size" (P.105)
- 4. Click the [Blank Page Processing/Document Splitting] tab, and specify whether to split the document before the blank page, to skip the blank page, or to split the document by the specified page.
- 5. Click [OK].

Adjust Size

"Adjust Size" refers to the changing of the image size in order to fit the specified standard size. If the image is smaller than the specified size, white space will be added to supplement. If the image is bigger than the specified size, the image will be reduced. If margins occur after the image is reduced, white spaces will be added to supplement.

If multiple standard sizes are specified to be adjusted to, size fitting to process the image will be determined in order, from the smallest size first.

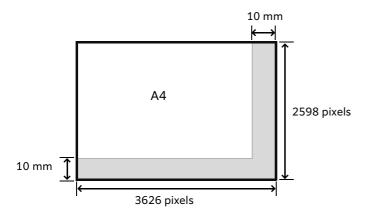
Detection of Fitting to Size

When the input image satisfies the following 2 conditions, it is detected that it "fits" that standard size, and the image size is adjusted.

- Long edge of image <= (long edge of standard size + detection threshold value)
- Short edge of image <= (short edge of standard size + detection threshold value)

For example, when [A4] and [10] mm are specified for standard size and [Detection Threshold Value] respectively, an image with resolution of 300 dpi becomes as follows.

A4 long edge (297 mm) + 10 mm = 3626 pixels A4 short edge (210 mm) + 10 mm = 2598 pixels Therefore, an image whose size is enclosed by the large border of the figure below, or smaller, is detected to fit A4, and its size will be adjusted to A4.



Processing of Adjust Size

The method of processing for Adjust Size consists of the following 2 types.

• Filling with white spaces (image size remains the same)

The image is pasted on the standard size fitted, and the margins are filled with white spaces. This type of processing will be performed in the following case.

- When specifying [0] for [Detection Threshold Value], and image is smaller or same as Standard Size.
- Reduction

The image is reduced to fit, and pasted on the standard size fitted, If there are margins, they will be filled with white spaces. The rate of reduction will be the same for both the long and short edges.

This type of processing will be performed in any of the following cases.

- When [1] is specified for [Detection Threshold Value], and the image is larger than the standard size
- When [Fit to Largest Selected Size] is selected for [Processing When Size Does Not Fit].

Setting the [Format Conversion] Function

Can set to convert the format of the imported document.

This function can be used to convert multiple documents handled in the flow all at once, or convert only the document of the delivery destination.

The available formats and compression methods vary depending on the color of the page or the input format of the document.

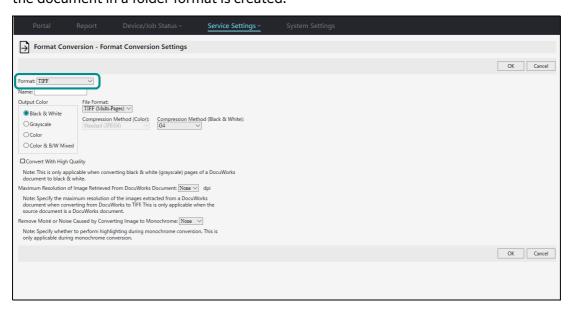


- When you select the high compression PDF or high compression DocuWorks, the file size is reduced. However, the image quality is poor compared to the standard PDF or DocuWorks conversion, and the processing speed may be decreased. The document color may not be reproduced correctly.
- After the format conversion, some documents contain noise (black isolated points in the image) according to the document when you convert color documents to black and white.



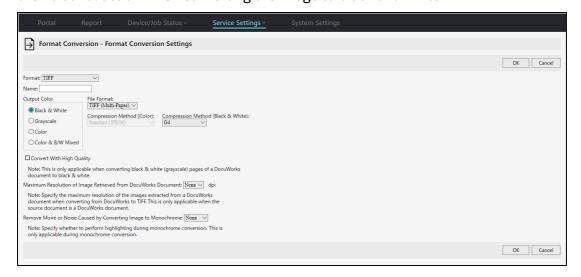
- "Formats Supported by the [Format Conversion] Function" (P.323)
- 1. Select [Format Conversion] in one of the following methods.
 - [Add] in [Processing Method] on the flow settings page.
 - [Add] in [Preprocessing] on the [Edit Delivery Destination] page

2. Select the format to be converted from [Format]. You can select [TIFF], [JPEG], [TIFF/JPEG Mixed], [DocuWorks Document] or [PDF]. If you convert a document with multiple pages to [TIFF (Single Page)], [TIFF/JPEG Mixed] or [JPEG], the document in a folder format is created.

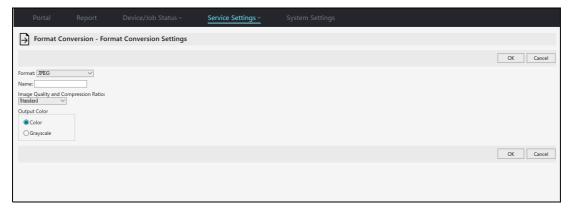


- 3. In [Name], enter the function name.
- 4. Set the necessary information for the format conversion.
- When selecting [TIFF] in [Format]

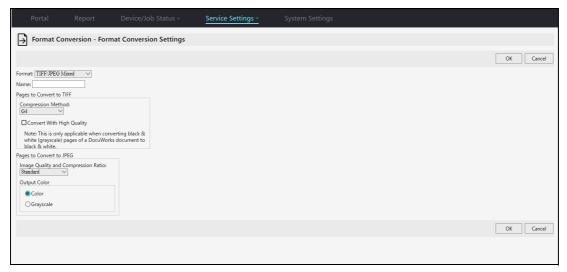
 Specify the output color, file format, and compression method. In addition, you can specify the high quality and the maximum resolution of images when converting from DocuWorks to TIFF, and specify the noise reduction when converting the image to black and white.



■ When selecting [JPEG] in [Format]
Specify the image quality and output color.



■ When selecting [TIFF/JPEG Mixed] in [Format]
Specify the items for the pages to convert to TIFF, and the pages to convert to JPEG respectively.



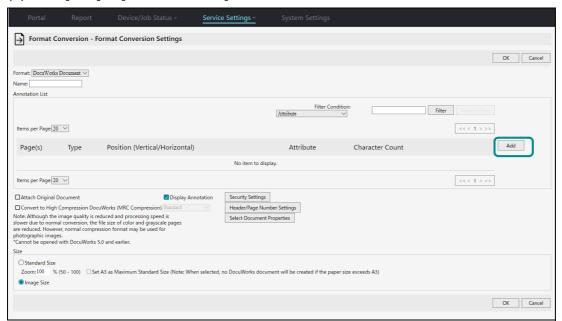
■ When selecting [DocuWorks Document] in [Format]

Specify the adding annotations, attaching the original document, converting to high compression DocuWorks, and the size. You can also set the security, header/page number and document properties.

When an unsupported font is selected in the annotations, header, and/or page number setting, the standard font is used. "For specifying the unsupported font during the DocuWorks conversion" (P.111) Refer to .

To add annotations, perform the following procedure.

(1) Click [Add] in [Annotation List].



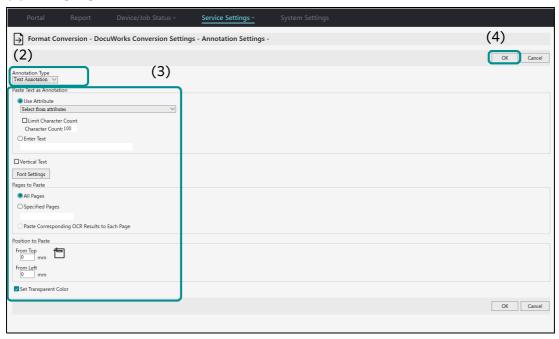
- (2) Specify the annotation type.
- (3) Specify the paste text as annotation, pages to paste, position to paste and so on. You can specify the attribute for the paste text as annotation.

The position to paste the annotation is fixed. Therefore, if you process both vertical and horizontal documents all at once, the desired process result may not be output. In that case, before starting [Format Conversion], execute [Auto Rotation] in [Image Processing] to set the correct orientation.



"Element Settings Page" (P.78)

(4) Click [OK].

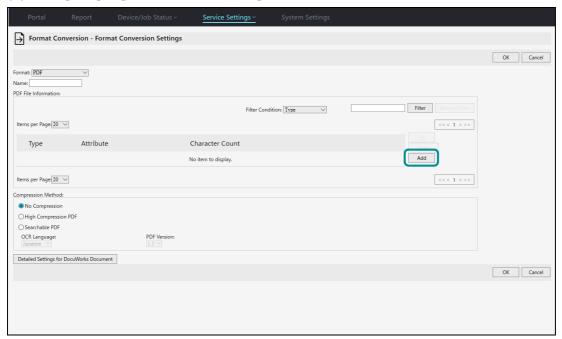


■ When selecting [PDF] in [Format]

Specify the document information, attaching thumbnail data and compression method. In addition, you can specify the resolution and high quality when converting from the DocuWorks document to PDF.

To add document information, perform the following procedure.

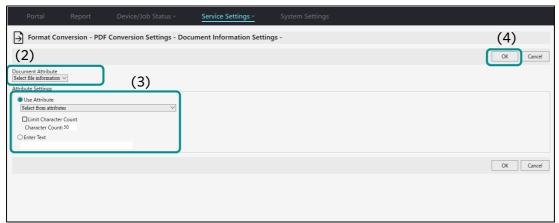
(1) Click [Add] in [PDF File Information].



- (2) Specify the document attribute.
- (3) Specify the element set to the document attribute.



(4) Click [OK].



- (5) To add multiple document information, perform Step (1) and Step (4) repeatedly.
- (6) You can change the order by clicking [Up] or [Down] as necessary. The order can be changed within the same document attribute.
- 5. Click [OK].

For specifying the unsupported font during the DocuWorks conversion

Can specify the font by setting the annotations, header/page number when converting to DocuWorks document.

When the font specified in [Font Name] does not exist in the folder where Windows standard fonts are stored or when [Character Set] that is not supported by the specified font is selected, the following fonts are used:

DocuWorks type	Items	Used value
Japanese version of DocuWorks	Character Set	Japanese
	Font Name	MS Mincho
	Style	Regular
	Size	12
	Strikethrough	None
	Underline	None
	Color	Black
DocuWorks versions other than Japanese	Character Set	Western
version	Font Name	Times New Roman
	Style	Regular
	Size	12
	Strikethrough	None
	Underline	None
	Color	Black

Setting the [OCR] Function

Can set to OCR the image of the imported document to extract the text. When you use the Windows Japanese or English operating system, the auto rotation function is performed during the OCR process.

The available settings vary depending on the input format of the document.

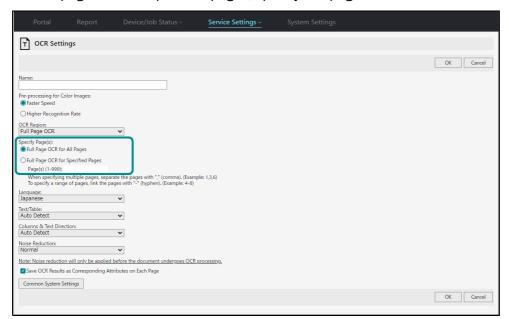


- The OCR results of specified zones are not embedded as DocuWorks file attributes even when OCR is specified for image processing and [Perform OCR on the Specified Zones on Specified Page] is selected for the flow definition in which DocuWorks document is input.
 - In addition, when [Perform OCR on the Specified Zones on Specified Page] is selected, the results for Auto Rotation will not be reflected to that DocuWorks document even though it is a part of OCR processing.
- To perform OCR processing, DocuWorks is required. Moreover, the option for other language is required as shown below:
 - In case of Japanese version of DocuWorks 9.0.1 or later: ApeosWare Management Suite 2 OCR for DocuWorks Japanese Option
 - English version: (OCR) for DocuWorks English Option
 - Chinese, Korean, and Thai versions: OCR for DocuWorks Multi Language Option
- When you use the Korean, Simplified Chinese, Traditional Chinese or Thai versions of Windows operating system, the auto rotation function is not performed during the OCR process.



"Input Formats Supported by the [OCR] Function" (P.328)

- 1. Select [OCR] from [Add] in [Processing Method] on the flow settings page.
- 2. On the [OCR Settings] page, enter the function name in [Name].
- 3. In [Preprocessing for Color Image], select [By Speed] or [Higher Recognition Rate] as the scan processing method.
 - When the image quality is deteriorated due to the reason, such as recopied documents, select [Higher Recognition Rate]. Although it takes time for processing, the recognition rate increases.
- 4. In [OCR Region], specify the region of OCR. You can select [Full Page OCR] or [Zone OCR].
- 5. If [Full page OCR] in [OCR Region] is selected, specify the page in which OCR is to be performed on. You can select [Full Page OCR for All Pages] or [Full Page OCR for Specified Pages]. When you select the full page OCR for specified pages, specify the pages to OCR.

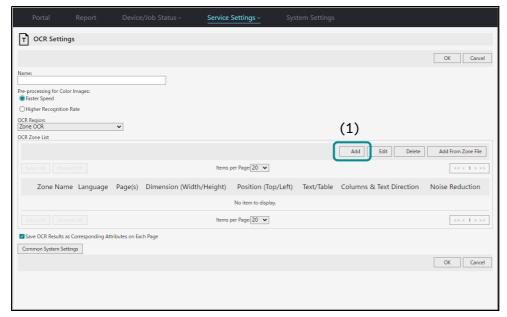


6. If [Zone OCR] in [OCR Region] is selected, specify the OCR region. To specify the OCR region, you can enter numbers or specify a zone file.

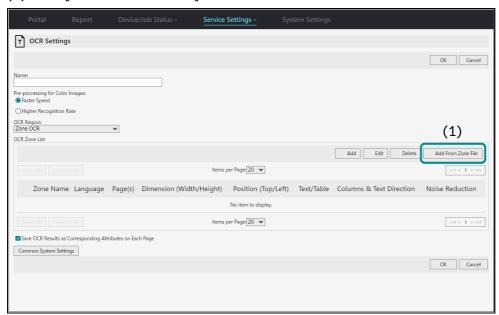
A zone file is a DocuWorks document (or DocuWorks binder) in which the OCR processing area is specified by a "rectangular" annotation in advance. Using a zone file allows easier specification of the area that is to be OCR processed than entering numbers.

■ Entering numbers

(1) Click [Add].



- (2) On the [OCR Settings Page/Zone] page, specify the name for selecting attributes, pages and zone for OCR, and then click [OK].
 - [Name for Selecting Attributes] is viewed when the attribute of the [OCR] function is used for other functions.
- Specifying a zone file
 - (1) Click [Add From Zone File].



(2) On the [OCR - Import Zone File] page, specify the zone file you have prepared before, and then click [OK].



7. In [Save OCR Results as Corresponding Attributes on Each Page], specify whether to output the OCR result as corresponding attributes on each page.



- 8. If you are using the Japanese version of DocuWorks, select the software to use for OCR as necessary. Perform the following steps.
 - (1) Click [Common System Settings].
 - (2) On the [OCR Common System Settings] page, select the software to use.

You can select [DocuWorks Built-In OCR] or [WinReaderPRO].

To use WinReader PRO, install a version of WinReader PRO that is supported by the Japanese version of DocuWorks and set access rights using the Administrative Tools. For details, refer to "Installing Required Software Applications" (P.45).

You must first exit the WinReader PRO application.

(3) Click [OK].



[OCR Software] is common to all flows. When you set [WinReaderPro] for the OCR software, this setting is applied to all the flows where the [OCR] function is added.

9. Click [OK].

Saving the OCR results to DocuWorks document

When using the [OCR] function and [Format Conversion] function together, you can save the text extracted using full page OCR in the DocuWorks document. You can view the saved OCR results in the [OCR Results] tab of the Infoview of DocuWorks document.

However, this function is available only when [Full Page OCR] is specified for [OCR Region] on the detailed settings page of the [OCR] function. When [Zone OCR] is specified, the OCR results cannot be saved even if you specify the DocuWorks document.

To save the OCR results in the DocuWorks document, set the flow processing method in the following order.

- (1) [Format Conversion] function (DocuWorks Conversion)
- (2) [OCR] function

Method of Creating Zone File

Perform the following procedure to create a zone file.



This function is available only when you use DocuWorks Japanese version.

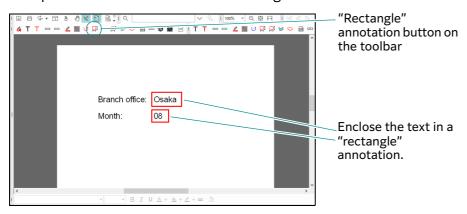
- 1. On DocuWorks Desk, select [File] > [Import Files] and then, select the image file for OCR to convert to the DocuWorks document.
- 2. Open the converted document and enclose the zone to OCR in a "rectangle" annotation. To specify multiple zones, enclose each zone in a rectangle annotation.
 - The maximum zone file size is 2400 mm in vertical and horizontal directions.
 - Create the zone file at the same magnification as the image file to OCR. If you increase or decrease the magnification, the coordinate in the zone cannot be read correctly.

- When you use DocuWorks Printer to convert the image file to the DocuWorks document, set the margin to 0 mm. If you set a number other than 0 mm, the coordinate in the zone cannot be read correctly as the document is reduced during the conversion.
- The text in the zone enclosed by the "rectangle" annotation is OCR'ed. The text on line of the "rectangle" annotation is not OCR'ed.
- When you specify multiple pages in the zone file, the zone marked by the annotation is read from the first page. When you specify multiple zones in one page, the zones are read in creation order of annotations.
- If you specify a zone file with the specified OCR zone, the preceding specified zone is retained without change. The newly read annotation position information in the zone file is added as the zone for OCR.

3. Save the document.

The following example shows how to specify the OCR zone.

Example: To OCR "Osaka branch" and "August"





How to Operate DocuWorks⇒DocuWorks Manual or Help

Setting the [Document Name] Function

Can set the name to save documents.

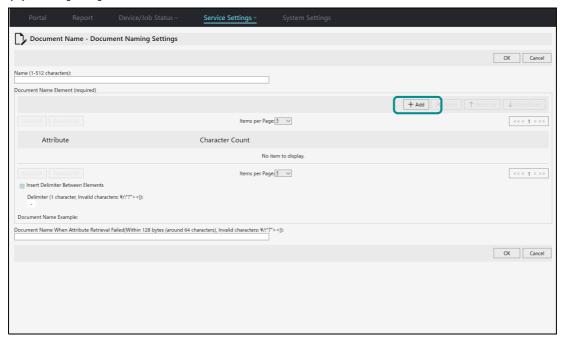
This can be set for multiple documents handled in the flow all at once, or set for only the document of the delivery destination.



Document name can be specified with a character string of up to 128 bytes. If the number of characters for the specified element exceeds 128 bytes, the first 128 bytes will be specified as the document name.

- 1. Select [Document Name] in one of the following methods.
 - [Add] in [Processing Method] on the flow settings page.
 - [Add] in [Preprocessing] on the [Edit Delivery Destination] page

- 2. On the [Document Name Document Naming Settings] page, enter the function name in [Name].
- 3. Perform the following steps.
 - (1) Click [Add].



(2) On the [Document Name - Element Settings] page, specify the element for the document name, and then click [OK].



"Attributes and Elements Settings Page" (P.77)

- (3) To set multiple elements, perform Step (1) and Step (2) repeatedly.
- (4) Change the order by clicking [Move Up] or [Move Down] as necessary.
- 4. To insert the delimiter between elements, select the [Insert Delimiter Between Elements] check box, and enter a delimiter character between them.
- 5. In [Document Name When Attribute Retrieval Failed], enter any string.

 If an attribute is blank or an attribute cannot be retrieved, the value you have set here becomes the document name.
- 6. Click [OK].

Setting the [QR Code Reader] Function

the [QR Code Reader] function.

Can set to read the QR code in the document and output it as the document attribute. The available settings vary depending on the input format of the document.



- You must set the [QR Code Reader] function before setting the [Image Processing] function. If you set the [Image Processing] function first, QR codes may not be read.
- [QR Code Reader] function recognizes the QR code of the form in the [Form Analysis] function. Therefore, if you use the same flow for [QR Code Reader] function and [Form Analysis] function, there may be unexpected processing in the [QR Code Reader] function.

 In order to avoid this, please perform either a or b from the following.

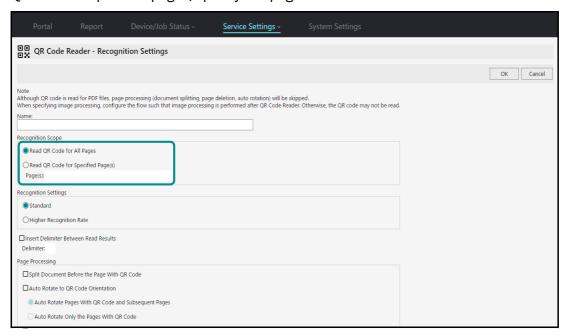
 a.Set up [Form Analysis] function before [QR Code Reader] function, and uncheck the [Include Form Image File in output document] checkbox in [Form Analysis].

 In this case, do not Auto Rotate through Form instructions. If doing so, the QR code may not be read by
 - b.Remove Form from the [Recognition Scope] page in [QR Code Reader] function.
- To use this feature, Paper Form & QR Code Reader Option is required.



- Supported Input Formats \$\rightarrow\$ "Input Formats Supported by the [QR Code Reader] Function" (P.329)
- [Form Analysis] function ⇒ "Configuring the [Form Analysis] Function in the Flow" (P.250)
- $oldsymbol{1}$. Select [QR Code Reader] from [Add] in [Processing Method] on the flow settings page.
- 2. On the [QR Code Reader Recognition Settings] page, enter the function name in [Name].
- 3. In [Recognition Scope], specify the scope to read the QR code.

 Select [Read QR Code for All Pages] or [Read QR Code for Specified Pages]. When you select the read QR code for specified pages, specify the pages.



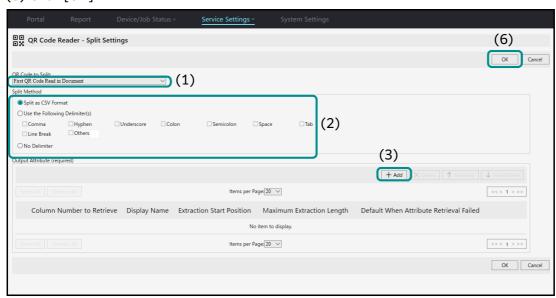
4. In [Scan Settings], select [Standard] or [Higher Recognition Rate] as the scan processing method. When the image quality is deteriorated due to the reason, such as fax documents or recopied documents, select [Higher Recognition Rate]. Although it takes time for processing, the recognition rate increases.

- 5. In [Insert Delimiter Between Read Results], specify whether to insert the delimiter between the read results.
- **6.** In [Page Processing], specify whether to split the document before the page with the QR code, autorotate to the QR code orientation, or delete pages with the QR code.
- 7. To split and output the read QR code as attributes, select the [Split & Output QR Code] check box, and then click [QR Code Split Settings].
 - Refer

"Example of output attributes when you specify the split option" (P.118)

- 8. When you click [QR Code Split Settings] in Step 7, perform the following procedure.
 - (1) Specify [QR Code to Split].

 Select [First QR Code Read in Document] or [Concatenated QR Code for Entire Document].
 - (2) Specify [Split Method].
 When you select [Split as CSV Format], QR codes are split by commas in the CR code.
 When selecting [Use the Following Delimiter(s)], you can specify the delimiter to split the QR code.
 - (3) In [Output Attribute], click [Add].
 - (4) On the [QR Code Reader Output Attribute Settings] page, specify the column number to output as attributes within the split QR code, attribute display name and default when attribute retrieval failed.Click [OK].
 - (5) To set multiple columns, perform Step (3) and Step (4) repeatedly. Change the order by clicking [Move Up] or [Move Down] as necessary.
 - (6) Click [OK].



9. Click [OK].

Example of output attributes when you specify the split option

This section describes examples of output attributes when you specify [QR Code Split Settings].

Example 1:

• QR code text:

00001, Fuji, Taro, "123-567", taro@example.com

- QR code to split: The QR code read first in the document.
- Split method: Split as data in a CSV format.

When you set the above options, the output attributes are shown below. The double quotation marks (") are removed from the data.

Column	1	2	3	4	5	6
Data	00001	Fuji	Taro	123-567	taro@example.com	

Example 2:

• QR code text:

00001, Fuji, Taro, "123-567", taro@example.com; 00002, Fuji, Hanako, "173-475", hanako@example.com

- Delimiter to concatenate data: Semicolon (;)
- QR code to split: Concatenated QR code for entire document
- Split Method: Use the following delimiter(s)
- Delimiter character: Comma, Semicolon, Hyphen

When you set the above options, the output attributes are shown below.

Column	1	2	3	4	5	6
Data	00001	Fuji	Taro	"123	567"	taro@example.com
Column	7	8	9	10	11	12
Data	00002	Fuji	Hanako	"173	475"	hanako@example.com

Example 3:

• QR code text:

00001, Fuji, Taro, "123-567", taro@example.com

- QR code to split: The QR code read first in the document.
- Split Method: Use the following delimiter(s)
- Delimiter character: Comma, Semicolon, Hyphen, Others "At sign (@)"

When you set the above options, the output attributes are shown below.

Column	1	2	3	4	5	6
Data	00001	Fuji	Taro	"123	567"	taro
Column	7	8	9	10	11	12
Data	example.com					

Example 4:

• QR code text:

00001FujiTaro123-567taro@example.com

- QR code to split: The QR code read first in the document.
- Split method: No delimiter

When you set the above options, the following attributes are output.

Column	1	2	3	4	5	6
Data	00001FujiTaro123-567taro@example.com					

If you specify [Extraction Start Position] and [Maximum Extraction Length], the desired attributes can be extracted.

Setting example	Extracted data
Column number: 1 Extraction start position: 1 Maximum extraction length: 5	00001
Column number: 1 Extraction start position: 6 Maximum extraction length: 4	Fuji
Column number: 1 Extraction start position: 10 Maximum extraction length: 4	Taro

Setting [OmniPage(R) OCR] Function

OmniPage is used as the OCR engine to process OCR and extract text. The extracted text can be converted to a specific format.



To use this feature in separate composition, Scan OCR Option is required at the flow server. "OmniPage" is manufactured by Kofax.

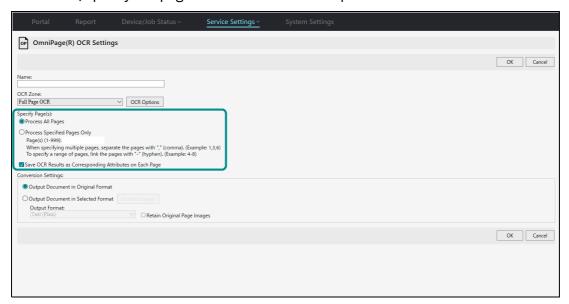


"Formats supported by [OmniPage(R) OCR] feature" (P.329)

- $oxed{1.}$ Select [OmniPage(R) OCR] from [Add] under [Processing Method] on the flow settings page.
- 2. On the [OmniPage(R) OCR] page, enter the function name in [Name].
- 3. In [OCR Region], specify the region of OCR.
 You can select [Full Page OCR] or [Zone OCR].
 If the OCR character recognition accuracy is low, select [Zone OCR].
- 4. Click [OCR Option] to specify default settings such as image rotation, inversion, deskewing, and character recognition.

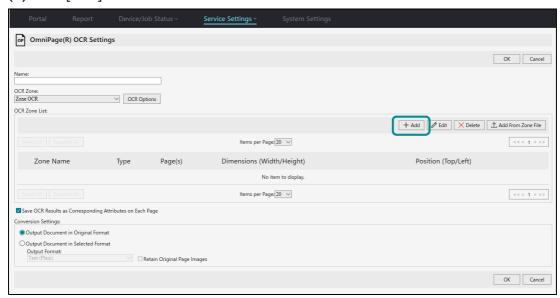
Rotation, inversion, and deskewing are preprocessed to improve the character recognition accuracy.

5. If [Full page OCR] in [OCR Region] is selected, specify the page in which OCR is to be performed on. Select either [Process All Pages] or [Process Specified Pages Only]. If [Process Specified Pages Only] is selected, specify the pages in which OCR is to be performed on.



- 6. If [Zone OCR] in [OCR Region] is selected, specify the OCR region.

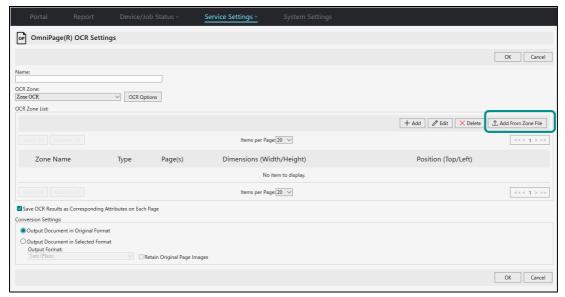
 To specify the OCR region, you can enter numbers or specify a zone file.
 - The zone file is a PDF file with the area in which OCR is to be performed on is annotated. Using a zone file allows easier specification of the area that is to be OCR processed than entering numbers.
 - Entering numbers
 - (1) Click [Add].



- (2) Specify the zone name, page and zone for OCR on the [OmniPage(R) OCR Settings Page/Zone] page, and then click [OK].
 - [Zone Name] is used when referring to the [OmniPage(R) OCR] function attribute in other functions.

■ Specifying a zone file

(1) Click [Add From Zone File].



(2) Specify the zone file you have prepared on the [OmniPage(R) OCR - Import Zone File] page, and then click [OK].



"Method of Creating Zone File" (P.122)

- 7. In [Save OCR Results as Corresponding Attributes on Each Page], specify whether to output the OCR result as corresponding attributes on each page.
- 8. Under [Conversion Settings], select whether to convert the format of the document.

 If [Output Document in Selected Format] is selected, specify the output format. In addition, specify whether to retain the custom layout, original image and other settings.

[Retain Original Image] can be set in the following cases:

- When [Full page OCR] is selected i [OCR Zone] and [Process Specified Pages Only] is selected in [Specify Pages]
- When [Zone OCR] is selected in [OCR Zone] and [Searchable PDF] is selected in [Output Format]



Details of Conversion Settings → "Conversion settings" (P.123)

9. Click [OK].

Method of Creating Zone File

Perform the following to create a zone file.

Applicable files

PDF documents without any security settings Version 1.5 or lower files

How to specify the zone

• Create a PDF file that will be the zone file and annotate the area to be OCR processed in the file. Use the PDF annotation tool to create the annotation.

When you specify multiple pages in the zone file, the zone marked by the annotation is read from the first page. When you specify multiple zones in one page, the zones are read in creation order of annotations.

A single annotation is read as one zone and is added to the zone list on the [OmniPage(R) OCR Settings] page.

- The annotation to be specified as the zone must satisfy the following conditions:
 - The zone must be a rectangular.
 - The start position (position from the top or left side) of the annotation must be less than 499 mm.
 - The annotation range (width and height) must be less than 500 mm.

If the above conditions are satisfied, the page can be processed even if the annotation runs outside of the page.

- If you specify a zone file with the specified OCR zone, the preceding specified zone is retained without change. The newly read annotation position information in the zone file is added as the zone for OCR.
- Up to 500 OCR zones can be specified (combined with the zones specified in the zone list on the [OmniPage(R) OCR Settings] page). If 500 OCR zones have been specified, new OCR zones will not be added.
- Up to 999 pages can be specified for a annotation zone. If there are more than 999 pages, pages 1,000 and on will not be processed.
- A zone file cannot contain stream objects defined in a PDF. If there is even a single stream object defined, all annotation information will not be processed. A confirmation message will display if a stream object is detected.

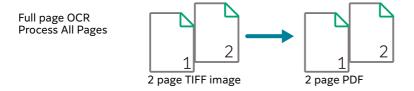
Conversion settings

Output Document in Selected Format

If [Output Document in Selected Format] is selected from [Conversion Settings], the process will be as follows:

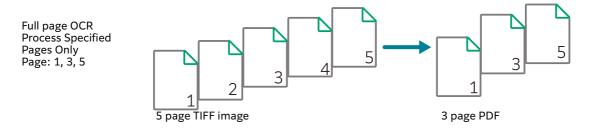
Example 1:

If all pages are to be OCR processed and [Adobe PDF] is selected as the output format, a PDF containing all of the pages is created.



Example 2:

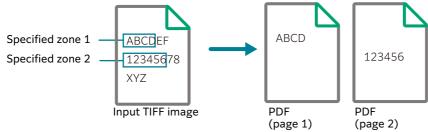
If a TIFF image with multiple pages is specified to be OCR processed and specific pages are selected to be output as a [Adobe PDF], a PDF with the specified pages is created.



Example 3:

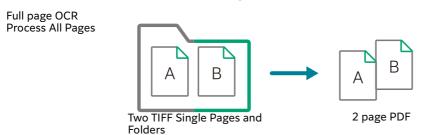
If a 1 page TIFF image with 2 OCR zones is specified to be output as a [Adobe PDF], a 2 page PDF with the corresponding OCR zones is created.





Example 4:

If a folder format document with 2 single page TIFF images is specified for full page OCR process and outputted as an [Adobe PDF], a 2 page PDF is created.





If you convert a document with multiple pages to [TIFF (Single Page)], [TIFF/JPEG Mixed] or [JPEG], the document in a folder format is created.

Retain Original Page Images

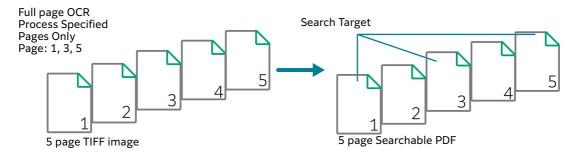
If [PDF Searchable Image] is selected as the output format and [Retain Original Page Images] is enabled, the process will be as follows:

• If [Process Specified Pages Only] under [Full page OCR] is selected

Pages not specified are also converted and a document with all the pages is created. The text/
content in the pages not specified cannot be searched within the PDF.

Example 5:

In the following example, a 5 page PDF Searchable Image is created where the text/content in pages 1, 3, and 5 can be searched.



• If [Zone OCR] is selected

A PDF with multiple OCR results on the same page is created. The text/content in zones not specified cannot be searched within the PDF.

Example 6:

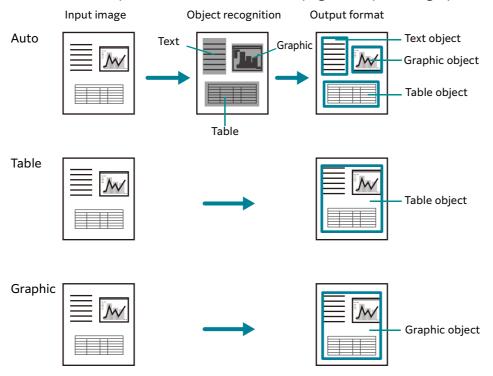
If 2 OCR zones are specified for a 1 page TIFF image, a PDF Searchable Image is created containing the OCR results and non-OCR zones.



Custom layout

If [Output Document in Selected Format] under [Conversion Settings] is selected, you can specify the object type of the converted OCR results.

If [Auto] is selected under the custom layout settings, the objects in the specified image are automatically detected and placed in the converted file. If [Table] is selected, the entire page is output as a table. If [Graphics] is selected, the entire page is output as a graphic.



Setting the [OmniPage(R) Barcode Reader] Function

Reads one-dimensional barcodes from documents and outputs the results as document attributes. If the entire page is specified as the target zone for reading the barcode, only 1 document attribute will be output. If multiple pages are specified, attributes will be output by each page.

OmniPage is used as the software for processing the barcodes.

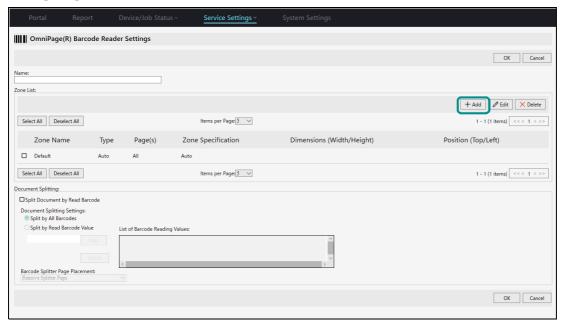


- The maximum number of attributes that the [OmniPage(R) Barcode Reader] feature can output is 64 items. The maximum length for an attribute value that can be output for 1 attribute is 255 bytes. If barcode recognition results exceed 255 bytes, output will be made to the limit, and the remaining thereafter will not be output.
- The number of documents and pages that can be processed is a maximum of 999 for either item. If documents exceeding this limit are entered, an error will occur.
- \bullet The maximum number of bar codes that can be recognized in 1 job is 256 items.
- To use this function, OmniPage Barcode Reader Option is required.
- "OmniPage" is manufactured by Kofax.

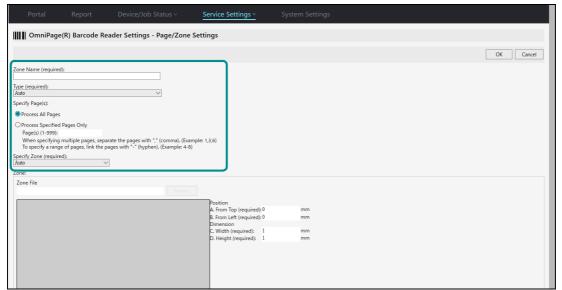


"Supported Formats of the [OmniPage(R) Barcode Reader] Function" (P.331)

- 1. From the Flow settings page, select [Processing Method] > [Add] > [OmniPage(R) Barcode Reader].
- 2. On the [OmniPage(R) Barcode Reader Settings] page, enter the name of the feature for [Name].
- 3. Click [Add].



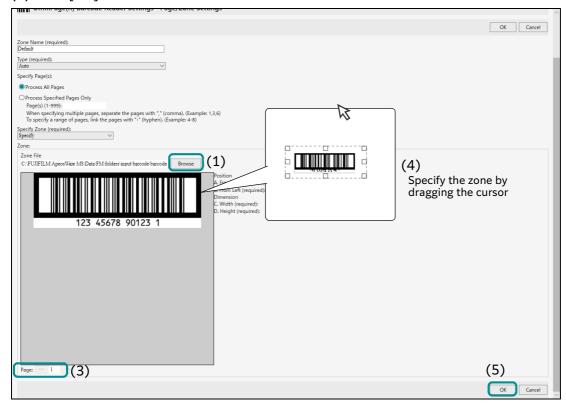
4. Specify [Zone Name], [Type], [Page], and [Zone Specification].



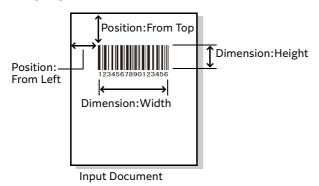
- 5. Specify the zone to recognize the barcode when [Specify] is selected in [Specify Zone]. You can use a zone file, or enter numerical values.
- To use a zone file to specify the zone of the barcode

 Zone file is a file with the barcode image affixed to it. For details, refer to "Method of Creating Zone File" (P.114).
 - (1) Click [Browse].
 - (2) From the [OmniPage(R)Barcode Reader Settings Select Zone File] page, select the zone file, and click [OK].
 - The zone file is read, and the contents of the file are displayed on the screen.
 - If files are not displayed, refer to "Registering Folders/Files to Be Used in Functions" (P.68) and register the zone file.

- (3) Specify the target page with [Page] when the zone file that is read has multiple pages.
- (4) Drag the cursor on the screen to enclose the zone of the barcode within the frame.
- (5) Click [OK].



- To enter numerical values for the position and range to specify the zone of the barcode
 - (1) Enter the distance (mm) from the top and left edges of the document to the top left of the barcode for [Position]. Enter the width and height (mm) of the barcode for [Range].
 - (2) Click [OK].

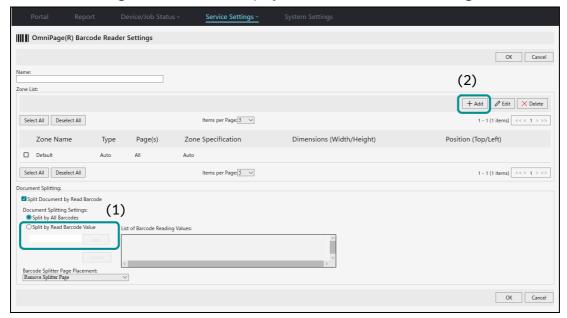


- 6. When reading multiple barcodes, repeat Step 3 5.

 Barcode reading results are stored to document attributes by the read zone settings of the barcode added at steps 3 to 5.
 - If [Process All Pages] is selected for [Specify Page(s)] at step 4, 1 document attribute will be output. If pages are specified as [Process Specified Pages Only], document attributes are output by specified pages. Barcode read zone settings that exceed 64 items for document attributes cannot be added.
- 7. Select the check box of [Split Document by Read Barcode] to split documents by barcode(s) read. Depending on the format of the input document, splitting may not be possible. "Supported Formats of the [OmniPage(R) Barcode Reader] Function" (P.331) Refer to .

- 8. When the check box in Step 7 is selected, select [Split by All Barcodes] or [Split by Read Barcode Value] from [Specify Document Splitting].
- When [Split by Read Barcode Value] is selected
 - (1) Enter the text string to be compared with the barcode into the textbox. The specified text string is compared with the barcode value actually read, and the document is split by the matching page.
 - (2) Click [Add].

 The text string entered in (1) is displayed at [List of Barcode Reading Values].



- (3) To specify multiple text strings for comparison with the barcode, repeat the operations of (1) and (2).
- 9. When the check box in Step 7 is selected, select from [Document Page Settings] the processing method for the page that is to be the reference point for splitting.
 - Remove Splitter Page
 Removes from the document the page that was used as the reference point for splitting, after performing splitting. If all pages are set as the reference point for splitting pages, an error will occur.
 - Place Splitter Page On Top
 Places the page set for the splitting reference point as the first page of the document after splitting.
 If all pages are set as the reference point for splitting, the document will be split every 1 page. If the first page is set as the reference point for splitting, the document will not be split.
 - Place Splitter Page Last
 Places the page set for the splitting reference point as the last page of the document after splitting.
 If all pages are set as the reference point for splitting, the document will be split every 1 page. If the last page is set as the reference point for splitting, the document will not be split.

10. Click [OK].

Method of Creating Zone File

Zone file is a file with an image for indicating position or range of the barcode affixed to it. When a zone file is used, you can specify the zone by dragging the cursor while browsing the barcode image displayed on the screen.

- 1. The zone file is created as follows.
 - The file format is JPEG, TIFF, PDF, BMP, GIF, or PNG.

- Start position of the barcode image (position from the top or left) is 499 mm or less.
- Range of barcode image (width and height) is 500 mm or less.
- Pages of the file is 999 pages or less
- 2. Save the zone file created in any folder in the Flow Management server.
- 3. Set the permissions to "read and execute" in respect of the NETWORK_ SERVICE account for the zone file, and the folder in which it is saved.
- 4. Register the zone file path with [Service Settings] > [Flow Management] > [Service Settings] > [Function Settings] of Flow Management.



"Registering Folders/Files to Be Used in Functions" (P.68)

Notes on Configuring OmniPage(R) Barcode Reader Settings Using Firefox

When configuring the [OmniPage(R) Barcode Reader] feature using Firefox, although an invalid scroll bar displays in the area of [List of Barcode Reading Values] under [Document Splitting], it does not affect operation.

Setting the [Attribute Mapping] Function

Use mapping data files as the source, and maps attribute values in documents, to other document attributes and attribute values.

If output attributes set here are specified at delivery destination setting, delivery destinations can be allocated.

The mapping data file should be in CSV format and prepared in advance.



- To allocate delivery destinations, there are 2 methods: [Delivery Conditions] and [Attribute Mapping]. Refer to "[Attribute Mapping] Function and [Delivery Conditions] Function Differences" (P.133) for details about their differences.
- When setting multiple (about 20 or more) delivery destination allocations, it is recommended that you use the [Attribute Mapping] feature.



"Setting the [Delivery Conditions] Function" (P.172)

Creating a mapping data file

A mapping data file can be created by following the below steps.

File format

The file must be in CSV (comma-separated value) format.

Character encoding

Encodings supported by Java can be used. For Java supported encodings, see the website of Oracle Corporation or other references on the Internet.

Reference websites:

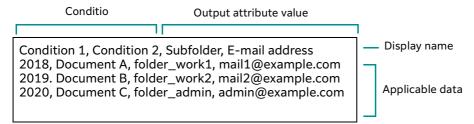
http://docs.oracle.com/javase/7/docs/technotes/guides/intl/encoding.doc.html

When specifying UTF-8 as encoding of an input file, specify it without BOM.

File contents

- There are two formats that can be used. One is where the display name is listed on the first row and the applicable data is on the second and subsequent rows. The second is where there is no display name and the applicable data is listed on the first row and subsequent rows. The format can be specified at the [Attribute Mapping Edit] page when creating a flow.
- Each row should contain the condition values (attributes and value to compare with) and output attributes.

In the following example, deliveries are sorted to storage folders and notification destinations depending on the sender ID and document name.



The order of rows in the mapping data file does not matter. The corresponding row-to-condition/ attribute mapping can be specified at the [Attribute Mapping - Edit] page when creating a flow.



The corresponding output attribute value-to-attribute mapping can be set at the detailed settings page of each function.

In example above, "Sub-folder" specifies the attribute when [Sort Documents and Save to Created Subfolder] under the [Save to Folder] function is selected. In addition, "E-mail address" specifies the attribute when [Specify Attribute] under the [Notification E-mail] function is selected.



"Case 5: Sorting documents using attribute mapping" (P.298)

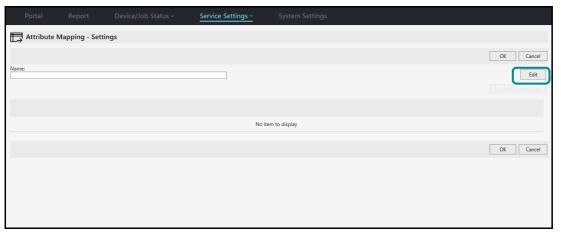
- The condition value can be up to 64 characters and the output attribute can be up to 128 characters. An error will occur if a value/attribute has more than the maximum allowed characters.
- The maximum number of lines that can be specified is 10,000.
- Empty rows in a file are skipped.
- There are column items that are empty strings (string with a length of 0) within a file and an error will occur if they are specified at the [Attribute Mapping Edit] page.
- If commas are included in the data, they should be enclosed in double quotes (""). Example:

```
Condition 1, Condition 2, Sub-folder, E-mail address 2018, Document A, folder_work1, "mail1@example.com,mail2@example.com" 2019, Document B, older_work2, mail2@example.com 2020, Document C, older_admin,admin@example.com
```

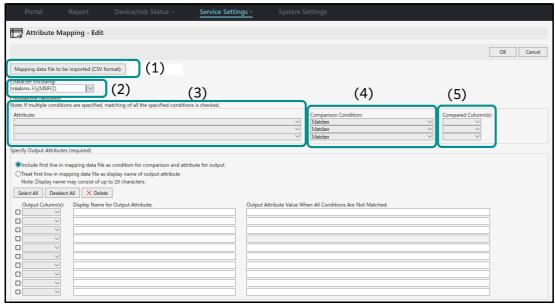
Setting the Attribute Mapping Function

Import the mapping data file and align the row data within the file to the conditions and output attributes.

- 1. Select [Attribute Mapping] from [Add] under [Processing Method] on the flow settings page.
- 2. On the [Attribute Mapping Setting] page, enter the function name in [Name].
- 3. Click [Edit].



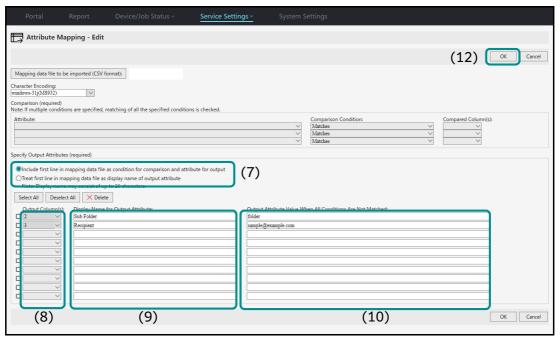
- 4. Perform the following steps.
 - (1) In [Import Data File] specify the mapping data file.
 - (2) Specify the character encoding to be used in [Character Encoding].
 - (3) Select the attribute to be compared in [Attribute]. Attributes of the specified function can be selected.
 - (4) For [Comparison Condition], select either [Matches], [Begins With] or [Contains]. If you select [Begins With] and there are multiple values to compare, the longest one will be used for comparison. For instance, when [Begins With] is selected, if the attribute value to be compared is "AABBA", and there are "AAB" and "AA" in the mapping data file, "AAB" is used. When there are multiple same-length values to compare, which one will be used is undefined. Set the conditions in a way that multiple values will not be matched.
 - (5) For [Compared Column(s)], specify the row number of the mapping data file specified in (1) as the value to compare with [Attribute].



(6) Repeat (3) to (5) to specify multiple conditions.

If multiple conditions are specified, all of the conditions are compared to see if they match.

- (7) Specify whether the first row in the mapping data file is to be used as the display name of the attribute to be output.
- (8) For [Output Column(s)], specify the row number of the mapping data file specified in (1) as the attribute value to output.
- (9) Enter the display name of the attribute in [Display Name for Output Attribute]. The string specified here will become the display name of the document attribute generated from the attribute mapping.
 - This item can only be entered when [Include first line in mapping data file as condition for comparison and attribute for output] is selected in (7).
- (10) Specify the attribute value to be generated when none of the conditions match in [Output Attribute Value When All Conditions Are Not Matched].
- (11) Repeat (8) to (10) to specify multiple attributes to output.
- (12) Click [OK].



5. Confirm the settings, and click [OK].

[Attribute Mapping] Function and [Delivery Conditions] Function Differences

[Attribute Mapping] feature and [Delivery Conditions] feature differences are as follows.

• [Delivery Conditions] Function

You can set complicated and detailed allocation of delivery destinations. On top of attribute conditions, time conditions can also be set.

However, it may take time for flows set with many [Delivery Conditions] to run. Also, running multiple flows set with multiple [Delivery Conditions] may cause memory insufficient errors to occur.

• [Attribute Mapping] Function

You can realize multiple [Delivery Conditions] with one feature. Therefore, you can shorten the flow run time, reduce memory load, and achieve other such actions.

Also, as condition text strings and delivery destinations are managed using files, you can easily add or edit conditions.

However, the [Attribute Mapping] feature does not support all conditions of the [Delivery Conditions] feature. It supports attribute conditions, but not time conditions.

Conditions Supported by Attribute Mapping Function

The following table shows support availability of the [Attribute Mapping] feature for the conditional items of the [Delivery Conditions] feature.

O: Can be set.

As required: Can be set with restrictions.

-: Cannot be set.

[De	[Attribute Mapping] Function	
Attribute condition	Begins with	O*1
	Ends With	-
	Matches	0
	Contains	O*1
	Does Not Begin With	-
	Does Not End With	-
	Does Not Match	-
	Does Not Contain	-
Time condition	Monthly	-
	Weekly	-
	Daily	-
	Time	-
Combination of Conditions	Include All Conditions (AND Condition)	As required*2 (Can set up to 3)
	Include Any Condition (OR Condition)	As required*3
Combination of Delivery Conditions	Disable [Do Not Deliver Documents Selected Under Other Delivery Conditions]	As required*4

- *1 If multiple candidates are found from the mapping table, the longest text string will be used (longest match).
- *2 You cannot set more than 4 AND conditions.
- *3 Can be set only when setting the same comparison condition for the same attribute.

Example 1)

When you want to allocate delivery destinations with a condition such as "Save to "FolderQ" when "Attribute X matches a" or "Attribute X matches b"", describe the mapping data file in the following manner.

a, FolderQ	
b, FolderQ	

Example 2)

Delivery destination allocation such as "Send to "FolderQ" when "Attribute X matches a" or when "Attribute Y matches b"" cannot be set using the [Attribute Mapping] feature.

*4 For the [Delivery Condition] feature, by disabling [Do Not Deliver Documents Selected Under Other Delivery Conditions], documents that matched a certain condition and have already been delivered once, may be delivered again if they match other conditions.

However, for the [Attribute Mapping] feature, there are no settings to disable [Do Not Deliver Documents Selected Under Other Delivery Conditions. Documents that matched the first condition and have been delivered, will not be delivered by other conditions.

However, by setting the following, you can deliver the same document to multiple locations. Example 1)

Save to "FolderO" when "Attribute X matches a"

Send to E-mail address "a@example.com" when "Attribute X matches a"

When you want to assign delivery destinations with such conditions, describe the mapping data file in the following manner.

a, FolderQ, a@example.com

Example 2)

Save to "FolderQ" when "Attribute X matches a"

Send to E-mail address "a@example.com" when "Attribute Y matches x"

When you want to assign delivery destinations with such conditions, set two [Mapping Attribute] features, and describe each of the mapping data files in the following manner.

File 1 File 2

a, FolderQ x, a@example.com b, FolderR y, b@example.com

Refer

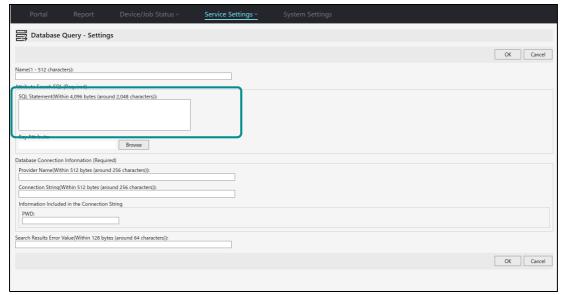
"Case 5: Sorting documents using attribute mapping" (P.298)

Setting the [Database Query] Function

Queries external database, and outputs the retrieved results as document attributes. It can also retrieve attributes from other features, and use them as keys for searching the database.



- The encoding of the values retrieved by the database is required to satisfy all of the following conditions. If they are not satisfied, the attribute values which are output will become garbage characters or be missing.
- Unicode, or Multi-byte Character Set (MBCS)
- Can be converted to MS932 (CP932/Code page)
- This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Database Query Option is required.
- 1. From the Flow settings page, select [Processing Method] > [Add] > [Database Query].
- 2. On the [Database Query] page, enter the name of the feature for [Name].
- **3.** Enter the SQL statement for querying the database for [SQL Statement].



Formats which can be specified are as follows.

Select {search target field name},{search target field name},...from {table name} where {search target field name} = \$KEYVALUE\$ order by {sort criteria field name}

- Attribute values to be retrieved from other features are displayed with "\$KEYVALUE\$". "\$KEYVALUE\$" can be specified in multiple places.
- When using the "\$KEYVALUE\$" replacement text for the Where statement search condition, the specification method differs according to the data type of the search condition field.

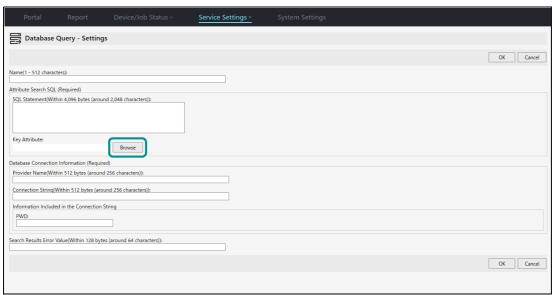
When specifying search condition as numbers, specify in the following manner.

```
... where {search condition field name} = $KEYVALUE$ ...
```

When specifying search condition as text string, enclose the "\$KEYVALUE\$" with single quotation (`).

```
... where {search condition field name} = '$KEYVALUE$' ...
```

- Statements other than SELECT statements cannot be specified.
- When multiple items are specified for {search target field name}, each string delimited by a comma
 of the results will be set as the document attribute.
 To retrieve individual attributes from multiple columns of search results, the [Separate CSV
 Attributes] feature can be used. For details, refer to "Setting the [Separate CSV Attributes]
 Function" (P.139).
- When multiple records are obtained from the search results, the result of the first record will be used
- 4. Specify the attribute to be the search key with the following when "\$KEYVALUE\$" is specified for [SQL Statement].
 - (1) Click [Browse].



(2) From the [Key Attribute Settings] page, select the attribute, and click [OK].



5. Specify [Provider Name], [Connection String] and [Information Included in Connection String] of the database.

When configuring the connection information of the database, creation of UDL file beforehand is recommended. By opening the created UDL file with a text editor, the required information for connection to the database can be checked. Refer to "Method of Creating UDL File" (P.137) for details.

• When connecting to Microsoft SQL Server®

Items	Setting Content
Provider Name	MSOLEDBSQL
Connection String	Server={SQL Server name};UID={User ID};PWD={password};Security Info=False;Initial Catalog={database name}
Information Included in Connection String	It is an input field for editing the password shown in PWD=[] in the [Connection String] described above. It is not to be used when newly specifying [Connection String]. Directly enter the password into [Connection String]. When opened from an existing flow, concealment character "*" is displayed for the password in PWD=[] of [Connection String] and for the [PWD] input field. When editing the password in PWD=[] of [Connection String], make sure to delete all "*" characters shown in the [PWD] input field, and then enter the new password.



The SQL Server installed in the ApeosWare Management Suite server cannot be designated.

- **6.** Specify the attribute value, to be set when no result is obtained from the database, for [Search Results Error Value]
- 7. Click [OK].

Method of Creating UDL File



The following procedures differ depending on the OS.

- 1. Right-click on the desktop, select [New] > [Text Document], change the extension to "udl", and save the document.
- 2. Perform the following steps.
 Enter items as follows in Command Prompt, and press <Enter>:

 $C:\Windows\syswow64\rundll32.exe\ "C:\Program\ Files\ (x86)\Common\ Files\System\Ole\ DB\oledb32.dll", OpenDSLFile\ \{UDL\ File\ Name\}$

In {UDL File Name}, enter the absolute path to the file name which you have created in Step 1. The [Data Link Properties] dialog box is displayed.

- **3.** Select the [Provider] tab, and select the data to connect to.
- 4. Select the [Connection] tab, and set the database and user information for the connection. The settings differ depending on the database.
- 5. Click [Test Connection] to check the connection to the database.
 When connection is successful, "Successfully connected." will be displayed.
- 6. Open the UDL file created with a text editor to check the connection information of the database.

Setting the [Load Attributes] Function

Load file containing attribute information during page processing, and output that attribute information as document attributes.

The file containing attribute information (hereafter called "attribute file") is created in the following format. Create the inbound channel folder of the attribute file beforehand.

File format: Text file

Encoding: windows-31j (MS932), UTF-8 (with BOM)

File name: Name of document with the specified extension added. For example, when the extension, "csv" is specified, the attribute file name of the "sample.xdw" document becomes "sample.xdw.csv".



- If a feature for changing file format (extension), such as, [Format Conversion] is set prior to this feature, processing may not be correctly performed as the extension of the original document is different from that of the processed document. To avoid this, do either of the following.
 - Name the attribute file according to the extension assumed based on the processing of the flow.
- Configure the [Load Attributes] feature prior to the format conversion feature.
- This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.

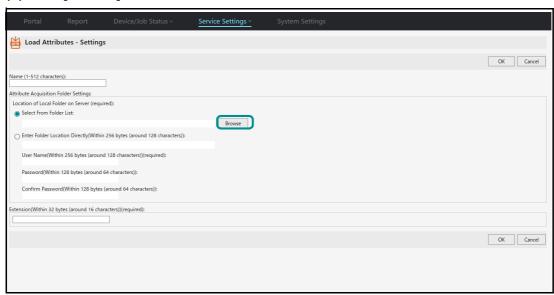


"Preparing Folders" (P.53)

- 1. From the Flow settings page, select [Processing Method] > [Add] > [Load Attributes].
- 2. On the [Load Attributes] page, enter the name of the feature for [Name].
- 3. Set the inbound channel folder of the attribute file with the following procedures. Folders which are mapped as network drives cannot be specified.
- Select From Folder List

If [Select From Folder List] is selected, the [User name] and [Password] cannot be specified. The NETWORK SERVICE account is used to access folders.

(1) Click [Browse].



The pre-registered folders are displayed on the folder selection page.

If folders do not display, see "Registering folders/files to be used in functions" (p.72) and register the folders.

- (2) Select only 1 inbound channel folder from the list.
- (3) Click [OK].
- Enter Folder Location Directly
 - (1) Enter in UNC format the absolute path of the inbound channel folder. Use Yen (\), or slash (/), as the delimiter of the folder. Example: C:\folder1\sub1, C:\folder1\sub1
 - (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.
- 4. Enter the [Extension] of the attribute file.
- **5.** Click [OK].

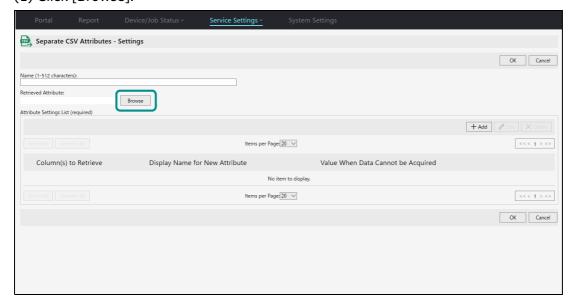
Setting the [Separate CSV Attributes] Function

Retrieves attributes from other features, and outputs only the data of specified columns as document attributes. The value of the attribute to be retrieved is required to satisfy the following conditions.

• Is in CSV format which conforms to RFC4180.



- This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.
- When a line feed code and/or double quotation mark is included in an attributed value, there is a need to enclose the attribute value with double quotation marks and add a double quotation mark immediately before a double quotation mark as part of the attribute value as an escape character.
- $oldsymbol{1}$. From the Flow settings page, select [Processing Method] > [Add] > [Separate CSV Attributes].
- 2. On the [Separate CSV Attributes] page, enter the name of the feature for [Name].
- Specify the attributes to be retrieved with the following procedures.
 (1) Click [Browse].



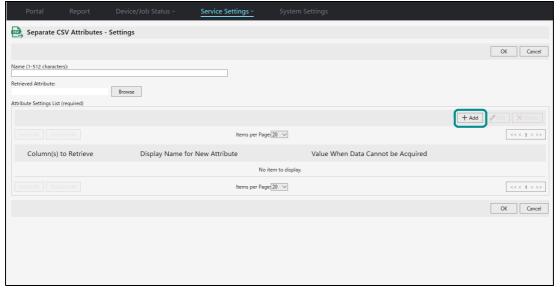
(2) From the [Separate CSV Attributes - Retrieved Attribute Settings] page, select the attribute, and click [OK].

Select attributes whose values are in CSV format.

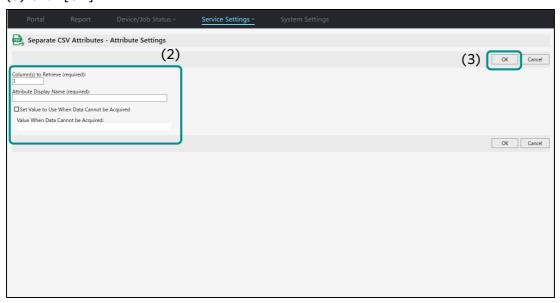


"Element Settings Page" (P.78)

- 4. Configure to retrieve column data from the attribute with the following procedures.
 - (1) Click [Add].



- (2) On the [Separate CSV Attributes Attribute Settings] page, specify [Column(s) to Retrieve], [Attribute Display Name], and [Set Value to Use When Data Cannot be Acquired].
- (3) Click [OK].



The attribute is added to [Attribute Settings List].

- (4) Repeat (1) to (3) only for the columns to be retrieved.
- **5.** Click [OK].

Setting the [Join CSV Attributes] Function

Retrieves multiple attributes from other features, joins their values, and outputs them as document attributes. Format of the attributes which are output are as follows.

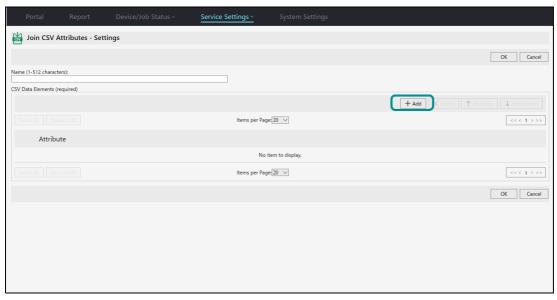
- Is in CSV format which conforms to RFC4180.
- Value of the attribute retrieved is enclosed by double quotes (").
- When multiple values of the attribute are retrieved, they are joined by commas (,).

Example: "AAA", "BBB", "CCC", "XXX"



Even when the attribute value contains a double quote, escape character is not appended.

- For example, if the attribute value retrieved is "aaa, "b"bb", "ccc", the output will be ""aaa", "b"bb", "ccc" instead of ""aaa", "b"bb", "ccc".
- This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.
- 1. From the Flow settings page, select [Processing Method] > [Add] > [Join CSV Attributes].
- 2. On the [Join CSV Attributes] page, enter the name of the feature for [Name].
- 3. Specify the attributes to be newly created with the following procedures. (1) Click [Add].



(2) From the [Join CSV Attributes - Element Settings] page, select the element of the attribute, and click [OK].

The element of the attribute is added to the [CSV Data Elements] list.



"Element Settings Page" (P.78)

- (3) Repeat (1) and (2) only for the elements to be created.
- (4) When multiple elements of the attribute are added, change their order by [Move Up] and [Move Down] if required.
- 4. Click [OK].

Setting the [Interaction Process] Function

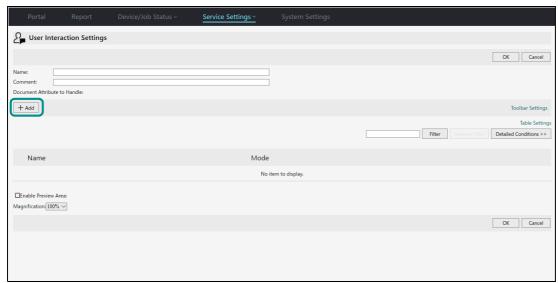
Can set to perform the interaction mode. The job flow with this setting can be previewed on the [View Suspended Jobs] page or the [Operate Suspended Jobs] page.

Only one function can be set for one flow.

Some jobs cannot be previewed according to the document format.

Refer

- "Formats Previewed in Interaction Mode" (P.334)
- "4 Operating the Job with the [Suspended] Status" (P.207)
- 1. In the processing method list on the flow settings page, click // (Edit) of the function to add the interaction process.
- 2. On the [Edit Processing Method] page, click [Add Interaction Process].
- 3. In [Name], enter the function name. In [Comment], enter the comment as necessary.
- 4. In [Document Attribute to Handle], specify the document attribute to display or edit during the interaction mode. Perform the following steps.
 - (1) Click [Add].

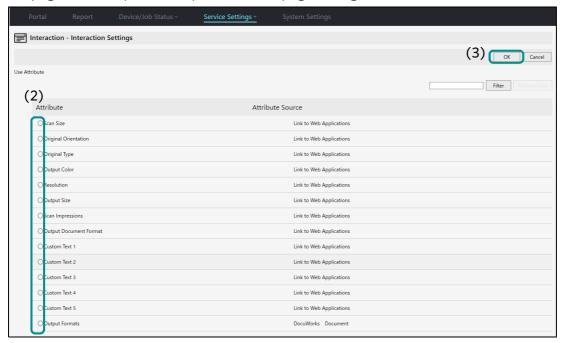


(2) Select the document attribute to handle in the interaction mode.

The available attributes are the document attributes of the processing method function for which this [Interaction Process] function is set, and the document attributes of the processing method function and inbound channel function that you have added before.

(3) Click [OK].

The attributes that you have added here can be viewed or edited on the [View Suspended Jobs] page or the [Operate Suspended Jobs] page during the interaction mode.

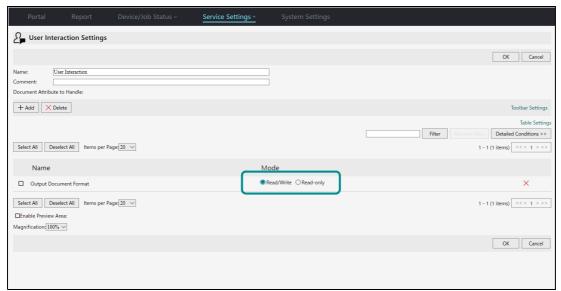


(4) For the added document attribute, select [Read/Write] or [Read-only].

When selecting [Read/Write], you can change the attribute information on the [Operate Suspended Jobs] page during the interaction mode.

You can edit up to 512 characters. If the attribute value for the target document exceeds 512 characters, the attribute value becomes read-only.

However, the [Document Name] attribute of the [Document Name] function cannot be edited. This is read-only.



- (5) To set multiple document attributes, perform Step (1) to (4) repeatedly.
- 5. In [Enable Preview Area], specify whether to configure the display settings of the preview. When this check box is selected, the value specified in [Magnification] is enabled. When this check box is deselected, the preview is displayed at 100% magnification.

- 6. When selecting the [Enable Preview Area] check box, specify the default value to increase or decrease the preview size during the interaction mode in [Magnification].
- 7. Click [OK].

Setting the [Save to Folder] Function

You can save a processed document to a specific folder. Create in advance the folder to be specified as the storage location.



When the FTP server specified for the forwarding destination does not support Shift-JIS, and double byte characters (Kanji or Hiragana) are included in the file name or folder name where documents are stored, the characters may be garbled in the forwarding destination.



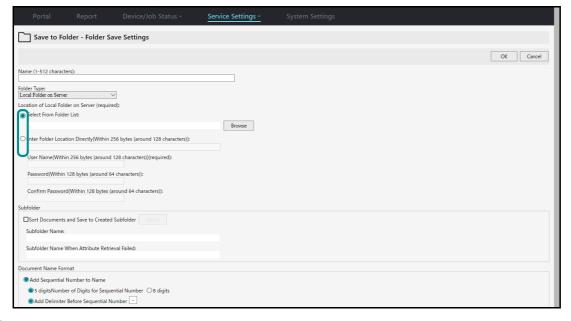
- 1. Select [Save to Folder] from [Add] in [Delivery Destination] on the flow settings page.
- 2. On the [Save to Folder Folder Save Settings] page, enter the function name in [Name].
- 3. In [Folder Type], select the folder type to save documents.

 You can select [Local Folder on Server], [Shared Folder] or [Virtual Directory (FTP)].



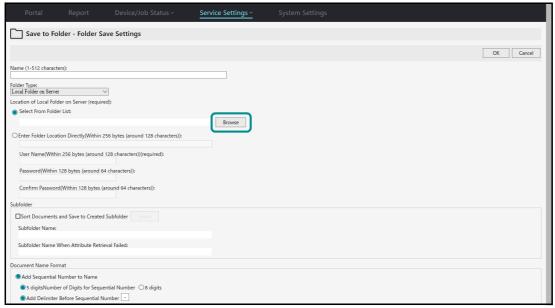
To specify the folder assigned to the network drive, select [Shared Folder]. If you select [Local Folder], a job is completed with errors during the flow process

4. If [Local Folder on Server] is specified from [Folder Type], select [Select From Folder List] or [Enter Folder Location Directly] for the folder selection method.



- 5. Perform the following steps.
- If [Local Folder on Server] is specified from [Folder Type] and [Select From Folder List] is selected If [Select From Folder List] is selected, the [User name] and [Password] cannot be specified. The NETWORK SERVICE account is used to access folders.

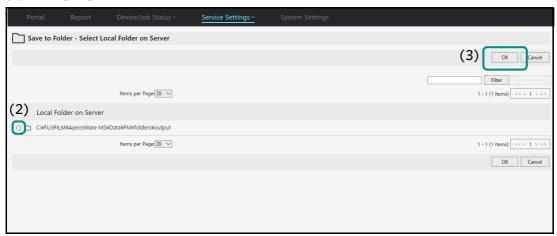
(1) Click [Browse].



The pre-registered folders are displayed on the folder selection page.

If folders do not display, see "Registering folders/files to be used in functions" (p.72) and register the folders.

- (2) From the list, select only one folder to be specified for the storage location.
- (3) Click [OK].

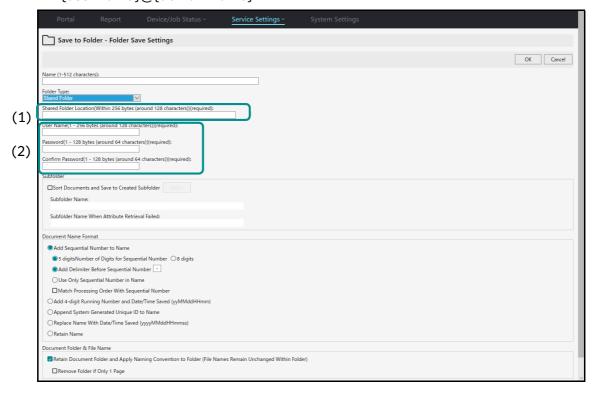


- If [Local Folder on Server] is specified from [Folder Type] and [Enter Folder Location Directly] is selected
 - (1) Enter the absolute path of the storage folder in UNC format. Use Yen (\), or slash (/), as the delimiter of the folder. Example: C:\folder1\sub1, C:\folder1\sub1
 - (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.



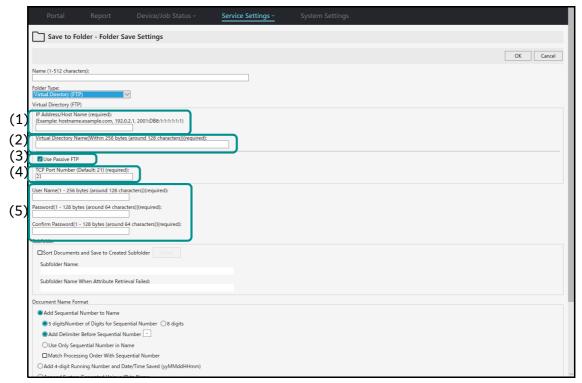
When you use the folder stored on the drive in the FAT or FAT32 format for the storage location as a local folder on the server, [User Name] specified here is not used.

- If [Shared Folder] is specified from [Folder Type]
 - (1) Enter the path of the storage folder in [Shared Folder Location] (in UNC format, starts with \\ or //). Use Yen (\), or slash (/), as the delimiter of the folder. Example: \\hostname\folder1\sub1, //192.0.2.1/folder1/sub1
 - (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted. If you are using a domain, specify the user name with the domain. If the domain is not included, the local user account is used. Specify one of the following formats for domain users.
 - {domain name}\{user name}
 - {user name}@{domain name}

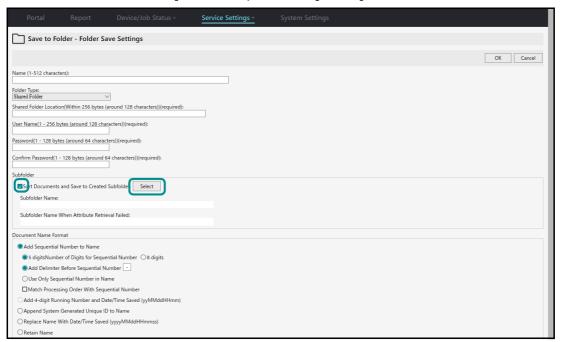


- If [Virtual directory (FTP) is specified from [Folder Type]
 - (1) Specify the host name or IP address of the computer with the virtual directory.

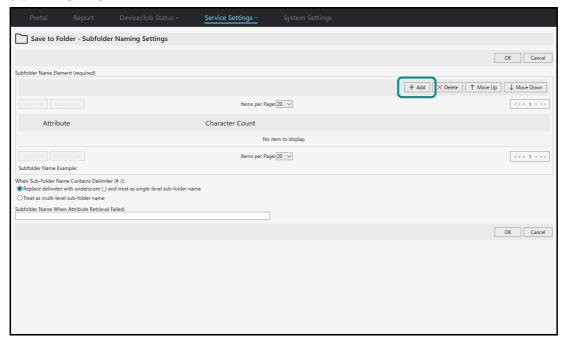
 The IP address can be specified in IPv4 or IPv6 format. The localhost, loopback address, user name, password, and port number cannot be specified.
 - (2) Specify the virtual directory name.
 Use Yen (\), or slash (/), as the delimiter of the folder.
 Example: folder1\sub1, folder1/sub1
 - (3) Enable to use FTP in passive mode.
 - (4) Specify the TCP port number used to access the FTP directory.
 - (5) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.



6. To sort documents by attributes and save them to created subfolders, select the [Sort Documents and Save to Created Subfolder] check box, and click [Select].



- 7. Perform the following if [Select] was clicked in Step 6.
 - (1) Click [Add].



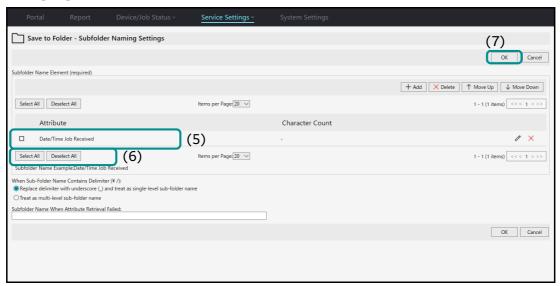
(2) On the [Subfolder Settings - Element-] page, specify the element for the subfolder name, and then click [OK].



- (3) To set multiple elements, perform Step (1) and Step (2) repeatedly. When you specify multiple attribute elements, a single byte space is entered between the elements.
- (4) Change the order by clicking [Move Up] or [Move Down] as necessary.

- (5) Specify [When Sub-Folder Name Contains Delimiter (\(\rangle \))].

 Create a sub-folder with a single hierarchy by replacing yen characters (\) or slashes (/) with a underscore (_) or create a multi-level subfolder structure of each element (using the name of each element as the folder name) by separating each element with a yen character (\) or slash (/).
- (6) In [Subfolder Name When Attribute Retrieval Failed], specify the subfolder name.
- (7) Click [OK].



8. In [Document Name Format], specify how to name the file of the document to be stored. When selecting [Retain Name], and the file with the same name already exists in the storage location, an error occurs.



"Example of the document file name stored" (P.149)

9. In [Document Folder & File Name], specify whether to save the folder when the document includes folders (document in a folder format).
If you convert a document with multiple pages to [TIFF (Single Page)], [TIFF/JPEG Mixed] or [JPEG],

If you convert a document with multiple pages to [TIFF (Single Page)], [TIFF/JPEG Mixed] or [JPEG] the document in a folder format is created.



"Document folder & file name" (P.150)

10. Click [OK].

Example of the document file name stored

This section describes examples of the file name set in [Document Name Format].

{document name} in the table below shows the name determined by the [Document Name] function. When [Document Name] function is not set, {document name} shows the name assigned by Flow Management automatically.



- "Document" (P.13)
- "Setting the [Document Name] Function" (P.115)

Ite	ms	Output file name
Add Sequential Number to Name	Add Delimiter Before Sequential Number	A sequential number is added at the end of {document name}. Example: • When specifying 8 digits and a hyphen (-) as the delimiter: {document name} -00000001.tif {document name} -00000002.tif • When specifying 5 digits and a hyphen (-) as the delimiter: {document name} -00001.tif {document name} -00002.tif
	Use Only Sequential Number in Name	{document name} is replaced with a sequential number. Example: • For 8 digits 00000001.tif 00000002.tif • For 5 digits 00001.tif 00002.tif
Attach 4-Digit Serial Number and Date at Time of Saving to Name		Attach a 4-digit serial number and date at the time of saving to the back of {document name}. A serial number is a sequential number from 0001 to 9999 and the date is year, month, day, hour and minute (yymmddhhmm). Example: {document name}-0001-1812101634.tif {document name}-0002-1812101634.tif {document name}-0003-1812101635.tif
Append System Unique ID to Na		{document name} with 32 digits unique ID becomes the file name. Example: {document name} - 12345678abcdefgh5678opqrstuv1234.tif
Replace Name Time Saved (yyyyMMddHH	•	The saved date and time becomes the file name. Example: When the file is saved at 19:30:45, on 15/Dec./2020: 20201215193045.tif When a file with the same name exists in the storage location, a hyphen and 5 digits sequential number is added at the end of the date and time.
Retain Name		20201215193045-00001.tif {document name} becomes the file name.



- When saving the job for which document splitting is specified in the [Image Processing] or [QR Code Reader] function to a folder, select the item other than [Retain Name] in [Document Name Format]. The same document name is set for all split documents. If you select [Retain Name] in [Document Name Format], an error occurs when you try to save the subsequent documents.
- A sequential number is added regardless of the file extension when you specify [Local Folder on Server] or [Shared Folder] for [Folder Type]. For example, when a file "A-00001.tif" exists in the folder of the storage location, and specify 5 digits to output "A.jpg", the output file name becomes "A-00002.jpg". This does not become "A-00001.jpg".

When you specify [Virtual Directory (FTP)] for [Folder Type], the extension is distinguished.

Document folder & file name

This section describes the settings of [Document Folder & File Name] in the [Save to Folder] function, and the output file name.

The available combinations of [Document Folder & File Name] are shown below.

- O: Select the check box.
- -: Deselect the check box.

Combination number	Retain document folder and apply naming convention to folder	Remove folder if only 1 page
1	-	Cannot be set
2	0	-
3	0	0

When [Add Sequential Number to Name], [5 digits] and [Add Delimiter Before Sequential Number] are set for [Document Name Format], the examples of the output file names with the combinations in the above table are described below.

{document name} in the example shows the name determined by the [Document Name] function. When [Document Name] function is not set, {document name} shows the name assigned by Flow Management automatically.



For the folder format document with one folder

When a file name in the folder included in a document is "A1" and "A2", the output file names are shown in the table below.

• One file

Combination number	Output folder name	Output file name
1	No folders	{document name} -00001.tif
2	{document name} -00001	A1.tif
3	No folders	{document name} -00001.tif

• Multiple files

Combination number	Output folder name	Output file name
1	No folders	{document name} -00001.tif {document name} -00002.tif
2	{document name} -00001	A1.tif, A2.tif
3	{document name} -00001	A1.tif, A2.tif

For the folder format document with multiple folders

When a file name in the folder included in a document is "A1" and "A2", the output file names are shown in the table below.

• One file

Combination number	Output folder name	Output file name
1	No folders	{document name} -00001.tif {document name} -00002.tif
2	{document name} -00001	A1.tif
	{document name} -00002	A1.tif
3	No folders	{document name} -00001.tif {document name} -00002.tif

• Multiple files

Combination number	Output folder name	Output file name
1	No folders	{document name} -00001.tif {document name} -00002.tif {document name} -00003.tif {document name} -00004.tif
2	{document name} -00001	A1.tif A2.tif
	{document name} -00002	A1.tif A2.tif
3	{document name} -00001	A1.tif A2.tif
	{document name} -00002	A1.tif A2.tif

Setting the [Send E-mail] Function

Set to attach the processed document to an e-mail and send it.

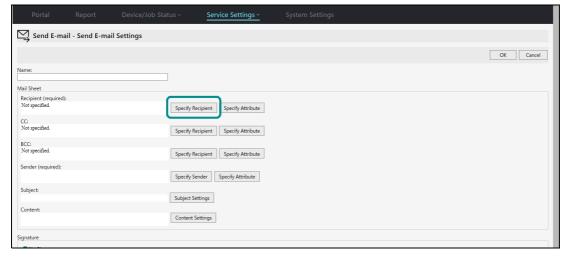
To use this function, you must configure the communication environment, such as SMTP server. The e-mail communication environment is set in [Network Settings] common to ApeosWare Management Suite.



Blank, tab or line break will not be reflected to the body of the mail when [Enter Text] is selected in mail elements setting page and only blank, tab or line break is entered in the text box. Enter character strings other than blank, tab or line break in the text box.

- 1. Select [Send E-mail (SMTP)] from [Add] in [Delivery Destination] on the flow settings page.
- 2. On the [Send E-mail Send E-mail Settings] page, enter the function name in [Name].
- 3. In [Recipient], specify the recipient e-mail address.

 There are two methods: one is to specify the e-mail address and the other is to assign the document attribute to the e-mail address.
- For specifying the e-mail address
 - (1) Click [Specify Recipient] in [Recipient].



(2) On the [Send E-mail - Recipient Settings - Specify Recipient Settings] page, specify the e-mail address and click [OK].

You can either enter the e-mail address directly, or select the e-mail address set to the user.

- For assigning the attribute to the e-mail address
 - (1) Click [Specify Attribute].
 - (2) On the [Send E-mail Recipient Settings Specify Attribute] page, specify the element of the attribute and click [OK].



- 4. Specify [CC] and [BCC] in the same operation as in [Recipient].
- 5. Specify an e-mail address for a sender in [Sender].

 There are two methods: one is to specify the e-mail address and the other is to assign the document attribute to the e-mail address.
- For specifying the e-mail address
 - (1) Click [Specify Sender] of [Sender].
 - (2) On the [Send E-Mail Source Setting Specify Source] page, specify the e-mail address and click [OK].

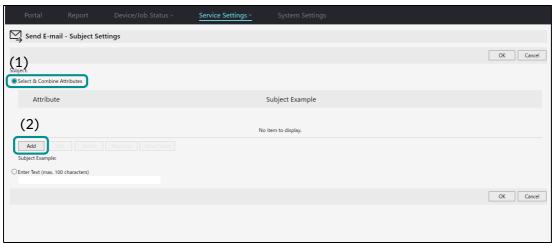
You can either enter the e-mail address directly, or select the e-mail address set to the user.

- For assigning the attribute to the e-mail address
 - (1) Click [Specify Attribute].
 - (2) On the [Send E-Mail Source Setting Specify Attribute] page, specify the element of attribute and click [OK].



- 6. Click [Subject Settings].
- 7. Specify the subject in the following procedure.

 There are two methods: one is to specify the combination of the attributes and the other is to enter any text.
- For specifying the combination of the attributes
 - (1) Specify [Select & Combine Attributes].
 - (2) Click [Add].



(3) On the [Send E-mail - Subject Element Settings] page, specify the element of the attribute to use as the subject, and click [OK].



"Element Settings Page" (P.78)

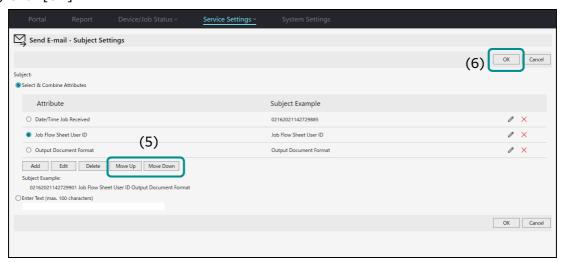
(4) To set multiple elements, perform Step (2) and Step (3) repeatedly.

When you specify multiple attribute elements, a single byte space is entered between the elements. In the case between documents, it is a comma. Also as for the same value in the same specification, the second one or later is deleted.

When multiple documents are targeted, the attribute value of each document is connected by commas (,), and the string becomes the element of the attribute. For example, if the attribute value of the first document is "AAA", and the second document is "BBB", the element of the attribute is "AAA,BBB".

The attribute with the same value is output only once. The attribute with no value is skipped. The character count specified in [Limit Character Count] is applied to the string after the connection.

- (5) Change the order by clicking [Move Up] or [Move Down] as necessary.
- (6) Click [OK].



- For entering any text
 - (1) Specify [Enter Text], and then enter any string to be used as the subject.
 - (2) Click [OK].
- 8. Specify [Content] using the same procedure as in [Subject].
- 9. In [Signature], specify whether to insert the signature in the e-mail.

 To insert the signature, select [Add Signature] to enter the string in the text box, or click [Load From File] to specify the file.
- 10. In [Attachment], specify whether to attach the processed document to an e-mail.
 For attaching the document, select the [Attach Document] check box and specify whether to attach multiple documents all at once.
- 11. To specify the limit size for the send e-mail, select the [Specify E-mail Size Limit] check box and enter the upper limit.

When you specify the upper limit, an e-mail that exceeds the size limit is split and sent out.

12. Click [OK].



When you receive split files, the files may not be combined according to your e-mail software. In that case, specify the splitting document in the [Image Processing] function so that all the data is included in one file. In addition, deselect the [Compile and Attach Multiple Files] check box.

Notes on Setting the [Send E-mail] Function

- The following error may occur and job processing may fail when [Specify E-mail Size Limit] is specified in [Send E-mail (SMTP)] feature.
 0034-132011-DFCCA" Failed to deliver e-mail.(0034-131055-DFCCA: Unable to send e-mail.; 554 5.6.1 Messages of type message/partial are not supported)
 If this message is displayed, the mail server does not support split transmission of e-mail.
 Please disable [Specify E-mail Size Limit].
- Some SMTP servers are able to check whether addresses specified as recipients are usable.
 When you specify multiple addresses as e-mail recipients with this SMTP server feature enabled, if
 it is determined that one of e-mail addresses is unusable, the SMTP server will cancel the send
 request, and no e-mail will be sent to the rest of the addresses.
 When you specify multiple addresses as recipients, disable the "Check whether addresses specified
 as recipients are usable" feature of the SMTP server, or if the address specified as recipient becomes
 unusable, remove it from the recipient list.

Setting the [Printer Output] Function

Can set to output the processed document to a printer or fax.

You need to install the printer driver or fax driver in the Flow Management server before using them.

You may not output some documents to a printer or fax according to the format or the compression method of the document.

To add devices in the [Printer Output] function, either the system administrator or device management role is required.

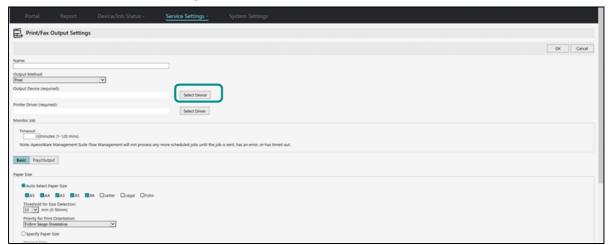


- When the Login mode is set to the device of the delivery destination, open the properties of the printer or fax driver, and then set the account mode and detailed user settings on the [Configuration] tab.
- Although you can specify settings on the [Print/Fax Output Settings] page that differ from the actual device configuration, for instance, if Color (Auto) is specified on a black & white device, printing will be done with the default settings on the device and not the specified settings, and an error may occur on the device. When an error occurs on the device, you can either refer to the device control panel or device manual for the method to resolve the error, or edit the flow so that the settings for Printer Output feature match the actual device configuration.
- If a PCL driver is selected as the fax driver, the recipient name or organization set in the fax settings are invalid and cannot be used when a job is processed.
- Do not specify "Reduced Print" when using the flow's "Printer Output" to deliver a document containing QR code. With Reduced Print, the QR code image may become smaller or distorted. As a result, using the QR Code Reader to process printed scans or faxed documents may cause an error to occur when the QR code is being read.

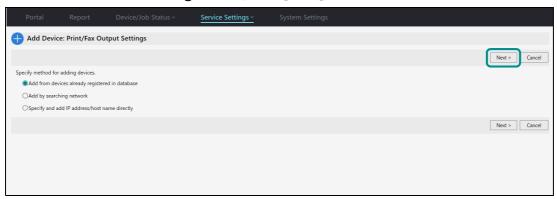


- "Configuring the Print or Fax Environment" (P.55)
- "Formats Supported by the [Printer Output] Function" (P.334)

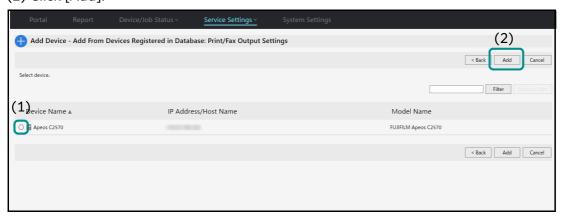
- 1. Select [Printer Output] from [Add] in [Delivery Destination] on the flow settings page.
- 2. On the [Print/Fax Output Settings] page, enter the function name in [Name].
- 3. In [Output Method], select [Print] or [Fax].
- 4. Click [Select Device] for [Output Device].



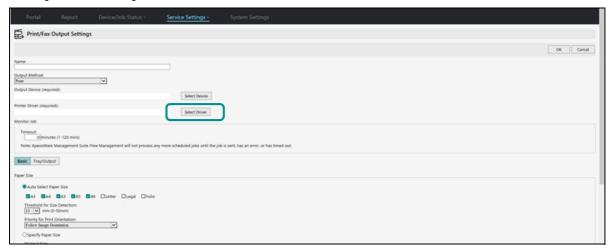
5. Select the method for adding devices, click [Next].



- **6.** Specify the target device in the following procedure.
 - (1) When [Add from devices already registered in database] is selected in Step 5, the device that registered previously in the ApeosWare Management Suite database is displayed. Select only one device from the list.
 - When selecting [Add by searching network] or [Specify and add IP address/host name directly] to add devices, see Help for each screen.
 - (2) Click [Add].



7. Click [Select Driver].



A list of the printer or fax drivers installed in the Flow Management server is displayed on the driver selection page.

When a list is not displayed, printer or fax drivers are not installed in the Flow Management server, or the server is not restarted after the installation. Install printer or fax drivers and restart the Flow Management server. After that, perform the procedure again.

- 8. On the [Select Driver] page, perform the following procedure.
 - (1) Select only one printer driver or fax driver from the list.
 - (2) Click [OK].
- 9. In [Monitor Job], enter [Timeout] to monitor the output status of the print/fax on the device. A timeout is a time from the sending of document data to a target device until when an output in the target device (print/fax) is finished in the [Printer Output] function of the Flow Management. If the output completion in the device cannot be confirmed even after the timeout input here is exceeded, the job of the Flow Management is terminated with an error.

In the case of two Flow Management jobs for which order retention has been specified, until the printing of previous job is output normally or it is terminated with an error, including a case where a specified timeout time is exceeded, the delivery processing of subsequent job will not be started.

As for setting not to monitor the output status of print/fax on the device, use the output status monitoring setting tool. Refer to "Output situation monitoring setting tool" (P.343) for details.

You may print and send a fax normally even though the job ends with the error due to time out in job monitoring. Confirm the status of the job in the job history of the device while reexecuting the job ended due to time out error.

- 10. Specify the details of the output method.
 - When selecting [Print] in [Output Method]
 - (1) On the [Basic] tab, specify the printing details, such as paper size, quantity, reduced print, reduce/ enlarge and so on.



"Auto selection of the paper size" (P.158)

(2) On the [Tray/Output] tab, specify the printing details, such as select paper tray, output method.

- When selecting [Fax] in [Output Method]
 - (1) On the [Fax Settings] tab, specify the recipient of the fax.

By clicking [Address Book], you can select the recipient preregistered in the database of ApeosWare Management Suite on the [Select Fax Recipient] page.

If you specify a speed dial for the fax recipient number, the speed dial number is only saved in the flow. For this reason, If you change the recipient of the speed dial on the device, a fax is sent to the new recipient and not to the recipient set in the flow.

If a PCL driver is used, [Address Name] and [Address Group] are not used when a job is processed.



- Some models used may not support the "Speed Dial Number" function.
- When checkmarking [Show fax number input field on device control panel] in [Fax Settings] of the [Link to Web Applications] function, "Input via device control panel when executing a job" can be selected.
- (2) On the [Basic] tab, specify the fax output method, such as paper size, reduced print, reduce/ enlarge and so on.



Refei

"Auto selection of the paper size" (P.158)

(3) On the [Communication Settings] tab, specify the communication method, such as communication mode and relay broadcast.



Some models used may not support the "Relay Broadcast" function.

11. Click [OK].



- When checkmarking [Show fax number input field on device control panel] in [Fax Settings] of the [Link to Web Applications] function, selection of a choice other than "Input via device control panel when executing a job" causes an error and a flow editing cannot be completed.
- When removing the check mark for [Show fax number input field on device control panel] in [Fax Settings] of the [Link to Web Applications] function, selection of a choice other than "Input via device control panel when executing a job" causes an error and a flow editing cannot be completed.

Threshold for size detection

[Threshold for Size Detection] on the detailed settings page of the [Printer Output] function is used to detect the output paper size used for the entered image size when [Auto Select Paper Size] is specified.

For example, for A4 size $(210 \times 297 \text{ mm})$, if you specify 13 mm for [Threshold for Size Detection], A4 size is selected for the document in the size of up to $223 \times 310 \text{ mm}$. When the image size exceeds the threshold, the next largest paper size is used to output the document.

Auto selection of the paper size

In the [Printer Output] function, you can set to determine the output paper size and orientation automatically.

To determine the size and orientation automatically, select [Auto Select Paper Size] on the [Basic] tab of the [Print/Fax Output Settings] page. You also specify the paper size candidates and [Priority for Print Orientation].

The output paper size and orientation are determined in the following steps.



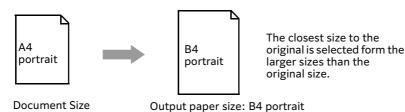
The following example shows the case when [Reduced Print] is not specified. If you specify [Reduced

Print], the output paper size is changed.

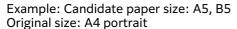
When selecting [Follow Image Orientation] in [Priority for Print Orientation]:

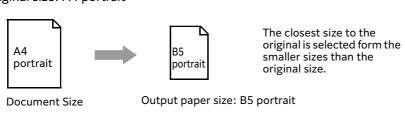
- (1) The paper orientation is determined by the original document size. When the document has the same horizontal and vertical size, the orientation becomes "portrait".
- (2) Check the paper size candidates to see if there is a size that fits the original document size, if any, it is determined as the output paper size.
- (3) If no candidate is found in Step (2), check them to see if there is a size larger than the original size, if any, the closest paper size is determined as the output paper size.

Example: Candidate paper size: A5, B5, B4, A3 Original size: A4 portrait



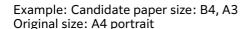
(4) If no candidate is found in Step (3), check the size smaller than the original size, and the closest paper size is determined as the output paper size.





When selecting [Fit to Portrait] in [Priority for Print Orientation]:

(1) Select the smallest size from the paper size candidates, and check if the document fits into a paper in "portrait" orientation. If it fits, the selected paper size is determined as the output paper size.





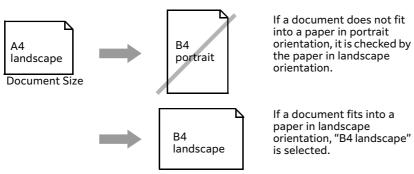
Checked by the smallest size,"B4" among the candidate paper sizes. If a document fits into a paper in portrait orientation, "B4 portrait" is selected.

Output paper size: B4 portrait

(2) If it does not fit in Step (1), check if the document fits into a paper in landscape orientation. If it fits, the selected paper size is determined as the output paper size.

Example: Candidate paper size: B4, A3

Original size: A4 landscape



Output paper size: B4 landscape

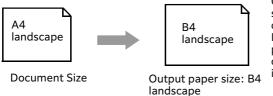
- (3) If it does not fit in Step (2), select the second-smallest size from the paper size candidates, and check if the document fits into a paper in portrait, and then or landscape orientation.
- (4) If the appropriate paper size is not found, the largest size of the paper size candidates is determined as the output paper size. The paper orientation is "portrait".

When selecting [Fit to Landscape] in [Priority for Print Orientation]:

(1) Select the smallest size from the paper size candidates, and check if the document fits into a paper in "landscape" orientation. If it fits, the selected paper size is determined as the output paper size.

Example: Candidate paper size: B4, A3

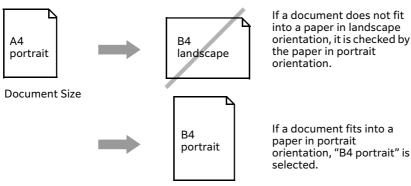
Original size: A4 landscape



Checked by the smallest size, "B4" among the candidate paper sizes. If a document fits into a paper in landscape orientation, "B4 landscape" is selected.

(2) If it does not fit in Step (1), check if the document fits into a paper in portrait orientation. If it fits, the selected paper size is determined as the output paper size.

Example: Candidate paper size: B4, A3 Original size: A4 portrait



Output paper size: B4 portrait

(3) If it does not fit in Step (2), select the second-smallest size from the paper size candidates, and check if the document fits into a paper in landscape, and then or portrait orientation.

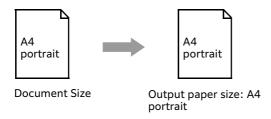
(4) If the appropriate paper size is not found, the largest size of the paper size candidates is determined as the output paper size. The paper orientation is "landscape".

When selecting [Use Printer Driver Settings] in [Priority for Print Orientation]:

- (1) The paper orientation is determined by the printer driver.
- (2) Select the smallest size from the paper size candidates, and check if the document fits into the size. If it fits, the selected paper size is determined as the output paper size.

Example: Candidate paper size: A4, B4, A3 Paper orientation in printer driver: Portrait

Original size: A4 portrait

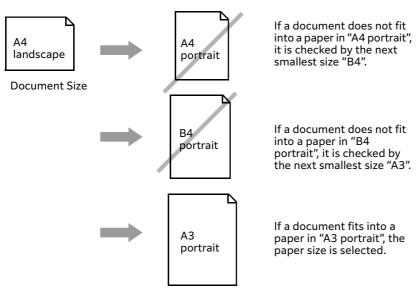


Checked by the smallest size, "A4" among the candidate paper sizes. If a document fits into a paper in the orientation set for a printer driver, "A4" is selected.

(3) If it does not fit in Step (2), check the sizes in ascending order to fit the document size.

Example: Candidate paper size: A4, B4, A3 Paper orientation in printer driver: Portrait

Original size: A4 landscape



Output paper size: A3 portrait

(4) If the appropriate paper size is not found, the largest size of the paper size candidates is determined as the output paper size.



The printer output feature may not available for 64-bit OS on some models. Refer to "Readme" of ApeosWare Management Suite for the target model. On a 64-bit OS, if print or fax is performed on the following Fuji Xerox models of non-Japanese specification, please use the printer driver (x64) later than their recorded versions.

ApeosPort-II C7500/C6500/C5400	2.6.4
DocuCentre-II C7500/C6500/C5400	

ApeosPort-II 7000/6000 DocuCentre-II 7000/6000	2.6.5
ApeosPort-II C4300/C3300/C2200 DocuCentre-II C4300/C3300/C2200 ApeosPort-II 5010/4000/3000 DocuCentre-II 5010/4000	2.6.6
ApeosPort-III C4400 DocuCentre-III C4400 DocuCentre-III C4100/C3100 ApeosPort-III C3300/C2200/C2201 DocuCentre-III C3300/C2200/C2201	2.7.2
DocuCentre-III 3007/2007 FUJI XEROX 4127/4112	2.7.4

Setting the [Link to Application] Function

Can set to execute the processed document using the application. You need to create and register executable files and working folders in Flow Management before using them.

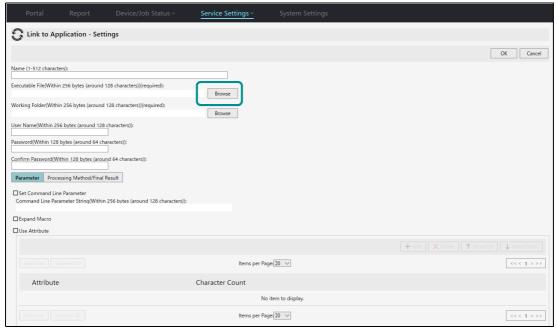


For applications executed from the [Link to Application] feature, please do not use standard output. If standard output is used, an error will occur and the will end with error.



"Configuring the Environment for Link to Application" (P.57)

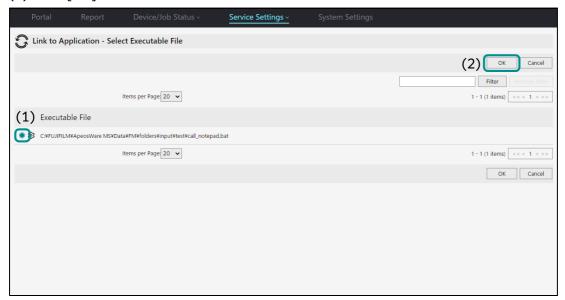
- $oxed{1.}$ Select [Link to Application] from [Add] in [Delivery Destination] on the flow settings page.
- 2. On the [Link to Application Settings] page, enter the function name in [Name].
- 3. Click [Browse] in [Executable File].



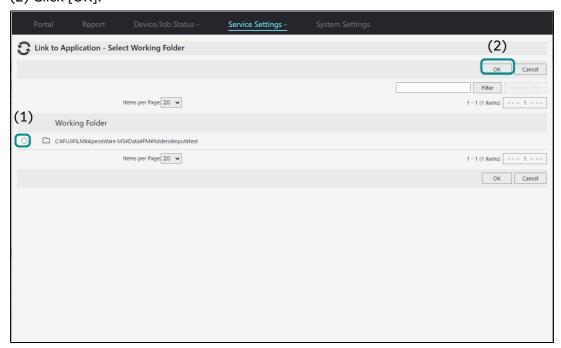
The preregistered executable files are displayed on the select executable file page.

If an executable file is not displayed, see "Registering Folders/Files to Be Used in Functions" (P.68) and register the work folder.

- 4. Perform the following steps.
 - (1) From the list, select the executable file to start.
 - (2) Click [OK].



- 5. Click [Browse] in [Working Folder]. The preregistered working folders are displayed on the select working folder page. If folders do not display, see "Registering folders/functions to be used in functions "Registering Folders/Files to Be Used in Functions" (P.68) and register the folders.
- 6. Perform the following steps.
 - (1) Select only one working folder from the list.
 - (2) Click [OK].



- 7. Enter the account of the user who executes an executable file in [User Name] and [Password].
- 8. To specify the command line parameter, perform the following procedure.



"About parameters" (P.164)

- (1) Select the [Set Command Line Parameter] check box.
- (2) Enter the command line parameter string.
- (3) In [Expand Macro], specify whether to expand the macro.

When this check box is selected, if a macro is included in the parameter, the macro is expanded and passed to the application.

When this check box is deselected, the parameter is passed to the application as it is.

- **9.** To specify the parameter from attributes, perform the following procedure.
 - (1) Select the [Use Attribute] check box.
 - (2) Click [Add].
 - (3) On the [Link to Application Parameter Element Settings] page, specify the element of the attribute to use as the parameter, and click [OK].



Refe

"Element Settings Page" (P.78)

- (4) To set multiple elements of the attribute, perform Step (2) and Step (3) repeatedly.
- (5) Change the order by clicking [Move Up] or [Move Down] as necessary.
- (6) When adding multiple attributes to use them as one parameter, select [Combine Attributes to Create Parameter] check box.

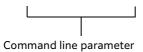
When deselect the check box, the added attributes are passed as an independent parameter to the executable file.

- 10. Click the [Processing Method/Final Result] tab, and specify the processing timing for next document, or whether to stop when the return value of the application is other than 0.
- 11. Click [OK].

About parameters

In a command prompt, the parameters passed to an executable file are referred to as "Command line parameter".

C:>sample.exe arg1 arg2 arg3



For example, when the three parameters "arg1", "arg2" and "arg3" are passed to the executable file "sample.exe" as a command line parameter to start "sample.exe", enter "arg1 arg2 arg3" in [Command Line Parameter String] on the [Link to Application - Settings] page.

You can specify any value for the command line parameter, and also specify the macro of scan information. The following macros can be specified.

Macro name	Descriptions
ImageCount	The number of documents passed to the executable file
FirstImage	The path of the first document passed to the executable file
ImageFiles	The paths of all documents passed to the executable file

Macro name	Descriptions
FileOrDirectory	The file path of the document, or the folder path where multiple files are stored, which is passed to the executable file.
SavedDocumentPath	When a single document is passed to the executable file: The folder path where multiple files are stored, When multiple documents are passed to the executable file: The file path of the document

To specify macros using a command line parameter, enclose the macro in dollar sings "\$".

Example: \$FirstImage\$

When you select the [Expand Macro] check box, the specified macro is expanded and passed to the application.

Setting the [Save Attributes to File] Function

Outputs the value of any document attribute as a file, and saves it to the specified folder. The file where attribute value is output (hereafter called "attribute file") is saved in the following format. Create in advance the folder to be the storage folder of the attribute file.

File format: Text file

Encoding: windows-31j (MS932)

File name: Name of document with the specified extension added. For example, when the extension, "csv" is specified, the attribute file name of the "sample.xdw" document becomes "sample.xdw.csv".



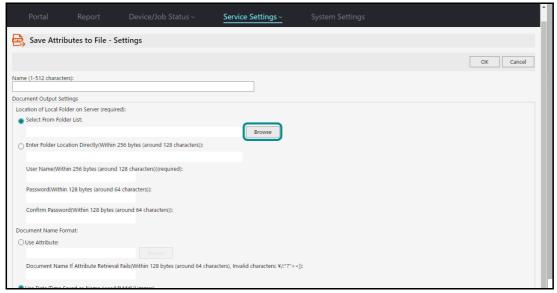
This feature can be used only when the language of the OS on which the Flow Management server is installed is Japanese. To use this feature, Attribute Processing Option is required.



- 1. From the Flow settings page, select [Delivery Destination] > [Add] > [Save Attributes to File].
- 2. On the [Save Attributes to File] page, enter the name of the feature for [Name].
- 3. Configure the output folder of the document with the following procedures. Folders which are mapped as network drives cannot be specified.
- Select From Folder List

If [Select From Folder List] is selected, the [User name] and [Password] cannot be specified. The NETWORK SERVICE account is used to access folders.

(1) Click [Browse].

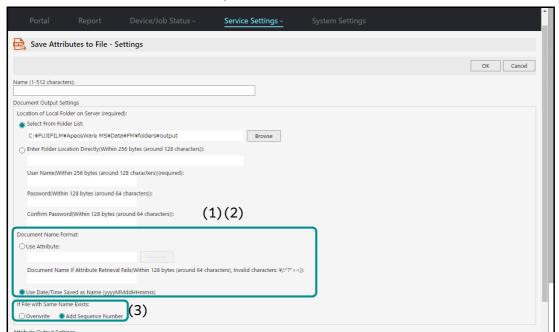


The pre-registered folders are displayed on the folder selection page.

If folders do not display, see "Registering folders/functions to be used in functions" (P.74) "Registering Folders/Files to Be Used in Functions" (P.68) and register the folders.

- (2) Select only 1 output folder from the list.
- (3) Click [OK].
- Enter Folder Location Directly
 - (1) Enter in UNC format the absolute path of the output folder. Use Yen (\), or slash (/), as the delimiter of the folder. Example: C:\folder1\sub1, C:\folder1\sub1
 - (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.
- 4. Set the file name of the document with the following procedures.
 - (1) For the file name of the document, set whether to use the attribute, or the date and time when the file is saved.
 - (2) If [Use Attribute] is selected in (1), click [Browse], and specify the element of the attribute on the [Save Attributes to File Document Name Settings Specify Attributes] page. Also, specify [Document Name If Attribute Retrieval Fails].
 - If [Document Name If Attribute Retrieval Fails] is left blank, "NONE" will be set when retrieval of attribute fails.





(3) Select [Overwrite] or [Add Sequence Number] if a file with the same name exists,

- **5.** Configure the contents of the attribute file with the following procedures.
 - (1) Click [Browse].
 - (2) From the [Save Attributes to File Output Attribute Settings Specify Attributes] page, select the attribute to be output to the attribute file, and click [OK].
 - Refer
 "Element Settings Page" (P.78)

(3) Enter the [Extension] of the attribute file.

Example: When the extension, "csv" is specified, the attribute file name of the "sample.xdw" document becomes "sample.xdw.csv".



- **6.** Configure the output folder of the attribute file with the following procedures.
 - (1) Specify whether to [Output To Same Location As Document Output Destination] for the attribute file.
 - When the check box is selected, the attribute file will be output to the folder selected in [Document Output Settings].
 - (2) When the check box of [Output To Same Location As Document Output Destination] is not selected, specify the output folder of the attribute file with [Location of Local Folder on Server]. The method of specifying is the same as [Document Output Settings]. Refer to Step 3.
- 7. Click [OK].

Setting the [Document and Attributes Table Output] Function

Can set to output the attribute list for the processed document.

The folder to which the document attribute file is output must be created in advance.

- 1. In the delivery destination list on the flow settings page, click // (Edit) of the function to output the document and attributes table.
- 2. On the [Edit Delivery Destination] page, click [Add] in [Document Attribute Output].
- 3. On the [Document and Attributes Table Output Table Output Settings] page, enter the function name in [Name].
- 4. In [File Name], enter the file name to output the document attribute list.

5. In [File Save Location Type], select the folder type to save the file. You can select [Local Folder on Server] or [Shared Folder].

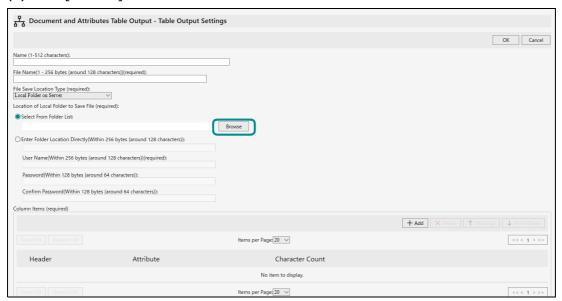


To specify the folder assigned to the network drive, select [Shared Folder]. If you select [Local Folder], a job is completed with errors during the flow process

- **6.** If [Local Folder on Server] is specified from [File storage location type], select [Select From Folder List] or [Enter Folder Location Directly] for the folder selection method.
- 7. Perform the following steps.
- If [Local Folder on Server] is specified from [File storage location type] and [Select From Folder List] is selected

If [Select From Folder List] is selected, the [User name] and [Password] cannot be specified. The NETWORK SERVICE account is used to access folders.

(1) Click [Browse].

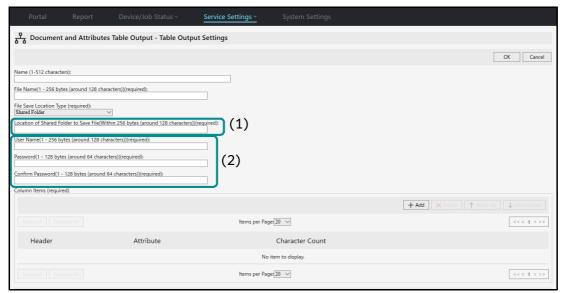


The pre-registered folders are displayed on the folder selection page.

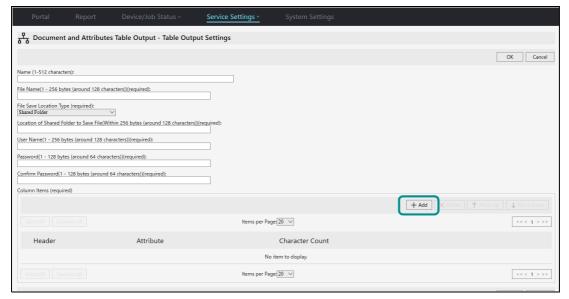
If folders do not display, see "Registering folders/functions to be used in functions" (P.74) "Registering Folders/Files to Be Used in Functions" (P.68) and register the folders.

- (2) Select a single storage folder from the list.
- (3) Click [OK].
- If [Local Folder on Server] is specified from [File storage location type] and the folder location is directly entered
 - (1) Enter the absolute path of the storage folder in UNC format. Use Yen ($\$), or slash ($\$), as the delimiter of the folder.
 - Example: C:\folder1\sub1, C:/folder1/sub1
 - (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.
- If [Shared Folder] is specified from [File storage location type]
 - (1) Enter the path of the storage folder in UNC format (starts with \\ or //). Use Yen (\), or slash (/), as the delimiter of the folder. Example: \\hostname\folder1\sub1, //192.0.2.1/folder1/sub1

- (2) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted. If you are using a domain, specify the user name with the domain. If the domain is not included, the local user account is used. Specify one of the following formats for domain users.
 - {domain name}\{user name}
 - {user name}@{domain name}

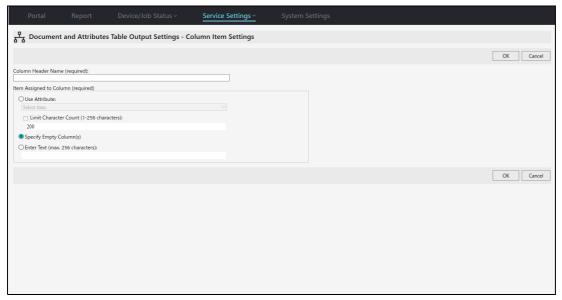


- 8. In [Column Information], perform the following procedure.
 - (1) Click [Add].



(2) On the [Document and Attributes Table Output Settings - Column Item Settings] page, specify [Column Header Name] and [Item Assigned to Column], and then click [OK]. You can select from attribute, empty column or any character for [Item Assigned to Column].





- (3) To set multiple column items, perform Step (1) and Step (2) repeatedly.
- (4) Change the order by clicking [Move Up] or [Move Down] as necessary.

9. Click [OK].

Format of output files

The document attribute file is output in the following way.

- The output file is created with the name, "{specified file name}.csv". If you do not specify ".csv" for the file name, the extension is added automatically.
- The attribute value is enclosed in double quotation marks ("). If double quotation marks (") are included in the attribute value, they are replaced with single quotation marks (').
- If multiple documents are included in a single job, the number of lines corresponding to the number
 of documents are output. For example, if three documents are included in a single job, three lines
 for the document information are output to the file.
 Example:

```
Header (1st line)
Document 1 (2nd line)
Document 2 (3rd line)
Document 3 (4th line)

Model name, Document name, Sender, Date, Format, Storage location
"FUJIFILM Apeos C6580","Report A", "03225M", "2020/12/10","TIFF","Folder A"
"FUJIFILM Apeos C6580","Report B", "03225M", "2020/12/10","JPEG","Folder B"
"FUJIFILM Apeos C6580","memo","Yama", "2020/12/10","PDF",""
```

• If the file with the same name already exists in the specified storage location, the document information is added after the last line of the file.

However, if the title line settings are different from the existing file, the existing file name is changed to "{file name}.bak", and a new file with the latest information is created.

In addition, if the file size exceeds 2 MB, the existing file name is changed, and a new file with the latest information is created.

- When the file name is changed, and the file with the name "{file name}.bak" already exists, a hyphen
 (-) and 5 digits sequential number (00001 to 99999) are added at the end of the file name.
 However, if an unused number exists, the number is assigned.
- When the specified attribute does not exist, or the attribute type does not follow the defied format, the value becomes null.

Setting the [Delivery Conditions] Function

Can set delivery conditions.



For flows with [Delivery Conditions] set to them, running time will increase exponentially along with the number of conditions. Also, running multiple flows set with multiple [Delivery Conditions] may cause memory insufficient errors to occur.

By using the [Attribute Mapping] feature, you can reduce the number of features used by the flow and resolve the abovementioned problem. When setting multiple (about 20 or more) delivery conditions, it is recommended that you use the [Attribute Mapping] feature.



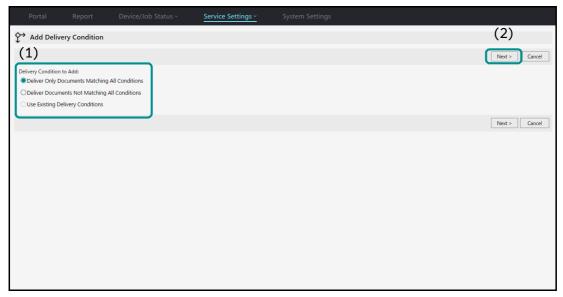
"Setting the [Attribute Mapping] Function" (P.130)

- 1. In the delivery destination list on the flow settings page, click (Edit) of the function to set delivery conditions.
- 2. On the [Edit Delivery Destination] page, click [Add Delivery Condition].
- 3. Perform the following steps.
 - (1) Specify [Delivery Condition to Add].

For adding a new delivery condition, specify [Deliver Only Documents Matching All Conditions]. For sending documents that does not match all conditions, specify [Deliver Documents Not Matching All Conditions].

For using the preset conditions, specify [Use Existing Delivery Conditions].

(2) Click [Next].



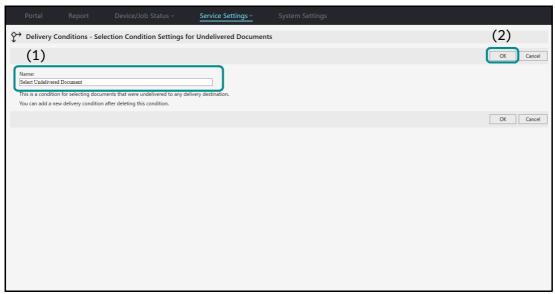
4. For the selected [Delivery Condition to Add], perform the following procedure.



"Setting examples of the delivery condition" (P.176)

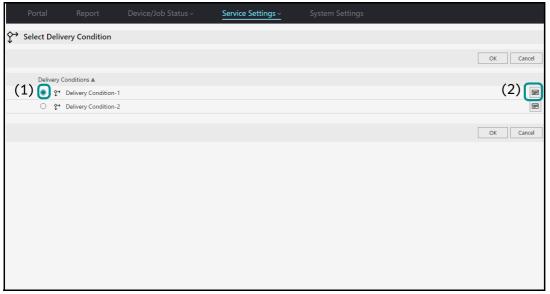
- When selecting [Deliver Only Documents Matching All Conditions]
 The [Delivery Conditions Delivery Condition Settings] page is displayed.
 Proceed to Step 5.
- When selecting [Deliver Documents Not Matching All Conditions]
 - (1) Enter the function name.

(2) Click [OK].



The delivery destination function with this option is added at the end of the list.

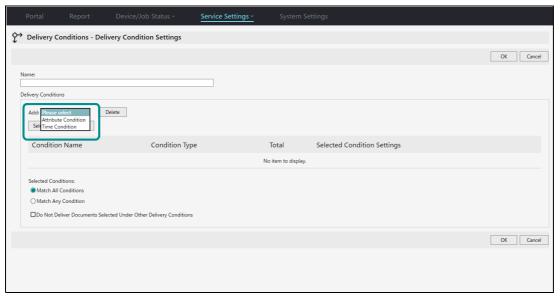
- When selecting [Use Existing Delivery Conditions] The preset delivery conditions list is displayed.
 - (1) Select only one delivery condition.



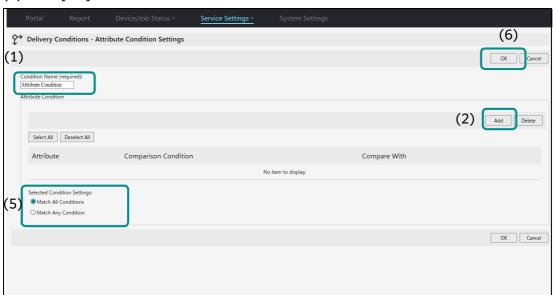
The delivery destination function with this option is added after the delivery destination function with the same delivery condition in the list.

The following procedure shows the operation when you select [Deliver Only Documents Matching All Conditions] for [Delivery Condition to Add].

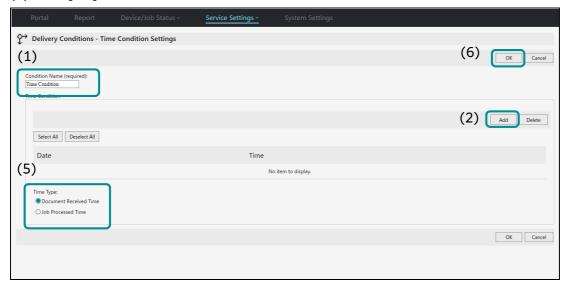
- 5. In [Name], enter the function name.
- **6.** Select [Attribute Condition] or [Time Condition] from Add in [Delivery Conditions].



- 7. Specify the details of the delivery condition.
- When selecting [Attribute Condition]
 - (1) Enter [Condition Name].
 You must set the condition name.
 - (2) Click [Add].
 - (3) On the [Delivery Conditions Attribute Configuration Settings] page, specify the attribute, comparison condition, and compare with for the delivery condition, and then click [OK].
 - (4) To set multiple time configuration settings, perform Step (2) and Step (3) repeatedly.
 - (5) Select [Match All Conditions] or [Match Any Condition] for [Selected Condition Settings].
 - (6) Click [OK].



- When selecting [Time Condition]
 - (1) Enter [Condition Name].
 You must set the condition name.
 - (2) Click [Add].
 - (3) On the [Delivery Conditions Time Configuration Settings] page, specify the date and time to compare, and then click [OK].
 - (4) To set multiple time configuration settings, perform Step (2) and Step (3) repeatedly.
 - (5) In [Time Type], specify [Document Received Time] or [Job Processed Time].
 - (6) Click [OK].



- 8. In [Selected Conditions], specify the combination of the specified attribute condition and time condition.
 - Specify [Match All Conditions] or [Match Any Condition] to deliver documents.
- 9. In [Do Not Deliver Documents Selected Under Other Delivery Conditions], specify whether to handle documents selected under other delivery conditions.

When this check box is selected, the document processed under other conditions before this condition are removed from the target of this condition. This function allows you to avoid duplication of delivery documents.



"Setting examples of the delivery condition" (P.176)

10. Click [OK].

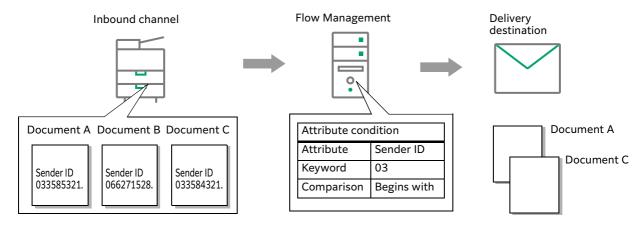
Setting examples of the delivery condition

Attribute condition

Only matched documents are delivered by comparing the specified attribute with other attributes and a keyword.

Example 1:

If you set "Documents beginning with the sender ID 03" for the attribute condition, and receive the following three documents, such as A, B and C by fax, the document A and C match the condition. Under that condition, the document A and C are delivered.

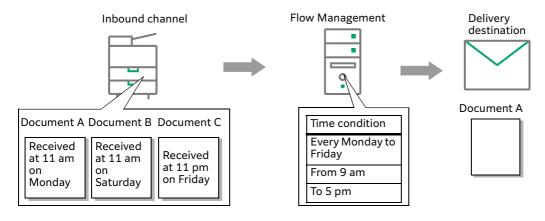


Time condition

Only matched documents are delivered by comparing the document received time or job process time with the specified time.

Example 2:

If you set "Documents received from Monday to Friday from 9 am to 5 pm" for the time condition, and receive the following three documents, such as A, B and C by fax, the document A matches the condition. Under that condition, the document A is delivered.

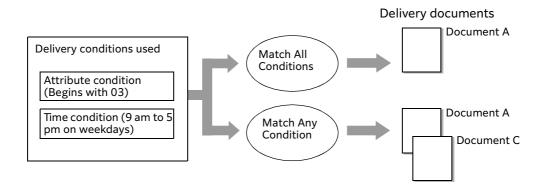


Combination of attribute condition and time condition

You can select [Match All Conditions] or [Match Any Condition] for the combination of the attribute condition and time condition.

Example 3:

When you set both the attribute condition in example 1 and time condition in example 2, and if you select [Match All Conditions], the document A is delivered. If you select [Match Any Condition], the document A and C are delivered.



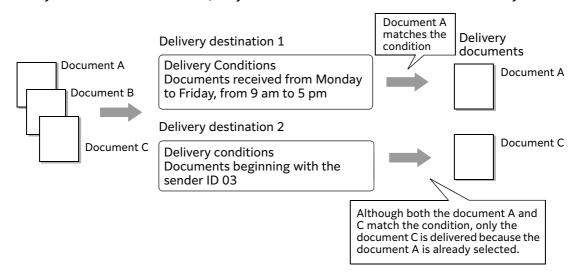
Do not deliver documents selected under other delivery conditions

When setting multiple deliver conditions, you can set not to deliver documents selected under other delivery conditions. The documents preprocessed under other delivery conditions are removed from the target of the current delivery condition.

Example 4:

Set the time condition in example 1 to the delivery destination 1 and set the attribute condition in example 2 to the delivery destination 2, and set the order of the process to the delivery destination 1 and delivery destination 2.

In that case, as the document A matches the condition of delivery destination 1, the document A is delivered in the delivery destination 1. Although the document A and C match the condition of delivery destination 2, the document A is removed from the target because it is already delivered in the delivery destination 1. Therefore, only the document C is delivered in the delivery destination 2.



Deliver documents not matching all conditions

You can set the delivery condition that does not match all conditions preset in [Delivery Conditions]. You cannot set the attribute condition and time condition for this condition.

The delivery destination function with this condition is processed last of all delivery destination functions (or processed just before [Document and Attributes Table Output]).

Setting the [Notification E-mail] Function

Can set to notify the specified users by e-mail. The notification can be set when:

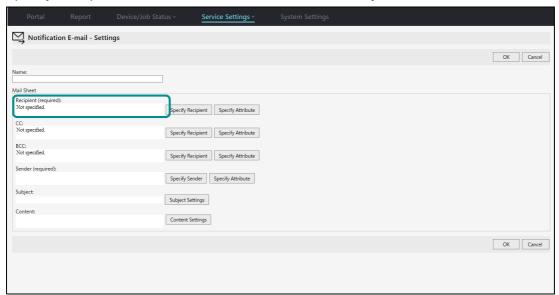
- The interaction mode is required.
- The delivery process is completed.
- An error occurs.

To use this function, you must configure the communication environment, such as SMTP server. The e-mail communication environment is set in [Network Settings] common to ApeosWare Management Suite.



For errors that occur on inbound channel devices, [Date/Time Job Received] is not set due to the events that happen before the receiving of jobs.

- Even if the [Date/Time Job Received] attribute was specified for the error notification feature, it does not process correctly, and errors will not be notified. Please do not set the [Date/Time Job Received] attribute for the error notification feature.
- Blank, tab or line break will not be reflected to the body of the mail when [Enter Text] is selected in mail elements setting page and only blank, tab or line break is entered in the text box. Enter character strings other than blank, tab or line break in the text box.
- $oldsymbol{1}$. Select [Notification E-mail (SMTP)] in one of the following methods.
 - [Add] in [Notification Settings] on the [Edit Processing Method]
 - [Add] in [Completion Notification] on the [Edit Delivery Destination]
 - [Add] on the [Error Notification] tab of the flow settings page
- 2. On the [Notification E-mail Settings] page, enter the function name in [Name].
- 3. Specify [Recipient] of the e-mail. Enter [CC], [BCC], [Subject] and [Content] as necessary.



6- Refer

Setting items ⇒ "Setting the [Send E-mail] Function" (P.152)

4. Click [OK].

Creating Flows Using the Predefined Setting Function

You can create a flow using the combination of several predefined functions on the flow settings page.

What is the Predefined Setting Function?

In Flow Management, the commonly-used functions are combined and predefined. This predefined setting function allows you to omit some or all setting procedures.

The predefined function consists of following options.

- Predefined function of processing method
 - Convert to PDF and Use OCR Result for Document Name
 - Convert to PDF and Split by Blank Pages
 - Convert to PDF and Remove Blank Pages
 - Convert to PDF and Perform Image Correction
 - Convert to XDW and Use OCR Result for Document Name
 - Convert to XDW and Split by Blank Pages
 - Convert to XDW and Remove Blank Pages
 - Convert to XDW and Perform Image Correction
 - Convert to XDW and Attach Original Data
 - Convert to XDW and Paste OCR Data
 - Convert to XDW and Embed OCR Data
- Predefined function of delivery destination
 - Create Scan Document List



For the details of each item, see Help.

Setting Example of the Processing Method

This section describes an example of setting [Convert to PDF and Use OCR Result for Document Name] for the predefined setting function.

Selecting this option adds the following functions automatically to the processing method of the flow.

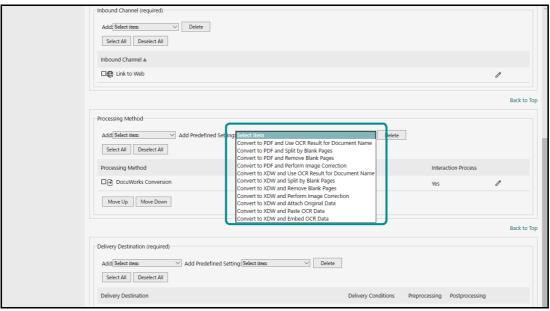
Features	Setting Content
Image Processing	 Function name: "Image Processing" Noise reduction: Yes Auto rotation: Yes Skew correction: Yes
OCR	 Function name: "Page Settings OCR" OCR region: Full page OCR Specify page(s): Full Page OCR for Specified Pages Page: 1
Format Conversion	 Function name: "PDF Conversion" File format: PDF Compression method: No Compression

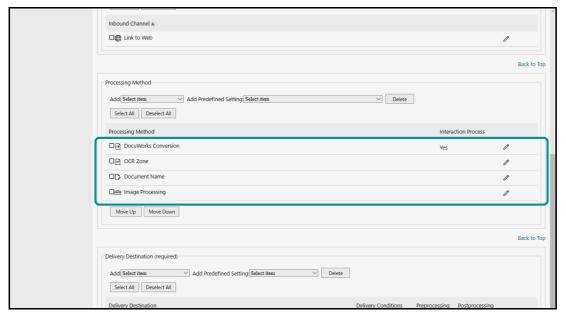
Features	Setting Content
Document name	 Function name: "Document Name" Document name element: {Specified Page OCR Text} in the [OCR] function Delimiter: Hyphen (-) Limit character count: Yes Byte limit: 32

 $oldsymbol{1}$. Display the [Create New Flow] page.



- 2. In [Flow Name], enter the flow name. Enter [Flow Description] as necessary.
- 3. Select the function for the inbound channel from [Add] in [Inbound Channel]. Set each items on the detailed settings page, and then click [OK].
- 4. Select [Convert to PDF and Use OCR Result for Document Name] in [Add from Predefined Settings] of [Processing Method].





The functions set for the predefined setting function are added to the processing method list.

The detailed settings page of the function is not displayed. The function name is assigned automatically.

- 5. Specify the delivery destination function from [Add] in [Delivery Destination]. Set each items on the detailed settings page, and then click [OK].
- **6.** Specify [Error Notification] and [Role Settings] as necessary.
- 7. On the [Create New Flow] page, click [OK].

Setting example of the delivery destination

This section describes an example of setting [Create Scan Document List] in the predefined setting function.

In this option, you can convert the document imported from the device folder to DocuWorks, and save it to the folder as well as output the document attribute to a file in CSV format.

The following functions are added to the delivery destination of the flow.

Features	Setting Content	
Save to Folder	Set the storage location to any, as the detailed settings page is displayed.	
Preprocessing (Format conversion)	The following contents are set automatically. • Function name: "DocuWorks Conversion" • Conversion format: "DocuWorks Document"	

Features	Setting Content
Document and Attributes Table Output	Set the file storage location to any, as the detailed settings page is displayed. The following information is already set in [Column Items].
	HeaderAttribute
	Device namefolder: Model name IPv4 addressfolder: IPv4 address (127.0.0.1) IPv6 addressfolder: IPv6 address (2001:0:0:0:0:0:0:1234) Host namefolder: Host name Folder namefolder: Folder number Result "Normal" Storage locationfolder: Received date and time Storage locationfolder: Received time Document sizefolder: Paper size Document Impressions folder: Number of pages Color modefolder: Compression format Entry typefolder: Entry type Directorysave to folder: Directory Output file namesave to folder: Output file name

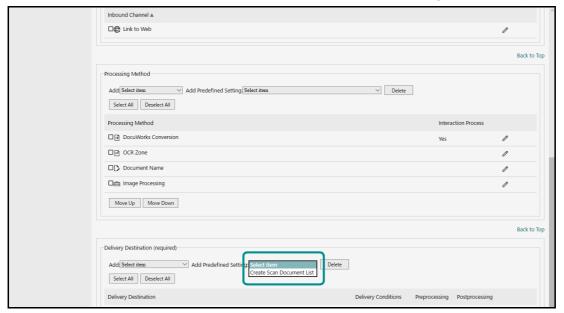
1. Display the [Create New Flow] page.



- 2. In [Flow Name], enter the flow name. Enter [Flow Description] as necessary.
- 3. Select the [Device Folder] function from [Add] in [Inbound Channel]. Set each items on the detailed settings page, and then click [OK].



4. Select [Create Scan Document List] in [Add from Predefined Settings] of [Delivery Destination].



5. Specify the folder type and path to save documents on the [Save to Folder - Folder Save Settings] page, and then click [OK].

Refer

"Setting the [Save to Folder] Function" (P.144)

6. Specify the storage location of the file and the file name to output document attributes on the [Document and Attributes Table Output - Table Output Settings] page, and then click [OK]. Although [Column Items] is set in advance, you can change it.

6- Refe

Refer
"Setting the [Document and Attributes Table Output] Function" (P.168)

- 7. Repeat steps 5 and 6 for the [Device Folder] functions that you have set.

 When input is finished, the [Save to Folder] function set by [Preprocessing] is added into the list of the delivery destination.
- 8. Specify [Error Notification] and [Role Settings] as necessary.
- 9. On the [Create New Flow] page, click [OK].

Enabling or Disabling Flows

You can select enable or disable for the flow to start or stop accepting jobs.



Note

The following are the estimated processing times when multiple flows created in Flow Management Option are selected and then enabled or disabled.

Measurement environment:

- Processor: Intel(R) Core(TM) 2 Duo E8400 (3 GHz)
- Memory: 4 GB

Number of flows	Disabled -> Enabled	Enabled -> Disabled
100	82 sec	20 sec
200	156 sec	47 sec

Enabling the Flow

Can enable the flow. When you enable the flow, jobs are accepted.

Since a new flow is created with the [Disabled] status, to start accepting jobs, you must enable the flow by this operation.

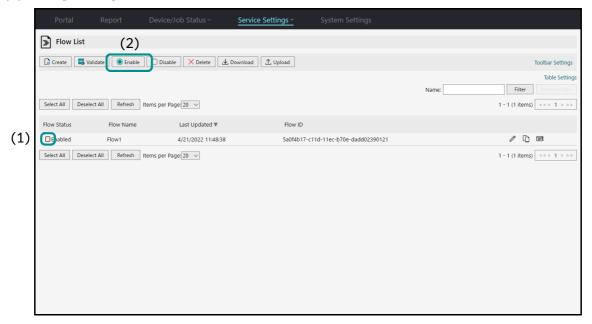


- When enabling flow with about twenty thousand inbound channels at a time, session timeout may occur during enabling process.
- In that case, "Although the flow was enabled, the operation could not be completed due to an error. Unable to unlock flow." will be recorded in the activity log.
- In addition, the flow in enabling process is displayed as [Partially Disabled] in the [Flow List] screen. It will be displayed as [Enabled] when enabling process is completed. Please click [Refresh] on the [Flow List] screen to check the status of flow.
- If an uninstalled function is set to the flow, you cannot enable the flow.



"Flow Status" (P.18)

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Perform the following steps.
 - (1) Select the check box for the flow to be enabled.
 - (2) Click [Enable].



3. On the [Confirm Enable Flow] page, confirm the flow to be enabled, and click [OK]. The flow is enabled.

Disabling the Flow

Can disable the flow. When you disable the flow, jobs are not accepted and job operations are stopped. The stopped jobs cannot be restarted.

To edit or delete the flow, you must disable the flow first by this operation.

If there is a job with the [In Queue] status when you disable the flow, entry acceptance stops, however, the job process continues. In that case, the flow status becomes [Partially Disabled]. To change the status from [Partially Disabled] to [Disabled], wait for the [In Queue] job status to be changed to in progress, or instruct to disable the flow again after the [In Queue] job disappears.



- If there is a job in the [In Queue] status before disabling the flow, the job process is continued.
- If there is an accepting job during the disabling process, the job may be accepted after disabling the flow depending on the timing. In that case, you cannot edit the flow. To edit the flow, enable the flow and wait for the job to be completed, or stop the job in the [In Queue] status.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Perform the following steps.
 - (1) Select the check box for the flow to be disabled.

(2) Click [Disable].



3. On the [Confirm Disable Flow] page, confirm the flow to be disabled, and click [OK]. The flow is disabled.

Operating the Flow

You can operate the existing flow such as edit, delete and copy.



Do not edit or copy the flows during the execution of flows with interaction mode or preview in Flow Management Option. The flows may not be editable or jobs may complete with error. When this occurs, restart the ApeosWare Management Suite Flow Management service and run the job completed with error again.

Editing the Flow

Can edit the settings of the flow. To edit the flow, the following conditions must be met.

- There are no jobs with the [In Queue], [In Progress] or [Suspended] status.
- The flow is disabled.

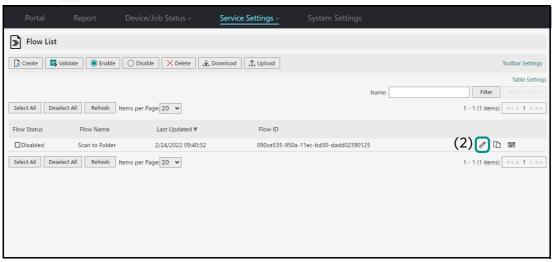


While another flow is running, you can edit the flow.

- $oldsymbol{1}$. Before editing the flow, confirm the job status in the following procedure.
 - (1) From the menu, select [Service Settings] > [Flow Management] > [Job List].
 - (2) Check if a job exists in the flow to be edited. If there is a job with the [In Queue], [In Progress] or [Suspended] status, wait for the job to be completed, or stop the job temporarily. Enter the flow name in [Flow Name] and click [Filter], only the target flow jobs are displayed.



- 2. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 3. Perform the following steps.
 - (1) When the status of the flow to be edited is [Enabled], select the check box for the flow, and click [Disable]. Click [OK] on the [Confirm Disable Flow] page.
 - (2) Click / (Edit) of the flow to edit.

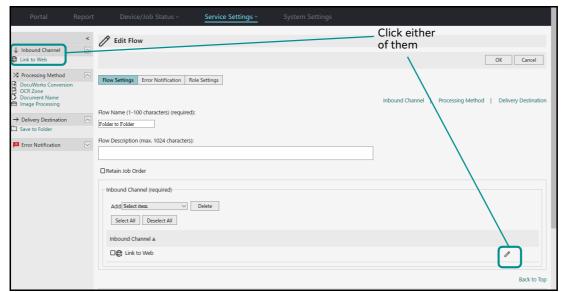


The [Edit Flow] page appears.

- **4.** To add the function, perform the following procedure.
 - (1) Select the function to be added from [Add] in [Inbound Channel], [Processing Method], [Delivery Destination] or [Error Notification].
 - (2) Set the items on the detailed settings page, and click [OK].
 - 6-3 Refer

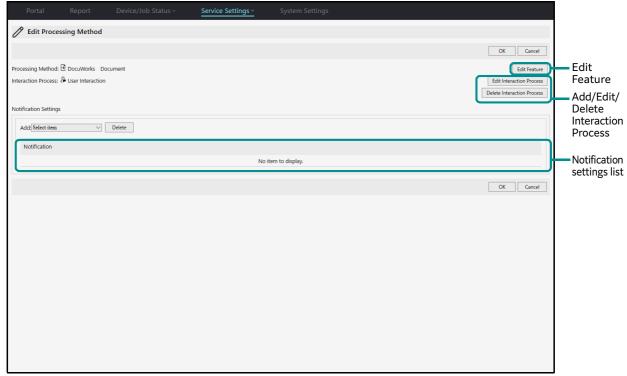
"3 Setting the Details of the Function" (P.93)

- **5.** To edit the function, perform the following procedure.
 - (1) Click (Edit) of the function to be edited in the Inbound Channel, Processing Method, Delivery Destination or Error Notification list. or click the function in the side bar.



- (2) For the selected function, perform the following procedure.
- When selecting the inbound channel or error notification function Set the items on the detailed settings page.

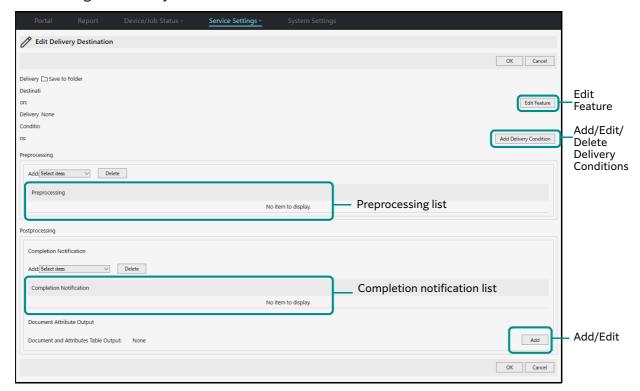
■ When selecting the processing method function



- Changing the content of the feature Click [Edit Feature].
- Changing the interaction process
 Click [Add Interaction Process], [Add Interaction Process] or [Delete Interaction Process].
 You can add only one [Interaction Process] function to one flow. When the interaction process has already been set for another processing method function, you cannot add an interaction process function.
- Changing the notification process
 To add, select [Notification E-mail (SMTP)] from [Add] in the completion notification list.
 The [Notification Settings] function can be added only when the [Interaction Process] function is added.
 - To edit the completion notification, click // (Edit) of the function.

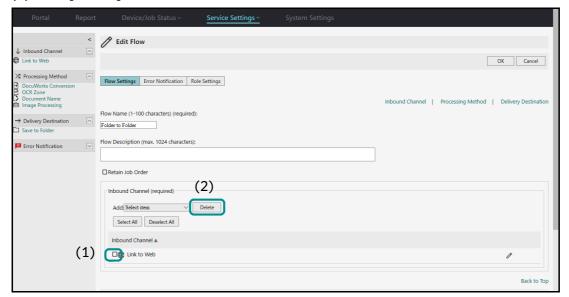
 To delete the notification settings, select the function in the list, and then click [Delete].

■ When selecting the delivery destination function



- Changing the content of the feature Click [Edit Feature].
- Changing delivery conditions Click [Add Delivery Condition], [Edit Delivery Condition] or [Delete Delivery Condition].
- Changing the preprocessing
 To add the preprocessing, select [Document Name] or [Format Conversion] from [Add] in
 the preprocessing list.
 - To edit the completion notification, click \mathcal{O} (Edit) of the function. To delete the preprocessing, select the function in the list, and then click [Delete].
- Changing the completion notifications
 - To add the completion notification, select [Notification E-mail (SMTP)] from [Add] in the completion notification list.
 - To edit the completion notification, click \mathcal{O} (Edit) of the function.
 - To delete the completion notification, select the function in the list, and then click [Delete].
- Changing [Document and Attributes Table Output] Function Click [Add], [Edit] or [Delete] in [Document Attribute Output].
- **6.** To delete the function, perform the following procedure.
 - (1) Select the check box for the function to be deleted in the Inbound Channel, Processing Method, Delivery Destination or Error Notification list.

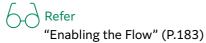
(2) Click [Delete].



7. After editing the flow, click [OK]. The selected flow is changed.



To start the edited flow process, enable the flow.



Device Body Settings or Device Information Update

In the flow including [Folder] feature and [Printer Output] feature, when changing the device information registered in ApeosWare Management Suite, you are required to reflect the change.

When changing the device body settings:

The device settings that need to be updated to the flow after change are shown below:

Settings	Features Included in the Flow			
Settings	[Folder] Feature	[Printer Output] Feature		
Device Name	Required to update	Required to update		
Device folder number		Not required		
Device folder name				
Communication Protocol*1				

- *1 Changes of the communication protocol include the following cases:
 - Switch between HTTP and HTTPS
 - Change of the SSL port number
 - Change of the SOAP port number

To update the device status whose settings have been changed, select [Device/Job Status] > [Device Status].

reselect the device on the [Edit Flow].



"3 Device Management" > "Settings and Confirmation in a Web Browser" > "Device Status" in the

"Features Guide".

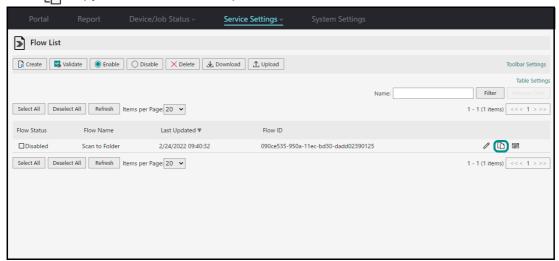
When changing the device information:

If changing the device name or the IP address, or deleting the device registered on [Device Management] of ApeosWare Management Suite, reselect the device on the [Edit Flow].

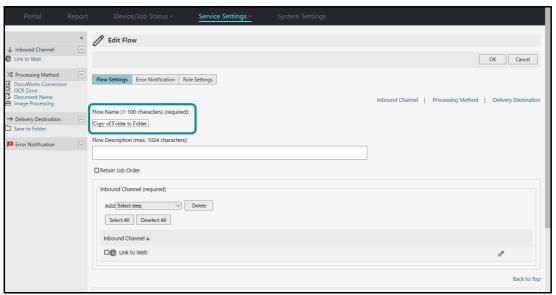
Copying the Flow

Can create a new flow by copying the existing flow. The status of the newly created flow is [Disabled].

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Click (Copy) of the flow to be copied.



3. Change [Flow Name], and edit the functions as necessary.





Step 4 and later in "Editing the Flow" (P.185)

4. Click [OK].

The copied flow is created.



To start the copied flow process, enable the flow.



"Enabling the Flow" (P.183)

Deleting the Flow

Can delete the flow. To delete the flow, the following conditions must be met.

- No jobs exist.
- No job histories (deleted or completed jobs) exist.
- The flow is disabled.
- $oldsymbol{1}$. Before deleting the flow, check if jobs and job histories exist in the following procedure.
 - (1) From the menu, select [Service Settings] > [Flow Management] > [Job List].
 - (2) In the Job List and Job History list, confirm that no jobs and job histories exist in the flow to be deleted.
 - Enter the flow name in [Flow Name] and click [Filter], only the target flow jobs are displayed.
 - (3) When any job is displayed, wait for the job to be completed, or delete all jobs.
 - Refer
 - "Deleting Jobs" (P.203)
 - "Deleting Job Histories" (P.207)
- 2. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 3. Perform the following steps.
 - (1) Select the check box for the flow to be deleted.
 - (2) When the status of the flow to be deleted is [Enabled], click [Disable]. Click [OK] on the [Confirm Disable Flow] page.
 - (3) Click [Delete].



4. On the [Delete Flow] page, click [Delete]. The flow is deleted.

Downloading Flows

Can download the flows created in Flow Management to the specified folder.



- If a large amount of items is set in the inbound channel of the flows to be downloaded, the download may fail due to the session time out. In that case, decrease the number of flows, and then download the flows again.
- The following are the estimated processing times when multiple flows created in Flow Management Option are selected and downloaded to a specified folder.

Measurement environment:

- Processor: Intel(R) Core(TM) 2 Duo E8400 (3 GHz)
- Memory: 4 GB memory: 4 GB

Number of flows	Download time
100	177 sec
200	327 sec

However, the time may differ depending on the number of inbound channels or set features in one flow.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Perform the following steps.
 - (1) Select the check boxes for the flows to be downloaded.
 - (2) Click [Download].



- 3. On the [Download Flow] page, confirm the flow to be downloaded, and click [Download].
- 4. In the dialog box to confirm that the file is downloaded, click [Save].
- 5. In the [Save As] dialog box, specify the storage location of the file and file name to be downloaded, and then click [Save].

The download files are stored in the specified folder.

6. Click [Back].

Uploading the Flow

Can upload the flow in Flow Management. The status of the uploaded flow is [Disabled]. Files with an extension "awfm" can be uploaded.



- If you enable the flow right after uploading it, the following error message will appear.
- "The parameter is incorrect. Logical printer "{Printer Name}" does not exist."
- To avoid the situation, please re-configure [Output Device] on the [Print/Fax Output Settings] page of the [Printer Output] feature.
- The following are the estimated times for completing the upload of a file containing multiple flows that is downloaded from Flow Management Option.
 - Measurement environment:
 - Processor: Intel(R) Core(TM) 2 Duo E8400 (3 GHz)
 - Memory: 4 GB memory: 4 GB

Number of flows	Upload time
100	39 sec
200	83 sec

However, the time may differ depending on the number of inbound channels or set features in one flow.

Notes When Uploading

- The following files cannot be uploaded.
 - Files downloaded by Flow Management with a different system ID.



A system ID is an ID which is assigned automatically to encrypt flows while Flow Management is installed. When you install Flow Management to another computer or reinstall Flow Management, a new system ID is assigned.

Therefore, the flow created in a different computer, or the flow before reinstallation cannot be uploaded as it is. For uploading, refer to "Uploading the Flow to Flow Management with a Different System ID" (P.195).

- When the version of Flow Management included in the file to be uploaded is newer than the currently used version.
- If uploading the flow downloaded from another ApeosWare Management Suite system, the [Role Settings] user set to the flow will be changed. In this case, change the [Role Settings] after uploading the flow.
- Files opened and edited on your computer after the file is downloaded by Flow Management after downloading the file using Flow Management, and doing direct editing on the PC, even if the file can be uploaded, proper operation cannot be guaranteed.
- When "(Flow) Owner", "User (Job Registration and Operation)", "User (Job Registration)", which are users specified in the flow, do not exist in the upload destination, these users will be deleted from the flow during upload.
- If unavailable features have been set to the flow, after uploading the flow, delete the features at the [Edit Flow] screen.
- If the total number of features set to Processing Method, Delivery Destination, and Error Notification exceed the warning number or maximum number, after uploading the flow, reduce the number of settings for the features at the [Edit Flow] screen.
- Flows that are not created by Flow Management can be uploaded, downloaded, deleted, enabled or disabled, but apart from these functions, other functions like copy, edit, display properties, validate, are not available.

- Following output formats are no longer available for [OmniPage(R) OCR] function:
 - Microsoft[®] Word 97, Word 2000 and Word XP document (.doc)
 - Microsoft[®] Excel[®] 97 and Excel 2000 document (.xls)
 - Microsoft[®] PowerPoint[®] 97 document (.ppt)
 - Corel[®] WordPerfect[®] 8 document

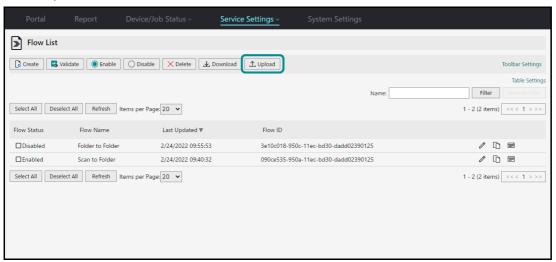
Therefore if any flows created with old versions of Flow Management are in these formats, the settings are required to be changed on the [Edit Flow] screen after uploading. Other functions using the attribute value of the output format are also required to be changed along with the [OmniPage(R) OCR] function.

- When changing the device body settings or the device information registered in ApeosWare Management Suite after downloading the flow including the [Folder] feature or the [Printer Output] feature, you, editing the flow that has been changed, are required to reflect the change. Refer to "Device Body Settings or Device Information Update" (P.189) for details.
- When downloading the flow containing the [Device Folder] function or [Printer Output] function, and using the flow after uploading it to a different environment, edit the uploaded flow so as to allow operating of devices in the upload destination.
 Refer to "Device Body Settings or Device Information Update" (P.189) for details.



The downloaded file name of the flow may become "awfm.zip" depending on your Web browser. Files with an extension other than "awfm" cannot be uploaded. In that case, you need to change the file extension to "awfm".

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Click [Upload].



- $oldsymbol{3.}$ On the [Upload Flow] page, perform the following procedure.
 - (1) Click the button to select a file.
 - (2) Select a file with the extension "awfm", and click [Open].
 - (3) Confirm the file to be uploaded, and click [Upload]. The flow is uploaded.
- 4. Confirm the settings of the uploaded flow, and then click [Back].

Uploading the Flow to Flow Management with a Different System ID

In the following cases, you may upload the existing flow to Flow Management with a different system

- The reinstallation of Flow Management is required due to some trouble, and you use the downloaded flow after reinstallation.
- In a server redundancy configuration, you upload the flow created in the main server to the sub
- You share the flow among multiple servers.

In those cases, you cannot upload the flow by the normal operation. To upload the flow, you must share the system ID between the flow creation environment and the upload destination environment. If the [Role Settings] target users set to the flow are not in the Flow Management upload destination, only the information of the user who uploaded the flow and the Apeos Admin user will be set to the flow after upload.

In addition, if you upload the flow with the [Device Folder] or [Printer Output] function to another Flow Management server, when the flow verified, an error may be displayed or the device you don't wish may print. To avoid these problems, it is necessary to back up the information of the device and restore it to the upload server.

If the device information is not restored, the display of job processing and properties will be based on the information as described in the flow after upload. You can import device information by selecting [Folder] of [Inbound Channel] from the [Edit Flow] screen, or [Select Device] of [Printer Output] from [Delivery Destination].

Even if the validation error occurs, processing jobs, editing flows and displaying properties can be executed properly.

The following shows the procedure for uploading the flow to Flow Management with a different system ID.



For uploading the flow to other computers, you cannot upload the flow to the environment in which Flow Management has already been installed. You must install Flow Management in the upload destination.

 $oldsymbol{1}$. Download the shared system ID file for Flow Management where the flow was created.



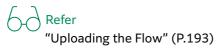
Refer
"Downloading the Shared System ID File" (P.67)

- 2. Perform the following procedure as necessary.
 - (1) Back up the device information on the PC used to create the flow.
 - (2) Restore the device information backed up at (1) to the PC using the flow.



Backup and Restoration ⇒"12 Maintenance" of "Features Guide"

- 3. Copy the downloaded shared system ID file to the computer on which the flow is used.
- 4. Reinstall Flow Management on the computer on which the flow is used. When the screen to specify whether to use the shared system ID is displayed during installation, specify the file copied in Step 3.
- 5. Upload the flow.



Validating the Flow

Flow Management validates whether the functions set to the flow are available, and displays the result in a list.

When creating or editing a flow, or an error occurs in a job, confirm that the functions set to the flow are available by using this operation.



When you upload the flow for which the [Device Folder] or [Printer Output] function is set to another Flow Management server, and you validate the flow, an error may be displayed. When this happens, perform any of the following operations.

- Back up the database of user and device information in the Flow Management server where the flow was created, and restore the data to the upload destination server.
- Edit or delete the [Device Folder] or [Printer Output] function of the error flow.
- · Validate the flow in the downloaded server.

Even if a validation error occurs, processing jobs, editing a flow and displaying properties can be performed without problems.

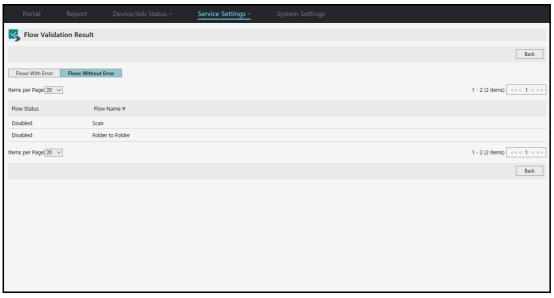


Backup and Restoration ⇒ "12 Maintenance" of "Features Guide"

- 1. From the menu, select [Service Settings] > [Flow Management] > [Flow List].
- 2. Perform the following steps.
 - (1) Select the check boxes for the flows to be validated.
 - (2) Click [Validate].



The [Flow Validation Result] page appears.



On the [Flow Validation Result] page, [Flows With Error] and [Flows Without Error] are displayed on a different page. On the [Flows With Error] page, the error details are displayed.

4 Job Operation

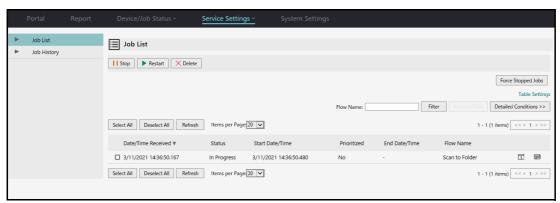
Things to Know before Operating Jobs

This section describes the page structure of the job list and the relationship between the job status and operation.

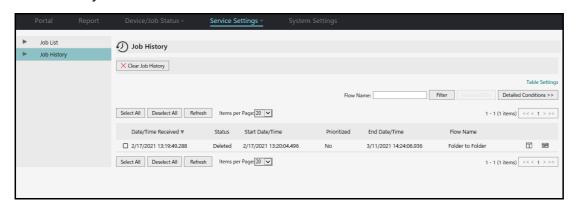
Job List Page

There are two types of job list pages; one is the operable job list page and the other is the job history list page.

• Operable job list



• Job history list



The jobs with the [In Queue], [Stopped], [Force Stopped], [In Progress], [Suspended] or [Completed With Error] status are displayed in the operable job list.

The jobs with the [Completed], [Deleted] or [Force Deleted] status are displayed in the job history list. Only the jobs for which the logged in user is set to the owner are displayed on the job list page. When you log in as Apeos_Admin user, all jobs are displayed.



Job Statuses and Available Operations

Can prioritize, stop, force stopped, restart or delete jobs, and retrieve the original document. The available operations depend on the status of the job.

O: Allowed

-: Not allowed

	Job Operation					
Job Status	Prioritize	Stopped	Force Stopped ^{*2}	Restart	Delete	Downloading Original Documents
In Queue	0*1	0	0	-	0	-
Stopped	-	-	-	0	0	0
In Progress	-	0	0	-	0	-
Suspended	-	-	0	-	0	-
Completed with error	-	-	-	0	0	0
Normal finish	-	-	-	-	-	O *3

^{*1} Once you prioritize a job, you cannot prioritize the job again.

There are the following restrictions to operate jobs.

- Only the jobs for which the logged in user is set to the owner can be operated.
- During status transition, you may not perform the operation.
- Since the job status on the list page is displayed on a Web browser, the status of the job in the list may different from that on the Flow Management server. When the Flow Management server receives the instruction to operate a job, and the job status is not ready, the operation results in an error.

For example, when the Flow Management server receives the instruction to prioritize a job, and the job is already executed, the operation results in an error.

In addition, the job completed with an error in the Flow Management server may appear on the job list page as a job [In Progress]. In that case, if you give an instruction to restart the job, the job is not restarted.

• Multiple users try to execute a single job at the same time, the first instruction accepted by Flow Management is executed. The other instructions are not executed.



Job Owner⇒"Roles of Flow Management" (P.38)

^{*2} This can be performed by only Apeos_Admin user.

^{*3} This cannot be performed when the original document is deleted after the retention period.

Operating Jobs

You can operate the flow job such as prioritizing, stopping, restarting and deleting jobs.

Prioritizing Jobs

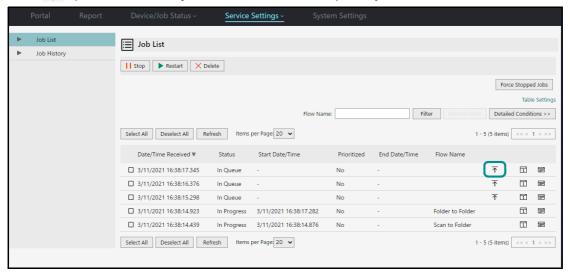
Can give an instruction to prioritize a job. The job to which the priority is given is executed first in other normal jobs.

Once a job is prioritized, the priority is not released until the job completes successfully. For example, even if the job completes with an error after you prioritize the job, when you restart the job, the job is executed preferentially.

In this operation, the jobs with the [In Queue] status are targeted.



- The job to which the priority is given is executed first regardless of the [Retain Job Order] settings on the flow settings page. However, if there is a job to which the priority is given, the job is executed after the first priority job is executed.
- The job prioritizing is a function that prioritizes and starts the job in queue without effect of other job statuses. This is not a function to output the results faster than other jobs.
- $oldsymbol{1}$. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Click $\overline{\uparrow}$ (prioritize) of the job to be executed on a priority basis.



- 3. On the [Prioritize Job] page, click [Prioritize]. The selected job is prioritized.
- 4. After the operation result is displayed, click [OK].



This operation can also be performed by clicking \blacksquare (Property) in the job list, and then clicking [Prioritize] on the [Properties] page.

Stopping Jobs

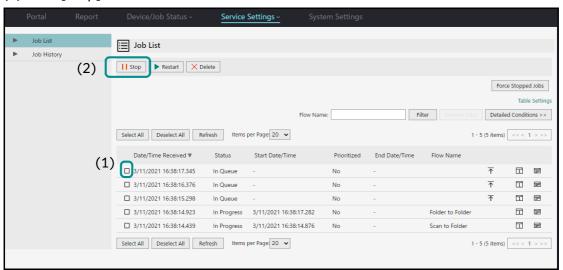
Can stop the job process. The stopped job is removed from the waiting list, and no operation is performed until a restart is instructed.

In this operation, the jobs with the [In Queue] and [In Progress] statuses are targeted.



The stopped job is overtaken by the subsequent jobs regardless of the [Retain Job Order] settings on the flow settings page.

- $oxed{1}$. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Perform the following steps.
 - (1) Select the check box for the job to be stopped.
 - (2) Click [Stop].



- 3. On the [Jobs Stopped] page, click [Stop]. The selected job is stopped.
- 4. After the operation result is displayed, click [OK].

Forcibly Stopping Jobs

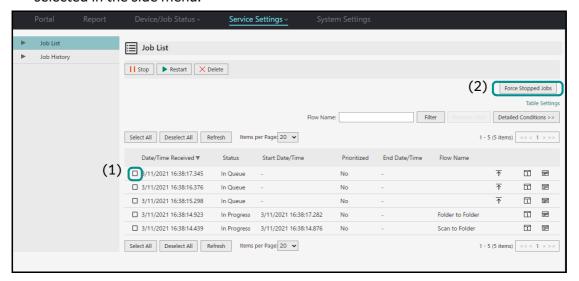
Can stop the job in progress or in queue forcibly. Only Apeos_Admin user can perform this operation. The force stopped job becomes the [Force Stopped] status. The job during the delete process becomes the [Force Deleted] status. These jobs are handled as the [Stopped] job or [Deleted] job. In this operation, the jobs with the [In Queue], [In Progress] and [Suspended] statuses are targeted.



You must perform this operation for emergency use only when an error occurs such as the job status is not changed for a long time, or when you stop forcibly the uncontrolled jobs in the waiting list.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Perform the following steps.
 - (1) Select the check box for the job to be stopped forcibly.

(2) Click [Force Stopped Jobs]. [Force Stopped Jobs] is displayed only when you log in as Apeos_Admin user and [Job List] is selected in the side menu.



- 3. On the [Force Stopped Jobs] page, click [Force Stopped Jobs]. The selected job is stopped.
- 4. After the operation result is displayed, click [OK].

Restarting Jobs

Can restart the stopped job or completed with errors job.

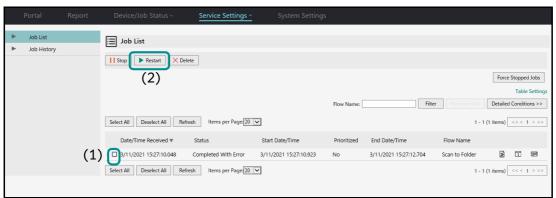
The stopped job is restarted from the beginning of the processing. For the job completed with errors, you can select whether to restart from the beginning of the processing or restart from the unprocessed operation.

In this operation, the jobs with the [Stopped] and [Completed With Error] statuses are targeted.

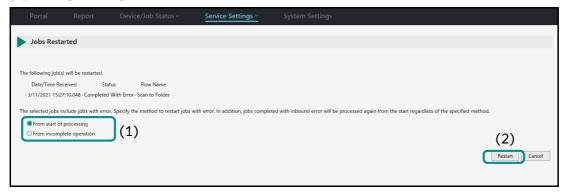


The restarted job is processed regardless of the [Retain Job Order] settings on the flow settings page.

- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Perform the following steps.
 - (1) Select the check box for the job to be restarted.
 - (2) Click [Restart].



- 3. Perform the following steps.
 - (1) Select whether to restart from the beginning of the processing or restart from the unprocessed operation when a job with the [Completed With Error] status is included in the specified job.
 - (2) Click [Restart].



The selected job is restarted.

4. After the operation result is displayed, click [OK].

Deleting Jobs

Deletes a job.

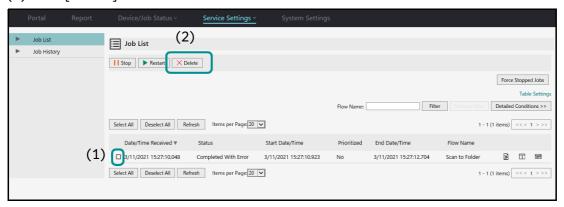
The deleted job is removed from the job list, and cannot be performed. The job is retained for a certain period, and then deleted from Flow Management.

In this operation, the jobs with the [In Queue], [Stopped], [Force Stopped], [In Progress], [Suspended] and [Completed With Error] statuses are targeted.

Refer

About Retention Period of Jobs ⇒ "Setting the Retention Period for the Completed or Deleted Jobs" (P.62)

- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Perform the following steps.
 - (1) Select the check box for the job to be deleted.
 - (2) Click [Delete].



- 3. On the [Jobs Deleted] page, click [Delete]. The selected job is deleted.
- 4. After the operation result is displayed, click [OK].

Downloading Original Document

Can download the original document to the folder you specified.

In this operation, the jobs with the [Stopped], [Force Stopped], [Completed With Error] and [Completed] statuses are targeted.

The original document is downloaded as a compressed file in zip format. You can set the compressed file name. The original document file name before compression becomes the file name stored in the database, or becomes the downloaded date and time if the file is not stored.

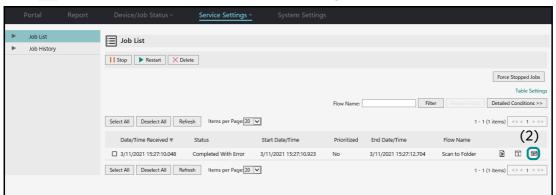
Example: When the original document is downloaded at 13:50 on October 19, 2020. 202010191350.tif



When the original document is deleted after the retention period, you cannot perform [Retrieve Original Document].



- "Setting the Retention Period for the Completed or Deleted Jobs" (P.62)
- "Original document retrieval tool" (P.342)
- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Click (Properties) of the job to download the original document.



3. Click [Retrieve Original Document].



- 4. On the [Retrieve Original Document] page, confirm the settings, and click [Download].
- 5. In the dialog box to confirm that the file is downloaded, click [Save].

6. In the [Save As] dialog box, specify the storage location of the file and file name to be downloaded, and then click [Save].

The original document file is saved to the specified location.

7. Click [Back].

Displaying Details of Jobs Completed with Errors

When a job is completed with an error, you can display the job details (process histories), and find out which function caused the error.

After removing the error cause, you can restart the job completed with the error.



• The job detailed information is also checked by the operation log file. The operation log file is created in the following location.

Storage Location: {destination folder}/Data/Logs/FM/awfm-geronimo

File Name: AWFM-system-{year-month-day}.log

Specify {destination folder} when installing. It goes by default to "C:\FUJIFILM\ApeosWare MS".

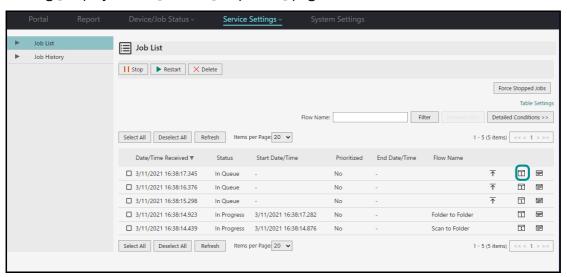
• Messages in the [Job Details] page are displayed not in the language specified in [Language], but in the language of the OS (specified in the system locale or Language for non-Unicode programs) of the Flow Management Server.



"Features Guide Flow Management Option Messages"

- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. Click ☐ (Details) of the job to be confirmed.

 The [Job Details] page can also be displayed by clicking ☐ (Property) in the job to check, and then clicking [Display Details] on the [Properties] page.



The [Job Details] page appears.

Confirm the settings, and remove the error cause.

- 3. Click [Back].
- 4. To restart the job, open the [Properties] page and click [Restart].



Operating Job Histories

The completed or deleted jobs are retained as job history for a certain period. You can check these jobs in the job history list.

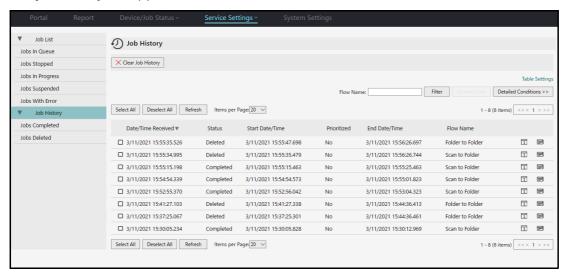
Confirming the Job History

Can display the job history list. In this list, you can confirm the job details, or download the original document for the completed job.

After the retention period has expired, jobs in the job history list are deleted automatically from Flow Management.



- "Setting the Retention Period for the Completed or Deleted Jobs" (P.62)
- "Downloading Original Document" (P.204)
- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. From the side menu, select [Job History]. The job history list appears.



3. To check the details, or download the original document of the [Completed] job, click [(Properties) of the job in the list.



Deleting Job Histories

Can delete the specified from the job histories to not to view the job.

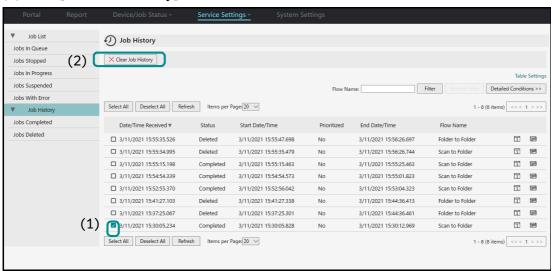
The job deleted from the list, is also deleted from Flow Management after the period specified in [Clear Job History Settings] of Flow Management Environment Settings elapsed.

You cannot undo this operation.



"Setting the Retention Period for the Completed or Deleted Jobs" (P.62)

- 1. From the menu, select [Service Settings] > [Flow Management] > [Job List].
- 2. From the side menu, select [Job History].
- 3. Perform the following steps.
 - (1) Select the check boxes for the jobs you delete the histories.
 - (2) Click [Clear Job History].



- 4. On the [Clear Job History] page, click [Clear Job History]. The selected jobs are deleted from the list.
- **5.** After the operation result is displayed, click [OK].

Operating the Job with the [Suspended] Status

The flow job with the interaction process stops and the status changes to [Suspended] before or during processing. You can preview the document and change the attributes in this status.

Displaying the Job List

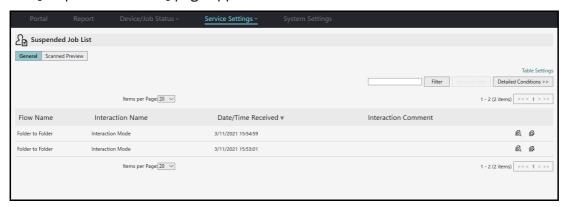
The job with the [Suspended] status is displayed on the [Suspended Job List] page.

On the [Suspended Job List] page, only the jobs for which the logged in user is set to the owner are displayed. When you log in as Apeos_Admin user, all jobs are displayed.



- Job Owner

 "Roles of Flow Management" (P.38)
- Job with the [Suspended] Status ⇒ "About Interaction Mode" (P.24)
- 1. From the menu, select [Service Settings] > [Flow Management] > [Suspended Job List]. The [Suspended Job List] page appears.



The tab details are displayed in the table below.

Tab	Displayed Job
General	The [Suspended] status jobs are displayed for the flow jobs with the [Interaction Process] function.
Scanned Preview	The [Suspended] status jobs with [Preview] are displayed for the flow jobs for which the [Link to Web Applications] function is set.

- 2. On the [Suspended Job List] page, you can perform the following procedure.
- For confirming the job details
 - Relation Click (Go to View Suspended Jobs page).

The [View Suspended Jobs] page appears.

- For changing the job details and restarting (or deleting) the job
 - E Click (Go to Operate Suspended Jobs page).

The [Operate Suspended Jobs] page appears.

Viewing and Restarting the Job

Can check the job with the [Suspended] status, and restart the process.

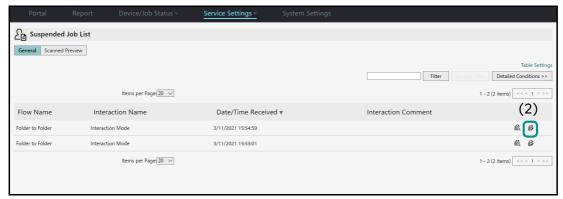
When notification settings are configured, and the job with the [Suspended] status occurs, an e-mail is sent.

Only TIFF format with multiple pages can be previewed.



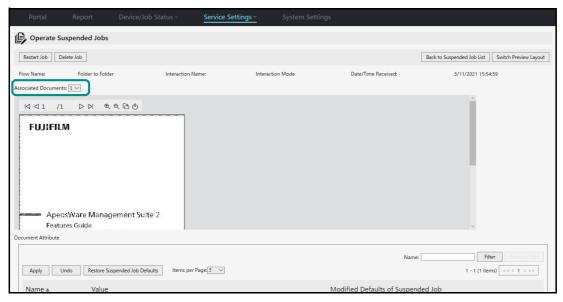
"Formats Previewed in Interaction Mode" (P.334)

- $oldsymbol{1}$. Display the [Operate Suspended Jobs] page in one of the following steps.
- For selecting from the menu
 - (1) From the menu, select [Service Settings] > [Flow Management] > [Suspended Job List].
 - (2) Click (Go to Operate Suspended Jobs page) of the job to perform the interaction mode.



- For clicking URL in the notification e-mail
 - When Processing Notification set, once the job status has became [Suspended], you receive an email. Clicking the URL in the e-mail displays the [Operate Suspended Jobs] page.
 - When you are required to log in to ApeosWare Management Suite, the login page is displayed first.
- 2. When multiple documents are included in the job, select the document to be displayed from [Associated Documents].
 - When you specify to split documents in the page processing, multiple documents are included in a single job.

In the [Associated Documents] drop-down list box, a temporary name assigned by Flow management may be displayed. (Ex: "00001", "00002")



3. Review the previewed document.

If [Switch Preview Layout] is clicked, the display layout of the document view and attribute will switch between a portrait and landscape.



"Operating the Previewed Image" (P.211)

- 4. Confirm the document attributes.

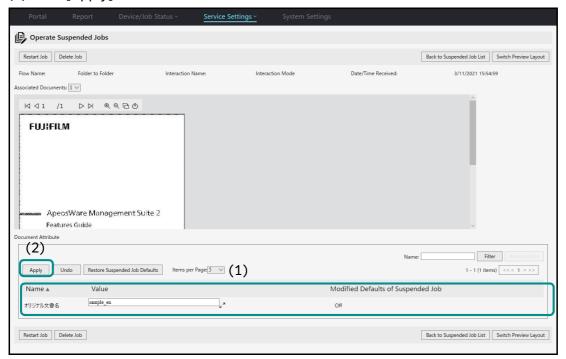
 The [Document Attribute to Handle] added in the [Interaction Process] function is displayed in [Document Attribute].
- 5. To edit the document attribute, perform the following procedure.

 You can edit only the document attribute set to [Read/Write] in [Document Attribute to Handle] of the [Interaction Process] function.

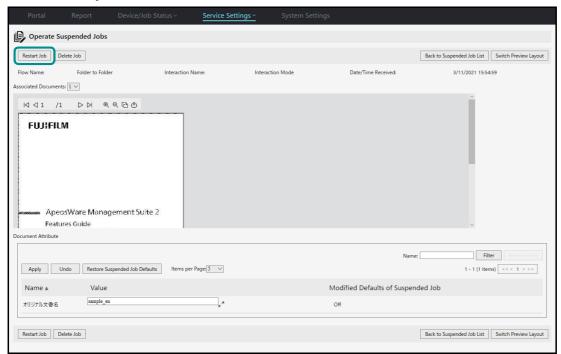
When the attribute value exceeds 512 characters, even if you set [Read/Write] on the details setting page of the [Interaction Process] function, the document attribute becomes read only.

- (1) In [Value], enter a new document attribute.

 Point the cursor to the bottom right corner of the text box (Drag to Change Size) and drag the cursor to change the size of the text box.
- (2) Click [Apply].



6. To restart the job, click [Restart Job].



The operation of the job is started.

Operating the Previewed Image

On the [View Suspended Jobs] and [Operate Suspended Jobs] pages, the previewed document is displayed. Only TIFF format with multiple pages can be previewed.



If you increase, decrease or rotate the previewed document on the [View Suspended Jobs] or [Operate Suspended Jobs] page, the result is effective only in the preview area. The result is not applied to the document during delivery.

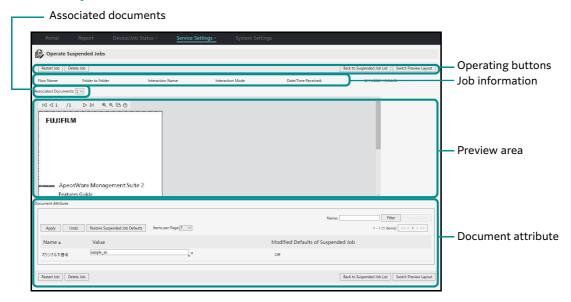


"Formats Previewed in Interaction Mode" (P.334)

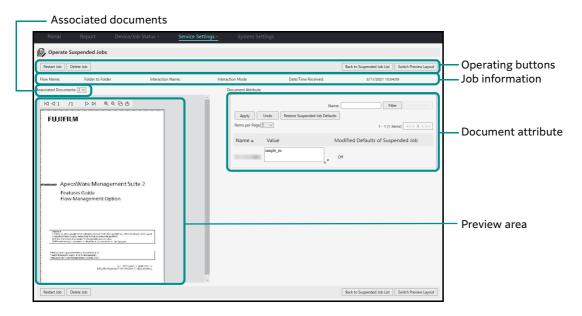
Main Structure of the Screen

The [View Suspended Jobs] or [Operate Suspended Jobs] page consists of the following parts. If [Switch Preview Layout] is clicked, the display layout of the document view and attribute will switch between a portrait and landscape.

Portrait layout



Landscape layout



Screen items

The following explains the menu items and operating buttons.

Items	Descriptions			
Operating buttons	Restart job	This is displayed only on the [Operate Suspended Jobs] page. Restarts the job operation.		
	Delete job	This is displayed only on the [Operate Suspended Jobs] page. Deletes a job.		
	Operate suspended jobs	The [View Suspended Jobs] page appears. Move to the [Operate Suspended Jobs] page and you can restart processing, cancel the job, or edit the attribute value.		
	Return to the suspended job list	Return to the [Suspended Job List] page.		
	Switch preview layout	The display layout of the document view and document attribute will switch between portrait and landscape.		
Job information	The flow name and function name for the job, and the job received date and time are displayed.			
Associated documents	When multiple documents are included in the job, select the document to be previewed.			
Preview area	The image of the document is displayed. The following operations can be performed.			
	⟨ (First page)	Displays the first page.		
	⟨ (Previous page)	Displays the previous page.		
	n/m	This is the current page number/total pages		
	○ (Next page)	Displays the next page.		
	▷ (Last page)	Displays the last page.		
	@ (Zoom in)	Increases the image.		
	Q (Zoom out)	Decreases the image.		
	(Rotate)	Rotates the image clockwise 90 degrees at a time.		
	也 (Reset zoom)	Discards rotation, zooming, and scaling settings and displays		
		the image at the default magnification. The default magnification is [Magnification] set in the [Interaction		
		Process] function.		
Document	The attributes added by [De	ocument Attribute to Handle] of the [Interaction Process]		
attributes	function are displayed.			
	You can edit the attribute value on the [Operate Suspended Jobs] page. However, the only			
	attributes that can be edited are those for which [Read/Write] is set.			
	When multiple documents are included in the job ^{*1} , switch between documents with			
	[Associated Documents] and edit the attributes for each document.			
	The zone size may be edited by dragging 4, the [Value] text box . When displaying OCR			
	results or relatively long text, the whole text can be displayed by editing the zone size.*2 After editing the attribute, click [Apply].			
	I .			

^{*1} If the document is split using the [Image Processing] or [QR Code Reader] function, then a single job will contain multiple documents.

^{*2} The display area of the text box will return to its original size if buttons such as [Apply] and [Undo] are clicked or if the page is refreshed.

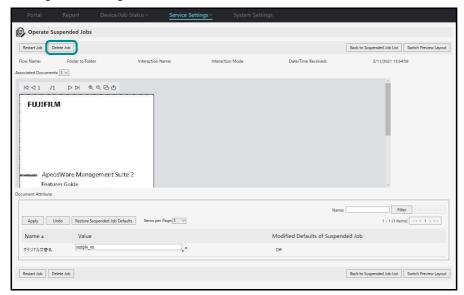
Deleting Jobs

Can delete the unnecessary jobs after checking the jobs with the [Suspended] status.

1. Display the [Operate Suspended Jobs] page.

Refer
Step 1 in "Viewing and Restarting the Job" (P.208).

2. Click [Delete Job].

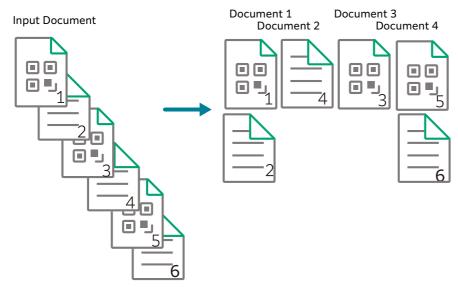


3. On the [Delete Suspended Job] page, click [Delete Job]. The job is deleted.

Points to Note When Running Jobs

• When processing a job using a flow combining [Image Processing] feature's document splitting and [QR Code Reader] feature's or [Form Analysis] feature's document splitting for multi-page documents, the split document will be added hindmost. Therefore, the document created in the delivery folder etc., will not follow the page sequence of the input document.

For instance, when split by every 3 pages is selected in the [Blank Page Processing/Document Splitting] tab in [Image Processing] and [Split before page in which QR code is read] is selected in [Page Processing] of [QR Code Reader], a document is split as shown below:



- If the disk space is insufficient on the disk drive for Flow Management Option data folder, when operating suspended jobs, "Unable to restart suspended job. Please wait a while and try again." may be displayed as an error message. In that case, please forcibly stop the applicable jobs, make enough disk space available for the data folder, and then restart those jobs that were forcibly stopped. Only the system administrator (user ID: Apeos_Admin) created automatically at installation can stop jobs forcibly.
- When the hard disk drive for the user data folder of Flow Management Option does not have enough space, running jobs may complete with error or continue to run without being processed. For jobs that continue to run without being processed, their job processing will not be resumed by only increasing the hard disk drive space. In this case, you must forcibly stop the jobs that are stuck in the running state, then restart them.
- When there is not enough space on the hard disk drive where the database file is stored, detailed
 job information will not be correctly displayed as the job information fails to be written to the SQL
 server. In addition, running jobs may complete with error or continue to run without being
 processed.
 - When there are jobs that continue to run without being processed, their processing will not be resumed even when the connection with the SQL server has returned to normal. In this case, you must forcibly stop the jobs that are stuck in the running state, restart ApeosWare Management Suite Flow Management service, then restart those jobs that were forcibly stopped.
- When the server burden is high or when the network has been disconnected, the job may complete
 with error and "Unable to log in to ApeosWare Management Suite Flow Management database." will
 be recorded to the log, and the job may be completed with an error.
 In this case, check for things such as if the error job have been successfully delivered, and restart
 the job.
- When database configuration is isolated in a server different from the Flow Management Option, the database may not be able to respond to the processing request from the Flow Management Option depending on the network and database server load status. In this case, risks like the job of Flow Management Option completing with error may occur.

5 Link to Web Applications

Scanning (Registering Jobs)

You can scan the document using the link to Web applications function on the device and register the job.

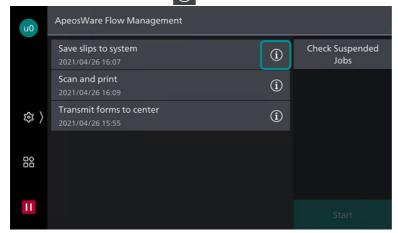
The menus on the control panel vary depending on the device. A typical example is explained below. For the operation of the devices, see the guide supplied with the device.



- It takes time to display documents with many pages on the preview screen because documents are displayed after all pages are transferred to Flow Management. To scan the document with many pages, scan one or two pages and check on the preview screen. After that, press [Rescan] and then deselect the check box for [Preview] to scan all pages of the document.
- To perform OCR processing, the default language and the language for OCR of the device must be set as
 the same as the language for Flow Management server. Also, it is recommended that the document to be
 OCR-processed is in the same language.
 Refer to the device manual for details such as the languages set on the device or with which languages
 OCR can be processed.
- 1. When the Login mode is set to the device, put the IC card or enter your User Name and Password on the control panel to log in to the device.
- 2. On the control panel, press the <Menu> button.
- 3. Perform the following steps.
- To Use Custom Service
 - (1) Press [ApeosWare Menu] > [Flow Management].
- To Use External Access Feature of the Device
 - (1) Press [Web Applications].
 - (2) From the destination servers list, select the URL of Flow Management.
 - (3) Select [Open] on the pop-up menu.
- 4. If the screen which requires you to enter the access information appears, enter your user name and password, and the click [OK].

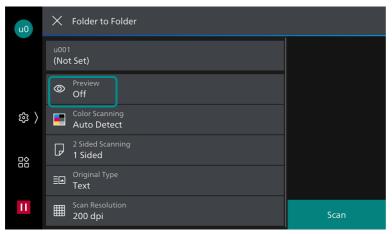
The flow list available for the logged in user is displayed.

- 5. Perform the following steps.
 - When scanning after checking/changing settings
 - (1) From the Flow List, press (i) of the flow to use.



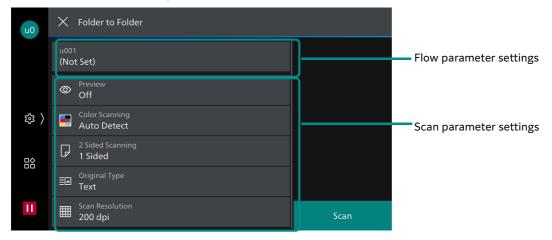
(2) Select whether to preview the document after scan.

You can select the preview only when you specify [Allow Change via Control Panel] in [Preview Settings] of the [Link to Web Applications] function.

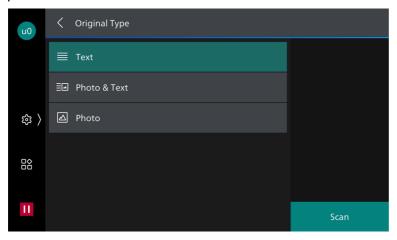


(3) On the flow check/setting screen, perform the check and setting change for the scan parameter and flow parameter.

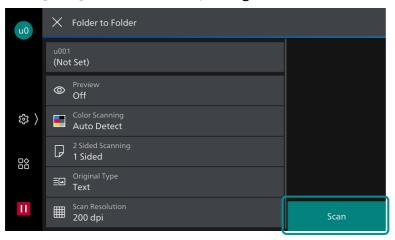
For the scan parameter and flow parameter, the check and setting change can be performed only if a check mark is attached to [Allow Change via Control Panel] in [Preview Settings] of [Link to Web Applications Settings].



When the item of the scan parameter or flow parameter is selected, the settings screen is displayed. Change the settings as necessary and press , and the screen goes back to the previous one.

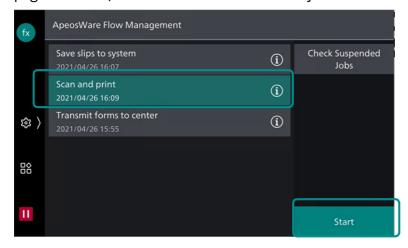


- (4) Put a document to scan on the device.
- (5) Press [Scan] on the flow check/setting screen.



■ When scanning

(1) From the Flow List, select the name of the flow to use and press [Start]. When the flow list is displayed on the device control panel, you can select a flow and execute it until it reappears on the control panel even though the flow is invalid or deleted on the Flow List page. However, if that flow is executed then a job ends with an error.



6. When [Preview] is [On], the Preview screen is displayed. Confirm that the orientation of the scanned document and output color are correct and press [Continue Job].

When pressing [Rescan], the flow check/setting screen is displayed and you can scan the document by configuring the scan parameter and flow parameter again. In that case, the job previewed on the screen is deleted, and a new job is created.

When you press [Cancel], the job is deleted.

The scanned document is transferred to Flow Management and a job is created.

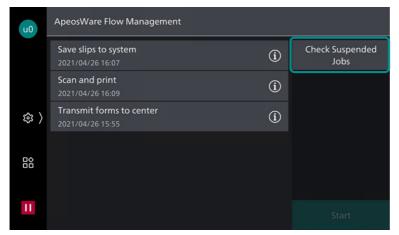
Operating Jobs

When you close the transfer screen during scan, or do not select [Resume Job] on the preview screen, you can confirm or operate the job later on the [Suspended Job List] screen.

1. Perform from Step 1 to 4 in "Scanning (Registering Jobs)" to access Flow Management on the device control panel.

The flow list available for the logged in user is displayed.

2. Press [Check Suspended Jobs].



- 3. On the [Suspended Job List] screen, select the job. The preview screen appears.
- 4. On the preview screen, perform the following procedure.
 - For scanning again
 - (1) Press [Rescan].

The job displayed on the Preview screen is deleted, and the flow check/setting screen is displayed. When you set the scan parameters and flow parameters, and then press [Scan], the scan start screen appears.

- For deleting the job
 - (1) Press [Cancel].
- For starting the job operation
 - (1) Press [Resume Job].



You can also preview or operate the job on the [Operate Suspended Jobs] page of your Web browser.



"Operating the Job with the [Suspended] Status" (P.207)

6 Paper Form Function

Paper Form Function Overview

This chapter describes the overview of Paper Form Function.

About Paper Form Function

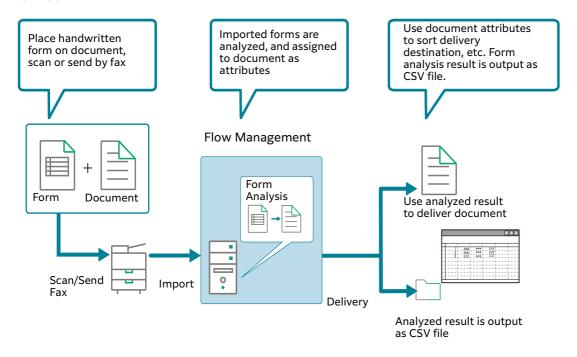
Generally, to digitize paper documents, one has to perform operations such as scanning the paper documents and storing them into a target folder.

However, by performing only this operation, it is not possible to direct specific processing information or instructional information to the documents, such as knowing "Where was this document sent from", or determining "What purpose does this document serve". Assigning these information calls for manual input of the information to the PC.

In Paper Form Function, the interface with PC is not keyboard or mouse but paper. This paper is the "Form".

Firstly, enter instructions by handwriting onto the form. Next, place the form on top of the document(s) you want to process, and scan or send by fax.

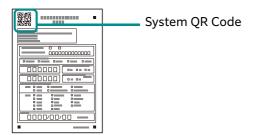
Input form is processed based on the flow previously set in Flow Management and is assigned as attributes to the output document. This document attributes allows delivery destination to be sorted, document name to be used, and the form analysis results can be stored in a Windows folder in the CSV format.



Terms Used in Paper Form Function

Form

This is a formatted file containing handwritten instructions, or the printed paper-form of this file. For each form, a separate form ID will be assigned. Form ID is written in the QR code created by the system (hereafter referred to as "System QR Code"). When a form is analyzed, the Form ID will be read from this System QR code.



Form Template

This is the file that form the basis of Forms. It is created by using the accessory tool "Paper Form Editor". The file extension is ".xft".

The accessory tool "Paper Form Management" is used to create forms from Form Template.



- "Paper Form Editor" (P.226)
- "Paper Form Management" (P.226)

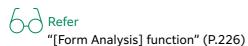
Form Management Group

Files like Forms and Form Templates, required in Paper Form Function are called "Resources". In addition, the gathering of resources with the same objectives is called "Form Management Group". Form Management Group is created by Paper Form Management.

You can set in the Form Management Group whether it can be opened to general users. When the Form Management Group is shared, general users can download created forms in DocuWorks or PDF format. Downloaded forms can be printed and used.

Form Image

This is a file containing the handwritten forms that are placed on top of documents, then scan or send by fax and stored in the folder of the device. Form image is imported by Flow Management and the form will be analyzed according to the flow settings.



Separator Form

The Separator Form is different from the usual Form, and is a Form used to mark the separation between documents. The Separator Form itself does not contain information required for Form analysis. It copies and inherits the information recorded in the Form just before it.

Using the Separator Form saves the effort of Form registration by eliminating the need to enter the same instructions numerous times.



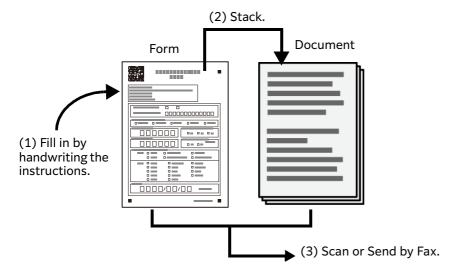
• The process to download the Separator Form is different from that of the usual forms. For details, refer to "Using the Form to process documents" (P.255).

• When it is set in the [Form Analysis] function to save form images, the image of the Separator Form will not be saved. Instead, the image of the Form just before it will be saved. However, if the form on the top page, or the form at the start of the original is a Separator Form, as an exception, the Separator Form image will be saved. Refer to the Flow Management Option Help for details on the settings of the [Form Analysis] function.

Features of Paper Form Function

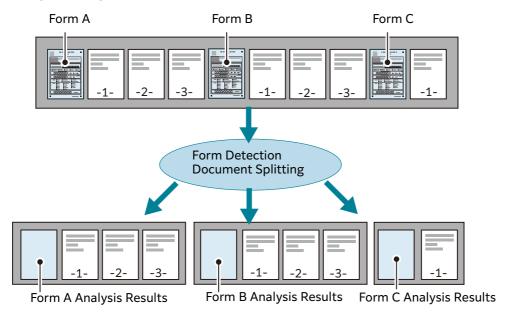
Simple user interface through the handwritten form

Job instructions can be given by marking on check boxes or entering values as instructions on handwritten form, then placing the form on top of the documents to scan or send by fax.



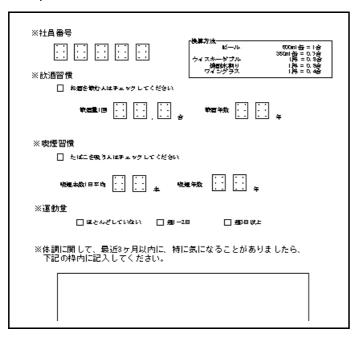
Scan / Fax multiple forms and documents together

Paper Form Function automatically detects forms, and separates each form to the respective documents. As a result, multiple forms and documents can be read together at one time when scanning or faxing them.



Create unique forms adapted for practical work

The forms utilize the accessory tool "Paper Form Editor" to create unique formats tailored to the actual business conditions. As a result, flexible processes adapted for practical work can be achieved. Example of a form:





Easy form entry

You can easily make form entries by just marking check boxes or writing down numbers into numeric entry boxes.

For check boxes

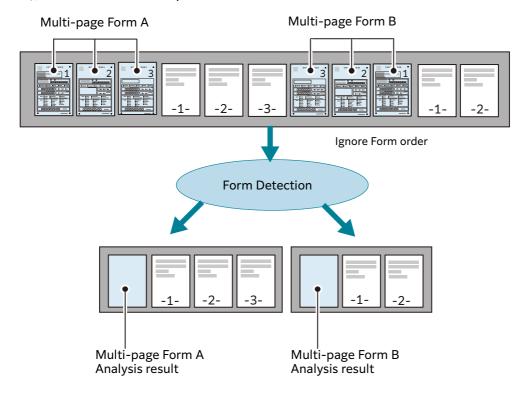


For numeric values



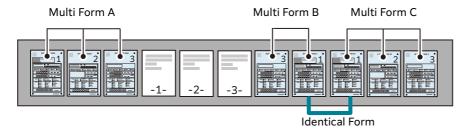
Multi-page Form support

By defining the form as a Multi-page Form in advance, you can consolidate analysis results from multiple forms and manage the consolidated analysis results in the same manner as if they were analysis results from 1 single form. This is convenient when there are many required attributes (input items), or when the work requires forms to be combined.





- When scanning or faxing the Multi-page Form, the sequential order of the pages is ignored.
- An error will occur when the total number of entered sheets do not match the quantity defined in the Multi-page Form.
- If the same page is scanned / faxed again, it will be recognized as the next Multi-page Form. The following example shows an error occurring when the second page of multi-form B is determined to be missing.



Document Format Specification (DocumentFormat)

If you specify the document format on the Form, you can change the format of the entered document. The following formats are supported.

- TIFF (Compression Format: Uncompressed)
- TIFF (Compression Format: G4)
- TIFF (Compression Format: Packbits)
- TIFF (Compression Format: JPEG6)
- TIFF (Compression Format: G4/Packbits)

- TIFF (Compression Format: G4/JPEG6)
- DocuWorks
- PDF



- When the Document Format is not specified, the document will be output in the entered format.
- The following items are used only when they are available in the specified document format.
 - Compression (Document Quality)
 - DocumentFileForm (Document File Save Format)



"Formats Supported by the [Form Analysis] Function" (P.333)

Retrieval of document OCR results (Ocr)

You can specify on the form to have OCR processing of documents. The OCR results will be output as "Full Page OCR Text" of the document attributes. The OCR function of DocuWorks is being used in OCR processing.



- An environment that allows the use of [OCR] function is required to retrieve OCR results.
- When DocuWorks is specified in the [Format Conversion] function, the OCR results will be saved in the DocuWorks document. You can view the saved OCR results in the [OCR Results] tab of the Infoview of DocuWorks document.

Auto Rotation Function (DocumentRotation)

You can specify on the form to have auto rotation for the documents. By specifying Auto Rotation on the form, you can call out the Auto Rotation function and automatically correct the orientation of documents even if they were scanned in the wrong direction for scan / fax sending.

Other functions that you can specify on the form

Apart from the abovementioned, the following 3 functions can also be set on the form.

• Document Quality (Compression)

This is the image quality parameter used when JPEG is specified as the compression format for images. You can select from [Normal], [High-Resolution], and [High-Compression]. If it is not selected, [Normal] will be applied.

• Document File Save Format (DocumentFileForm)

You can select whether to save as a Multi-page file or Single Page file when TIFF is selected for Document Format.

When Document File Save Format is not specified, multi-page is applied as the default value. Also, when PDF or DocuWorks is selected for Document Format, "Multi-page" will be applied regardless of the Document File Save Format settings.

Removal of Document Top Page (BlankRemoval/TopPageRemoval)

This function is used so that when placing the form on the top page of the document and scanning 2 sided originals, the reverse of the form is not taken as the top page of the document. The specifications include only remove side 2 of the form when it is a blank page, and remove side 2 of the form for all forms.



In the [Form Analysis] function, a unique file name will be assigned for processed document. If necessary, add flow in the [Document Name] function, and change the name accordingly.

Tools Used in Paper Form Function and Their Features

The following tools are included in the Paper Form & QR Code Reader Option.

- Paper Form Management
- Paper Form Editor

Also, if the Paper Form & QR Code Reader Option license is valid, the following Flow functions can also be used.

- Form Analysis (Processing Method)
- Save Form Analysis to File (Delivery Destination)



The display languages for Paper Form Management and Paper Form Editor are Japanese and English only. If your OS is in another language, it can still be displayed in English.

Paper Form Editor

Paper Form Editor is a tool used by the administrator to create Form Templates.

This allows user to place control objects like check boxes, or illustrations like graphics freely and thus creates a template with a form structure.



"Creating Form Templates" (P.231)

Paper Form Management

Paper Form Management is a Web application that manages the Form Management Groups and the resources used for Paper Form Function.

Paper Form Management also includes Form Deletion Tool. Form Deletion Tool is the tool which will automatically delete the forms according to some pre-set conditions.

Paper Form Management has an Administrator page and a General User page, and it is accessed with a Web browser.

You can register, edit, or delete Form Management Groups, form templates, and forms in the Administrator page. You can download forms that are shared by the Administrator in the General User page.



- Administrator Page ⇒ "Creating Form Management Groups / Forms" (P.234)
- General User Page ⇒ "Using the Form to process documents" (P.255)
- Form Deletion Tool ⇒ Paper Form Help

A tool which can export and import information required for form analyses is provided. Refer to "Form analysis data sharing tool" (P.345) for details.

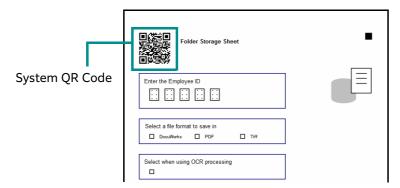
[Form Analysis] function

This is one of the [Processing Method] function of the flow in Flow Management.

The [Form Analysis] function processes the form images in the following steps when running flow.

- (1) Analyze the System QR code on the entered Form and get the Form ID.
- (2) Based on the retrieved Form ID, the respective form information can be retrieved from the Paper Form Management database. Follow the contents described in this Form, and analyze the Form.
- (3) Based on the Form Analysis Results, the document will be OCR processed, auto rotated, or will have blank pages removed.

(4) The Form Analysis Results and document file will be handed over to the next process in the flow.



[Save Form Analysis to File] function

This is one of the [Delivery Destination] function of the flow in Flow Management.

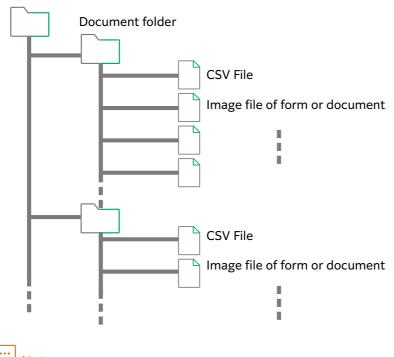
If you select the [Save Form Analysis to File] function in the flow, the form analysis results will be saved as a CSV format file.

The storage location of a file can be embedded in the Forms. When it is not specified, the file will be saved in the folder specified in the flow.

The following files will be saved.

File Type	Note	
CSV File	Form analysis results	
Image File	Image file of form or document	
Clip Image File	Image file clipped out from the form.	
OCR Result File	File that contains OCR result of the image	
Lock File	File that declares that processing of the CSV output function has ended	
Status File	File that contains the job process start date/time, end data/time, CSV output settings function name, error codes and error messages	

Output destination folder



CSV file will not be output for documents that has form analysis error during [Form Analysis].

Operational Flow

This section explains the operational flow of how to start using Paper Form Option.

Administrator Operations

Administrator created form template based on business operations and registered the template in Paper Form Management. After which, administrator will share the template so that general users can download it as a Form. Also, in order to analyze the form, the flow is also created on the Flow Management.

The following will explain the overview of Administrator Operations.

Step 1: Create Form Templates

Use Paper Form Editor to create Form Templates that satisfy the intended objectives. Before creating the Form Template, review how to process, in what format, where to output the document saved in folder.



- Overview of Operations ⇒ "Creating Form Templates" (P.231)
- Details of each item ⇒ Paper Form Help

Step 2: Create Form Management Groups / Forms

Use Paper Form Management to perform the following.

- (1) Create a new Form Management Group, and share to the general users.
- (2) Use Paper Form Editor to register the created Form Template to the Form Management Group.
- (3) Create a Form from the Form Template.



- Overview of Operations → "Creating Form Management Groups / Forms" (P.234)
- Details of each item ⇒ Paper Form Help

Step 3: Create the Flow

Create the flow requir+B724:B730ed for Form Analysis at the Flow settings page of Flow Management. Add the [Form Analysis] function in the Processing Method, and add the [Save Form Analysis to File] function to the Delivery Destination as necessary.



- Overview of Operations ⇒ "Creating the Flow" (P.249)
- Details of each item ⇒ Flow Management Option Help

General User Operations

The following describes the operational flow of general users. For detailed operation, refer to "6 Using the Form to process documents" (P.255).

Step 1: Download a Form

Connect to Paper Form Management using the Web browser, select a DocuWorks-format document or PDF-format document, and download the Form.

Step 2: Print the Form

Open and print the downloaded form file.

Step 3: Enter the instructions in the Form.

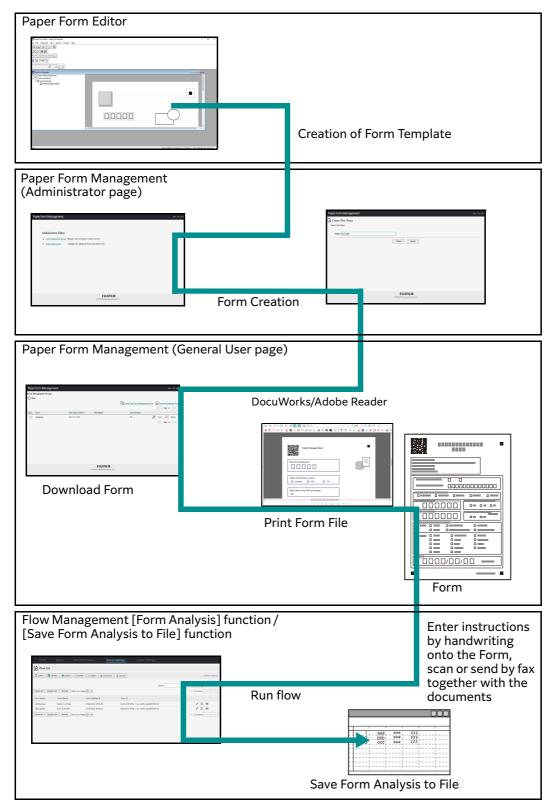
Enter instructions by handwriting onto the printed Form.

Step 4: Scan/Send by fax the Forms and documents

Place the Form on top of the document(s), and scan or send by fax.

Various Tools and Their Relation with the Function

Various tools and their relation with the function are displayed as follows.



Creating Form Templates

Use Paper Form Editor to create Form Templates. Form Templates are files that form the basis of Forms.

Starting Paper Form Editor

Start Paper Form Editor by following the steps below.

1. At the server where Paper Form Management was installed, from Windows Start Up Menu, select [FUJIFILM] > [Paper Form Editor].

Paper Form Editor screen will be displayed.



For details on Paper Form Editor, refer to the Paper Form Help.

Form Template Configuration

The configuration of Form Template is as follows.



You can print the Form Template to check the layout. However, printed Form Template cannot be used for Form Analysis.

Control Object

Form Templates are created with the following control objects.

• Boolean Control

Used when selecting 1 out of 2 conditions, such as "True/False" or "Yes/No".

Numeric Entry Control

Used when inputting numbers. Enter numbers into the exclusive 6-dot Number Box, keeping within the boundaries.

• Selection Group Control

Used when selecting a value from multiple options.

• Embedded Text Control

Used to embed strings into Forms. Print images are not displayed.

Clip Area Control

Clip the content entered freely by the user as an image.

QR Code Control

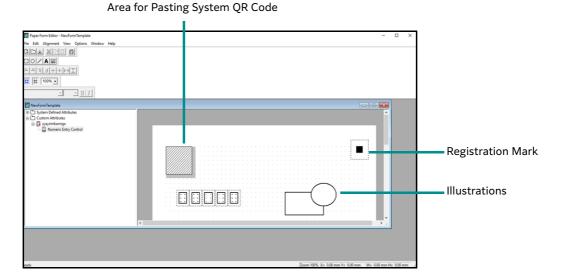
When pasting QR code, specify the location to place the QR code and the size of the code. In actual use, the QR code sticker will be pasted on this location.



The position of the System QR Code is fixed. It cannot be changed.

Illustrations

You can place squares, circles, or explanatory text using Illustrations.



Using Form Template Editor

When selecting multiple illustrations that may cause displacement of the rubber band when they are selected and their size is changed and moving the resizing handle to the reduction direction, the rubber band may freeze in a reduced size state. This is a display issue and will be corrected upon confirming the size change.

A positioning error of 0.01 mm may arise when selecting an illustration or control object that may cause an error of 0.01 mm at its position, changing the position in the [Position] tab of the dialog box, applying the change (clicking the [OK] button), and then reopen the dialog box. This arises due to calculation errors between the specified numeric value and the drawing.

Restrictions on Fonts Used for Text Illustrations

Select the TrueType font for fonts used for text illustrations. Text may not be printed correctly if bitmap fonts are selected when printing Forms.

The following shows examples of bitmap fonts.

- Courier (COURE.FON)
- Modern (MODERN.FON)
- MS Scans Serif (SSERIFE.FON)
- MS Serif (SERIFE.FON)
- Roman (ROMAN.FON)
- Script (SCRIPT.FON)

Do not place text or images like system QR codes or registration marks on areas where Control Objects cannot be placed in Paper Form Editor.

Deploy the column-order attribute and specify therein the attribute to output to CSV, and the order. If column-order is not specified, all attributes retrievable as Form analysis results will be output in CSV format. In addition, the attribute order will become irregular, and attributes may not be output in the same order every time.

When enumerating attributes to output to CSV for column-order attributes, use commas (,) as the delimiter to separate column-order attributes.

When deploying the Selection Control or the Multi-Element Control and using separators to link multiple values into 1 value, make sure to use the comma (,) as the separator.

When [Ignore error and continue processing] is specified in Paper Form Analysis Settings, upon the occurrence of analysis error, the [Save Form Analysis to File] feature exports error information to the default folder, but no CSV file is exported. This also happens when [Parsing Error Attribute Value] is set at Paper Form Analysis Settings.

Settings can be changed by using the Save Form Analysis to File mode switching tool.

Refer to "Save Form Analysis to File mode switching tool" (P.351) for details on the Save Form Analysis to File mode switching tool.

Operation is not guaranteed when loading Form Template files edited with software other than Paper Form Editor.

Operation is not guaranteed when loading control files edited with software other than Paper Form Editor.

When using multiple instances of Paper Form Editor to simultaneously edit Form Template files stored in shared folders and installed in different computers, the editing operation will not be exclusively controlled. Due to this, editing results saved first will be overwritten by editing results saved later, and contents from the former will disappear. This applies to the Custom Controls File as well.

When deploying controls, ensure that the control objects for check boxes, etc., do not overlap each other. Using Forms from a Form Template file with overlapping control objects may cause control analysis errors, wrong analysis results, etc.

Paper Form Editor can create Form Templates in the following paper sizes.

A3 (297 mm x 420 mm)

A4 (210 mm x 297 mm)

A5 (148 mm x 210 mm)

B4 (257 mm x 364 mm)

B5 (182 mm x 257 mm)

Letter (216 mm (8 1/2 inch) × 279 mm (11 inch))

Legal (216 mm (8 1/2 inch) × 356 mm (14 inch))

Government Legal (216 mm (8 1/2 inch) × 330 mm (13 inch))

Postcard (100 mm x 148 mm)

In addition to the above standard sizes, any other sizes can be specified. The specifiable value for the custom size is from 100 to 420 mm for both width and height.

When changing the paper size, especially when changing from a large paper size to a small paper size, landscape to portrait, etc., the previously correctly-deployed check boxes, control objects, etc., may end up being placed out of the control drawing area. If such control object deployment is not corrected and the resultant Forms are used for analysis, control analysis errors will occur. Due to this, when changing the paper size, confirm that all deployed control objects display within the control drawing area. If deployed outside the drawing area, revert back to the original paper size, adjust the position of the affected control, and then change the paper size again.

When setting selection controls for system defined attributes, specifying [interlink values] or [interlink values using separator] at Multiple Value Handling will result in analysis errors for related Forms that have system defined attributes with multiple value handling.

You can change Form Templates previously created in an older version of Paper Form Editor into new version Form Templates by opening these old Form Templates in the new Paper Form Editor, then overwriting/saving them. However, as the system defined attributes of the old version Form Templates will not be migrated, it is necessary to change with Paper Form Editor.

Before Creating Form Template

Review beforehand which Folder of which multifunction device the form image (Forms and documents) is to be taken from, and how it will be processed, in what format, and where to output to.

• Example for Review

Type of Process	Review Details	Review Target
Inbound channel (Input Process)	Which form image, taken from where, will be the processing target?	Device Folder • Device Location • Device folder number Web Applications
Processing Method (Process Handling)	How will the process be handled?	Type of Control Processing Method of Control Form Design
Delivery destination (Output Process)	Output in what manner?	PrintingDeliverySaveCSV Output

To Analyze Forms

Select [Form Analysis] for [Processing Method] at the Flow settings page of Flow Management. As a result, when running the flow, the Form is analyzed and you can retrieve the attributes included in the Form.

The attributes included in the Form Analysis results can also be used in other functions. For example, select [Send E-mail (SMTP] in the same flow, and the attribute value included in the Form Analysis Results can be used as the e-mail address.

• To Save Form Analysis to File

Select [Form Analysis] in [Processing Method] at the Flow settings page of Flow Management, and [Save Form Analysis to File] in [Delivery Destination] of the same flow. As a result, the Form Analysis Results will be output in a CSV format file.

Creating Form Management Groups / Forms

Use Paper Form Management to create a new Form Management Group. Also, register the Form Template to the Form Management Group and create Form.

Starting Paper Form Management

When Paper Form Management setup has already completed, you can use the following steps to log in.

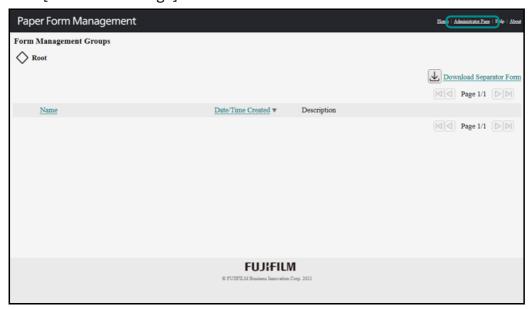
- $oldsymbol{1}$. Configure the following at the Web browser.
 - · Bypass proxy server
 - Enable JavaScript[™]
- 2. Perform the following steps.
- For Server with Paper Form Management Installed
 - (1) From the menu to start programs on Windows, select [FUJIFILM ApeosWare Management Suite] > [Paper Form Management].

- For Client PC
 - (1) Start the Web browser.
 - (2) Enter the following URL into the address bar.

http://{Host Name}/ApeosWareFMPFM

Enter the host name or IP address of the server installed with ApeosWare Management Suite in {Host Name}. For coded communication with SSL, enter "https://". When changing the default communication port number (HTTP "80", HTTPS "443"), enter a colon (:) and the port number after the {host name}.

3. Click [Administrator Page].



- 4. Perform the following steps to log in as an administrator.
 - (1) Enter the [User Name] and [Password] with OS Administrator permissions. Input the user name and password of the administrator selected at the time of the installation of the Paper Form Management. Input the user name and password. The selectable administrator is the local administrator of the PC where Paper Form Management is installed.
 - (2) Click [Login].

The page for Paper Form Management Administrator use will be displayed.

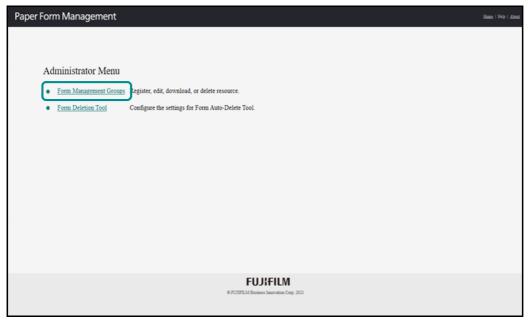


For details of each items in Paper Form Management, refer to the Paper Form Help.

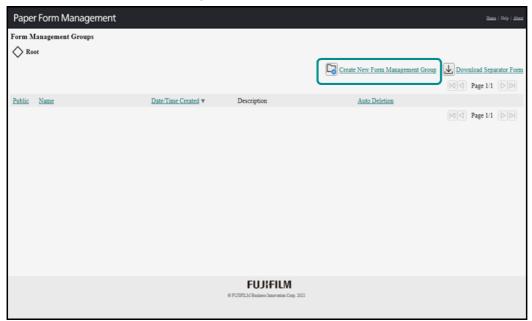
Creating a New Form Management Group

Create the Form Management Group required for registration of Form Templates and Forms.

1. Click [Form Management Groups].

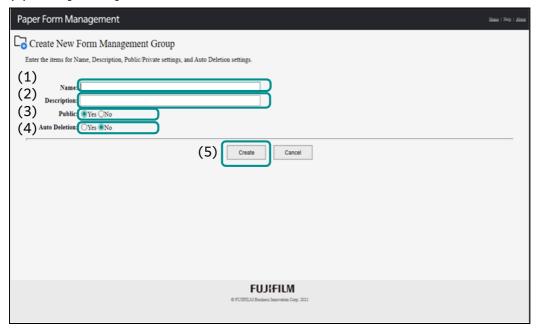


2. Click [Create New Form Management Group].



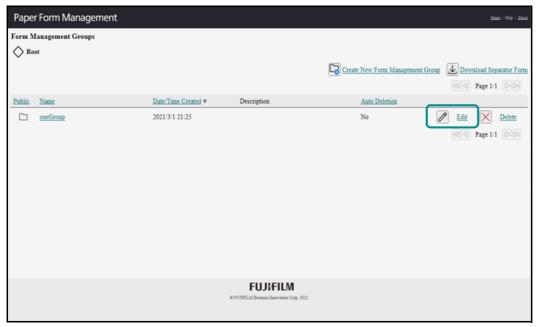
- 3. Perform the following steps.
 - (1) Enter [Name].
 - (2) Enter [Description] as necessary.
 - (3) Select [Yes] to share Form Management Groups to General Users. Select [No] to not share to General Users.
 - (4) Select [Yes] to set Form Management Groups as targets of scheduled deletion. Select [No] to not set as a target.

(5) Click [Create].



Editing

- 1. At the [Administrator Menu] page, click [Form Management Groups].
- 2. Click the [Edit] of the Form Management Group you want to edit.



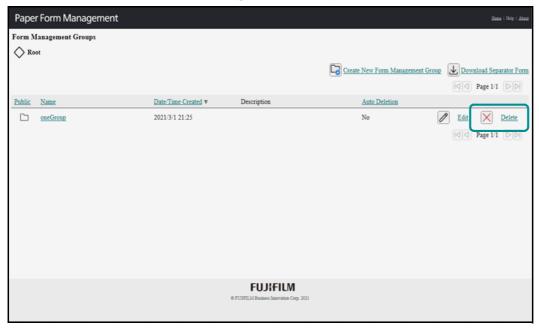
- 3. Perform the following at the [Edit Form Management Group] page.
 - (1) Edit the items as necessary.
 - (2) [Click] change.

Deleting



• If you delete a Form Management Group, all the Form Templates and Forms in the Form Management Group will be deleted.

- When a Form is in the deleted Form Management Group and a flow is using the Form, set up the Flow again. For details, refer to "Editing the Flow" (P.253).
- ${f 1.}$ At the [Administrator Menu] page, click [Form Management Groups].
- 2. Click the [Delete] of the Form Management Group you want to delete.



3. Check the contents, and click [Yes].

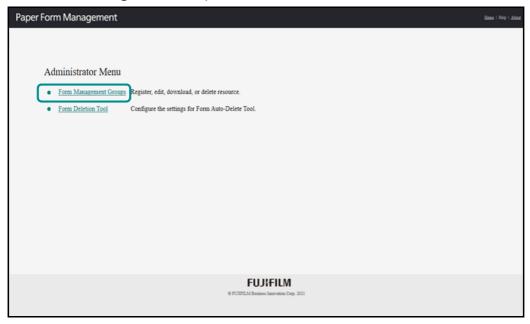
Registering New Form Templates

Use Paper Form Editor to register the created Form Template to the Form Management Group.

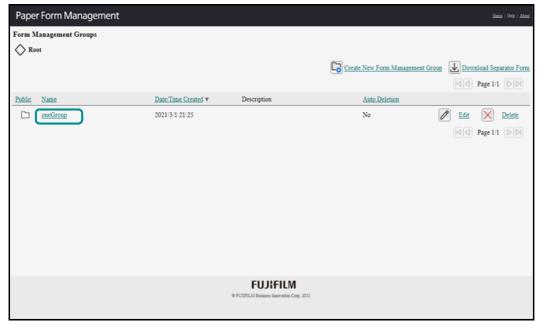


Form that is created by a newly registered Form Template, and is used in a Flow, set up the Flow again. Refer to "Editing the Flow" (P.253) "Editing the Flow" (p.248) for details.

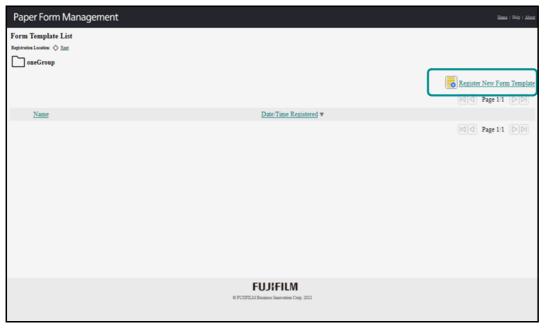
1. Click [Form Management Groups].



2. Click the Form Management Group name that you want to register the Form Template to.



3. Click [Register New Form Template].



- 4. Perform the following steps.
 - (1) Click [Browse].



The file selection dialog box is displayed.

(2) Select the file you want to register (file extension is ".xft"), and click [Open].

5. Click [Register].

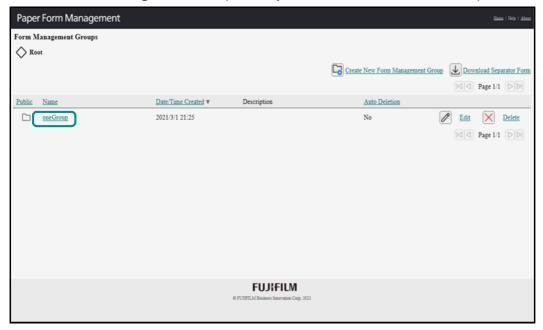


Saving

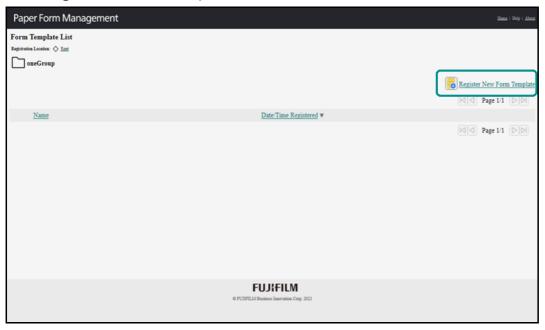
At the [Register New Form Template] page, if you select a Form Template with the same Form Template ID, this will result in a (overwrite) save.



- Once saved, all previous Forms can no longer be created. After saving, Forms will be created from the new Form Templates.
- When a Form Template ID is changed, a new Form Template is registered instead of saving the previous one.
- When a Form is created using the saved Form Template, and used in a Flow, set up the Flow again. For details, refer to "Editing the Flow" (P.253).
- $oldsymbol{1}$. At the [Administrator Menu] page, click [Form Management Groups].
- 2. Click the Form Management Group name you want to save the Form Template to.



3. Click [Register New Form Template].



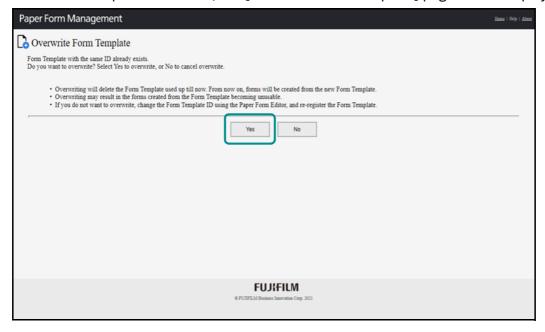
- 4. Perform the following steps.
 - (1) Click [Browse].



The file selection dialog box is displayed.

(2) Select the file you want to save (file extension is ".xft"), and click [Open].

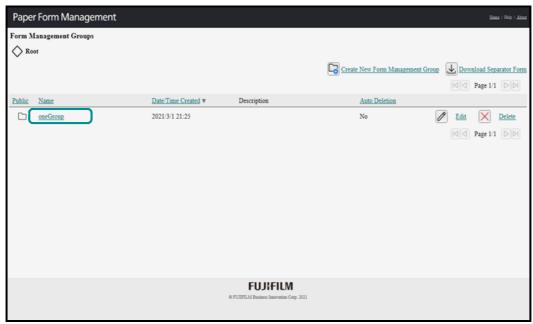
5. If the Form Template IDs match, the [Overwrite Form Template] page will be displayed.Click [Yes].



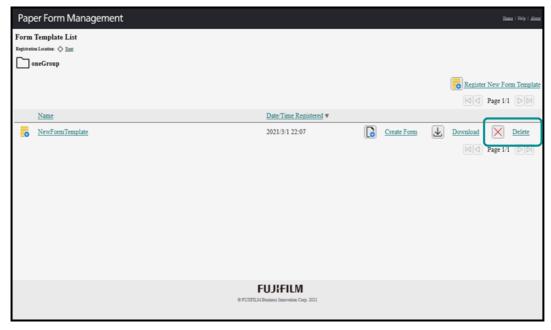
Deleting



- If you delete a Form Template, all Forms created from that Form Template will also be deleted.
- When a Form is created using the deleted Form Template, and used in a Flow, set up the Flow again. For details, refer to "Editing the Flow" (P.253).
- When Forms created from the deleted Form Template, are printed and in distribution, they (hardcopy Forms) will no longer be usable.
- 1. At the [Administrator Menu] page, click [Form Management Groups].
- 2. Click the name of the Form Management Group to which the Form Template to be deleted is registered.



3. Click [Delete].

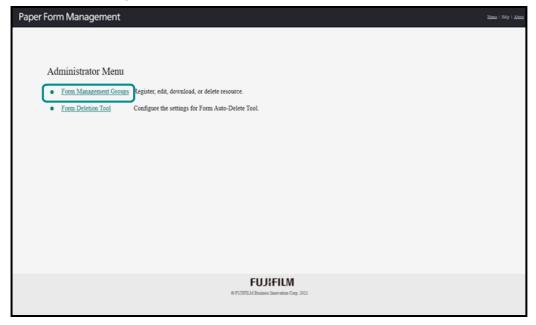


4. Check the contents, and click [Yes].

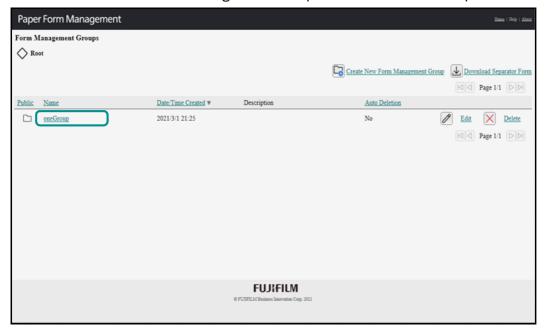
Creating the Form

Create the Form from the Form Template registered to Paper Form Management.

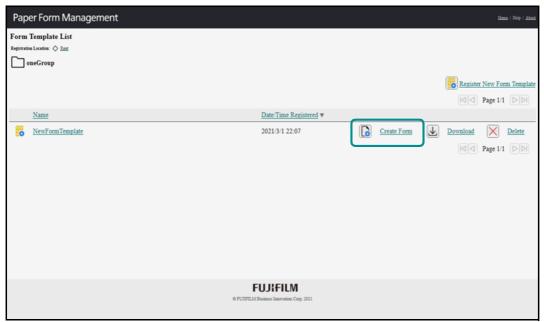
1. Click [Form Management Groups].



2. Click the name of the Form Management Group to which the Form Template to be used is registered.

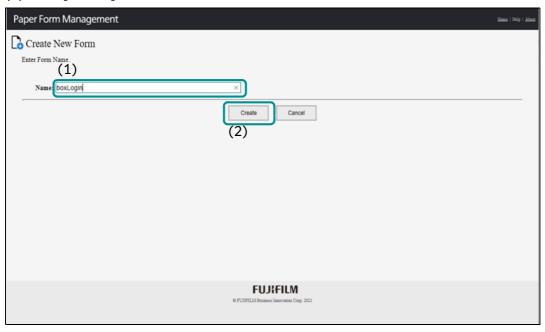


3. Click [Create Form].



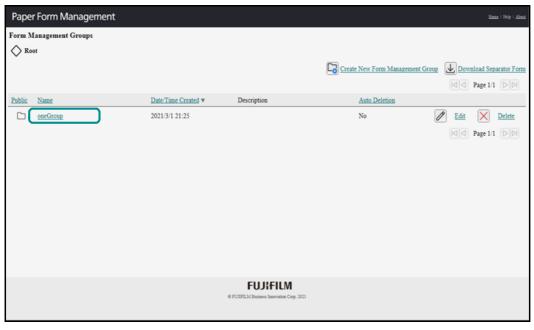
- 4. Perform the following steps.
 - (1) Enter name.

(2) Click [Create].

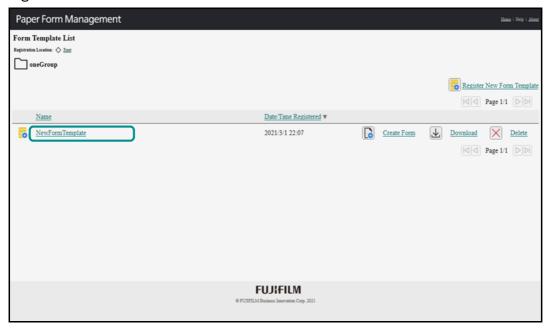


Editing the Name

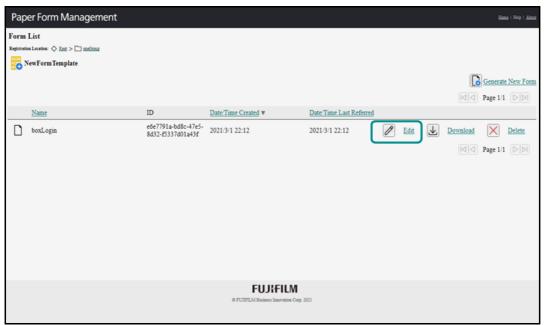
- ${\bf 1.}\, {\sf At the [Administrator Menu] page, click [Form Management Groups]}.$
- 2. Click the name of the Form Management Group to which the Form that you want to change the name is registered.



3. Click the name of the Form Template to which the Form that you want to change the name is registered.



4. Click [Edit].



- **5.** Perform the following steps.
 - (1) Change the name.

(2) Click [Edit].



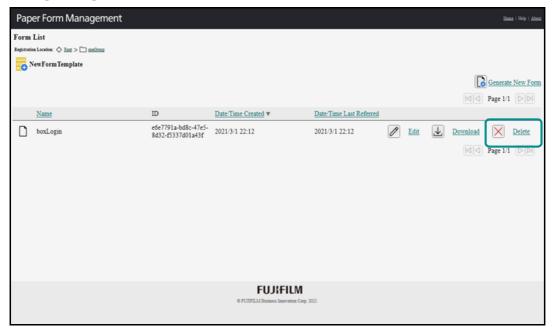
Deleting



You can preset the expiration date and the Form can be deleted according to the schedule. This function is called "Form Schedule Deletion Settings", and you can preset the validity period and the deletion start date/time for Forms. Refer to "Paper Form Help" for details.

- ${f 1.}$ At the [Administrator Menu] page, click [Form Management Groups].
- 2. At the [Form Management Groups] page, click the name of the Form Management Group to which the Form you want to delete is registered.

- 3. At the [Form Template List] page, click the name of the Form Template to which the Form you want to delete is registered.
- 4. Click [Delete].



5. Check the contents, and click [Yes].

Creating the Flow

Create Flow for analyzing Forms using Flow Management.

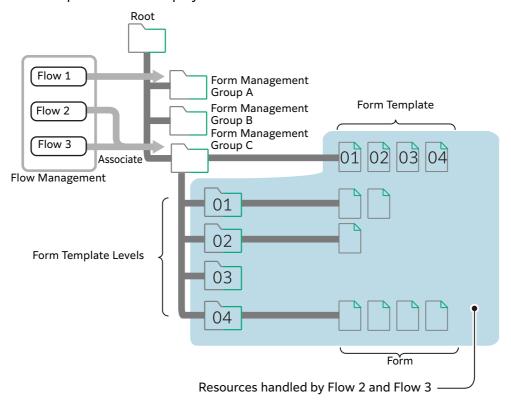
About Flow and Flow Management Group

When using Form in Flow Management, select [Form Analysis] from [Processing Method] at new Flow creation or Flow editing pages. Select 1 Form Management Group that is associated to the Flow as the [Form Analysis - Form Analysis Settings] page will be displayed.

The [Form Analysis] function retrieves the "Attribute List Information" of the selected Form Management Group from the Paper Form Management database. The attribute list information is a list of predefined attribute names retrieved from all Form Templates belonging to the Form Management Group.

Attribute list information retrieved from the [Form Analysis] function can be selected as the attributes used in document sorting and document name at the [Processing Method], and [Delivery Destination] functions, which are performed after the [Form Analysis] function.

You can also associate multiple Flows to a single Form Management Group. The association of Form Management Group and Flow is displayed as follows.





- Specify the Form Management Group during the creation of the Flow. Therefore, create Flow after the registration or editing of Form Management Group or Form Template has completed.
- The Flow must be edited in the following cases.
 - Newly registered Form Template
 - Edited or changed Form Template
 - Deleted Form Management Group.
- For details, refer to "Editing the Flow" (P.253).

Configuring the [Form Analysis] Function in the Flow

Configure how the analysis will be done when the imported document is a Form.



When creating flows for Flow Management Option, before performing Form analysis, do not register the processing or conversion for images such as format conversion and image processing, etc.

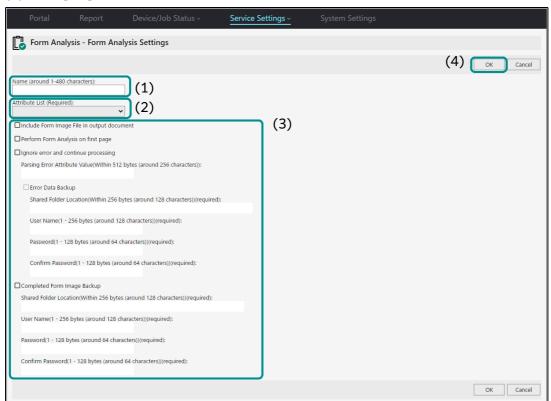


- Flow Settings Page ⇒ "Creating a Flow" (P.82)
- Details of each item ⇒ "Flow Management Option Help"
- $oldsymbol{1}$. From the Flow settings page, select [Processing Method] > [Add] > [Form Analysis].
- 2. Perform the following steps.
 - (1) In [Name], enter the function name.
 - (2) From [Attribute List], select the name of the Form Management Group to which the Form used in this Flow is registered.

(3) Configure each item.

When the check box for [Ignore error and continue processing] is selected, even when error occurs during Form Analysis, unless it is a fatal error affecting the system operation, the processing will continue. However, when error occurs at the image conversion process, process handling, or saving process of the process result, the processing will stop and the error will be handled like in normal situation.

(4) Click [OK].



Configuring the [Save Form Analysis to File] Function in the Flow

Configure settings for saving Form analysis results in CSV format to folders. Create in advance the folder to be specified as the storage location.



- Flow Settings Page ⇒ "Creating a Flow" (P.82)
- Details of each item

 "Flow Management Option Help"



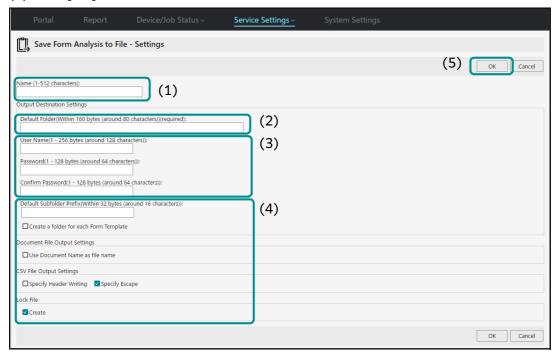
When creating Form Template, if the following attributes are set in advance, the contents of the [Save Form Analysis to File] function can be controlled in details. Refer to "Paper Form Help" for details.

- · Csv-output: Control the contents of the output destination folder
- · Column-order: Control the contents of the output CSV file
- Subdir-prefix: Use any strings as the prefix of the subfolder name
- Subdir-prefix-indirect: Retrieve the value of any prefix and use this value as the prefix of the subfolder name
- 1. From the Flow settings page, select [Delivery Destination] > [Add] > [Save Form Analysis to File].
- 2. Perform the following steps.
 - (1) In [Name], enter the function name.

- (2) Enter the absolute path of the storage folder in UNC format.

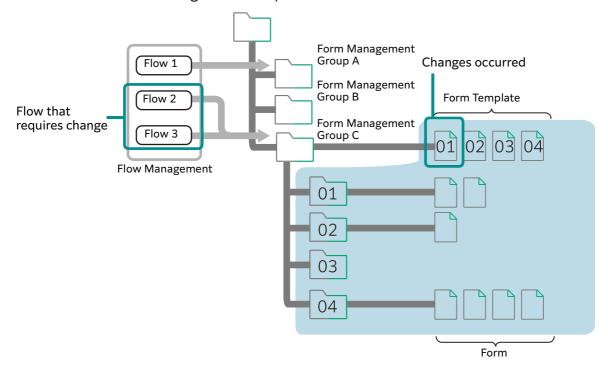
 Use Yen (\), or slash (/), as the delimiter of the folder.

 Example: \\{Computer Name}\work, //{Computer Name}/folder1/sub1
- (3) Enter the account of the user accessing the folder in [User Name] and [Password]. [User Name] and [Password] cannot be omitted.
- (4) Configure each item.
- (5) Click [OK].



Editing the Flow

When the resource that refers to the Flow is changed or deleted, you need to change the flow that is associated to the Form Management Group.



When Form Template is Newly Registered

When using the attributes set in a newly registered Form Template, change the Flow with the following steps.

- 1. The detailed settings page of the [Form Analysis] function can be displayed at the Edit Flow page. The latest Attribute List information will be updated.
- 2. Close the detailed settings page of the [Form Analysis] function.
- 3. Display the detailed settings page of the function positioned after the [Form Analysis] page, and set the newly added attributes.
- 4. Exit Flow editing.

When Form Template is Edited or Changed

When Form Template is saved or deleted, change the Flow associated with Form Management Group of the registration location according to the following steps.

- 1. The detailed settings page of the [Form Analysis] function can be displayed at the Edit Flow page. The latest Attribute List information will be updated.
- 2. Close the detailed settings page of the [Form Analysis] function.
- 3. Display the detailed settings page of the function positioned after the [Form Analysis] page, and release the settings of the newly added attributes, or the settings of the deleted attributes.
- 4. Exit Flow editing.

If you attempt to exit the Edit Flow page with the deleted attributes still set, the Flow Management check function will detect the mismatch in the respective areas. When this happened, repeat Step 3 to resolve the mismatch.

When Form Management Group is Deleted

When the Form Management Group is deleted, delete the associated Flow and then create a new Flow, or change the existing Flow.

Next, the section will explain the steps to change existing Flow.

- 1. The detailed settings page of the [Form Analysis] function can be displayed at the Edit Flow page. The latest Attribute List information will be updated.
- 2. From [Attribute List], select the new Form Management Group, and click [OK].
- 3. When there are other functions referencing the [Form Analysis] function, display the detailed settings of these functions, and change the attribute settings.
- 4. Exit Flow editing.

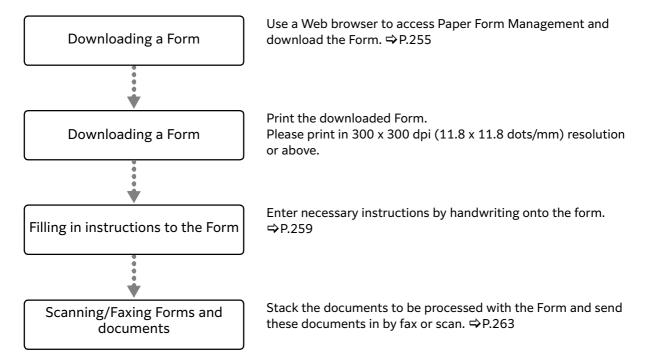
Using the Form to process documents

The following will explain how users can download the form, enter processing information unique to each document, and scan or fax.

Operation Flow

The following shows the operational flow for using the Form and entering documents. Confirm the following before starting the operation.

- The URL of Paper Form Management
- The Form to be used
- Input location (device folder, shared folder, etc.) for the document



Downloading a Form

Download the Form from Paper Form Management. Select "PDF" or "DocuWorks" for the file format.

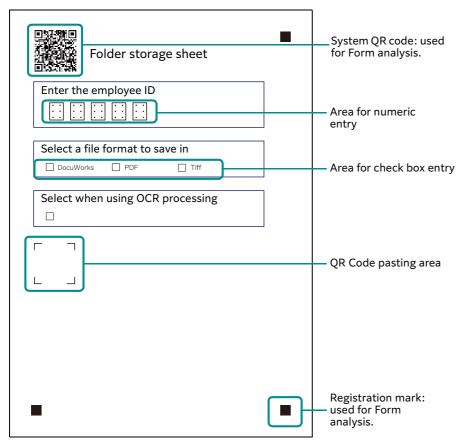
The standard Form, and the Separator Form

There are two types of Forms - the standard Form, and the Separator Form used to mark the separation between documents.

• Standard Form

Form created by the administrator and used for the filling of instructions.

A sample of the Form is as follows.

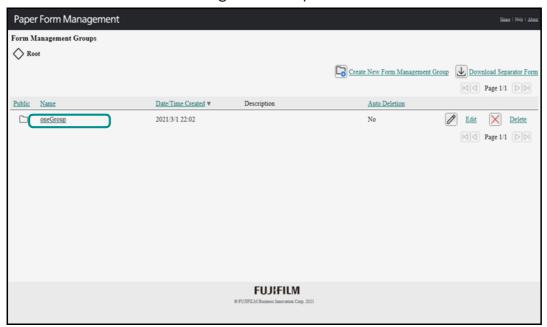


• Separator Form

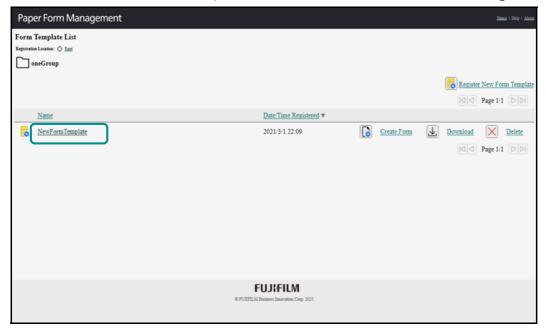
Copies and inherits the instructions from the Form one place before it. Using the Separator Form eliminates the hassle of instructing the same contents multiple times.

Downloading a Form

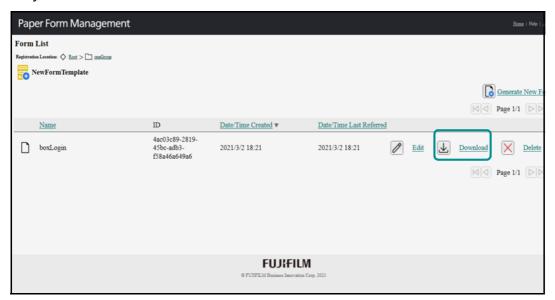
- 1. Start the Web browser.
- 2. Enter the Paper Form Management URL into the address bar of the Web browser.
- 3. Click the name of the Form Management Group which the Form to be downloaded is registered to.



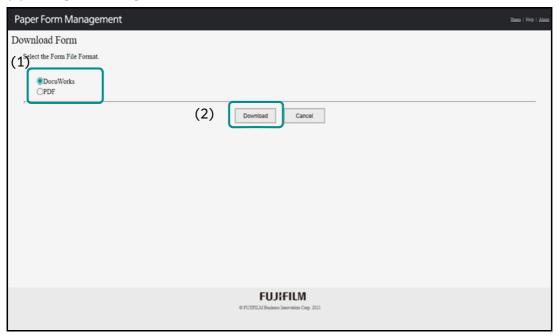
4. Click the name of the Form Template which the Form to be downloaded is registered to.



5. Click the [Download] of the Form to be downloaded. Only 1 Form can be downloaded at a time.



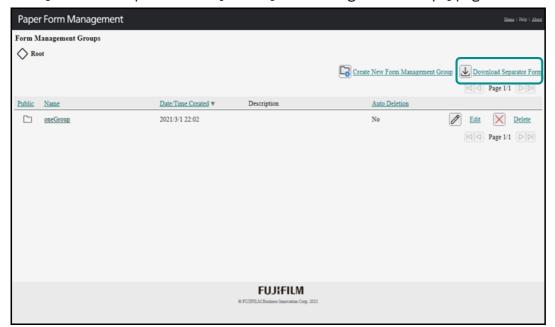
- **6.** Perform the following steps.
 - (1) Select [DocuWorks] or [PDF] for the file format of the Form.
 - (2) Click [Download].



- 7. Click [Save] when the file download confirmation appears.
- 8. Specify a saving location and click [Save].
 The Form is downloaded to the specified location.

Downloading the Separator Form

- 1. Start the Web browser.
- 2. Enter the Paper Form Management URL into the address bar of the Web browser
- ${\bf 3.} \, {\sf Click} \, [{\sf Download \, Separator \, Form}] \, {\sf at \, the} \, [{\sf Form \, Management \, Groups}] \, {\sf page}.$



- 4. Perform the following steps at the [Download Form] screen.
 - (1) Select [DocuWorks] or [PDF] for the file format of the Form.
 - (2) Click [Download].
- **5.** Click [Save] when the file download confirmation appears.
- **6.** Specify a saving location and click [Save]. The Separator Form is downloaded to the specified location.

Filling in instructions to the Form

This section describes the points to note when filling in check boxes, numbers, pasting QR Code stickers, or performing other such actions on the printed Form.

Filling in check boxes

Mark with a checkmark, centered and within the boundaries of the check box. Be careful not to go over the border lines.

[Examples of correct entries]



"X" can be used

[Examples of incorrect entries]



Not centered within the border

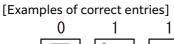


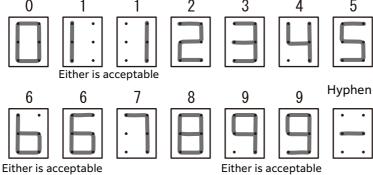
Went over the border lines

Entering numbers

To enter numbers, join the dots in the 6-dot Number Box.

The numbers 0 to 9, and hyphen (-) can be entered. An error will occur during Form analysis if incorrectly entered.





[Examples of incorrect entries]



Dots are not joined



Protruding from border



Slanted line used



Position of the line is different



Drawn line touched border lines

Pasting the QR Code

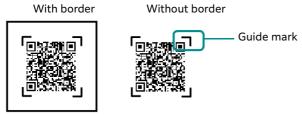


Please do not use the stamped QR Code. Using a stamped QR Code may result in incorrect analysis.

Pasting position of the QR Code

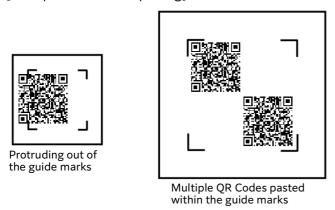
The markings showing the pasting position of the QR Code are referred to as "Guide marks". Please paste only one QR Code into the boundaries of the guide marks. Examples of pasted QR Codes are as follows.

[Examples of correct pasting]



Pasted within the guide marks

[Examples of incorrect pasting]





Incorrect pasting of the QR Code may result in the occurrence of errors during Form analysis.

Notes when creating the QR Code sticker

• QR Code standards

Only JIS X 0510 standard QR Code / Model 2 is analyzable. Operation of QR Code / Model 1, micro QR Code, structurally linked or concatenated QR Codes is not guaranteed.

• Cell size

The small four-sided dots that make up the QR Code are referred to as "cells". If the cell size is smaller than 0.8 mm, analysis may be impossible even if the QR Code is clearly printed. Please use QR Codes with cell sizes 0.8 mm and above.

• QR Code color

Please set the background to white and the cell color to black.



- Do not use JPEG or other non-reversible compressed image formats to print the sticker. Fine noise will occur between cells and prevent stable Form analysis.
- Do not use stickers with transparent backgrounds. The transparent areas may appear as noise in the form of fine dots in the scanned image, and affect the reliability of Form analysis.

Unusable QR Codes

The following types of QR Codes may lead to Form analysis errors.



Blurred / Unclear



Warped



Render size of cells are



QR Codes out of scope of guaranteed operation



Words or images placed on top of QR Code

Notes on Form entry

Take note of the following points when filling in the Form.

(1) Please use the following for writing materials.

Color: Black (Darker than HB if using a pencil)

Width: Width of writing tip to be 0.5mm and above

Do not use writing instruments with broad tips, such as markers, felt pens, etc.

- (2) Form analysis may be impossible in the following cases.
 - Form
 - -Printed (or copied) to a paper with size different from that planned
 - -Deteriorated image due to repeated copying or faxing
 - -Printed in a resolution lesser than 300 dpi (11.8 x 11.8 dots/mm).
 - -Enlarged or reduced print (or copy)
 - System QR Code, registration mark
 - -Erased
 - -Blacked out
 - -Overlaid by other images
 - -Unrelated writings or existing dirt
 - Area around the system QR Code, registration mark
 - -Unrelated writings or existing dirt

(instructions written in pencil, eraser dirt attached on the paper after erasing, etc.)

- Area for check boxes or numeric entry
- -Erased
- -Blacked out
- -Area blacked out is larger than the border of the check boxes

- -Lines of entered numbers joined to the border lines of the numeric entry area
- -Overlaid by other images
- -Unrelated writings or existing dirt (instructions written in pencil, eraser dirt attached on the paper after erasing, etc.)
- Check box border, 6-dot Number Box
- -Broken border (when a hard writing material is used, etc.)
- QR Code pasting area
- -QR Code out of place from the guide marks
- -Words or images placed on top of QR Code
- -Multiple QR Codes pasted
- -Any of the following QR Codes pasted
- -Blurred QR Code
- -Unclear QR Code
- -Warped QR Code
- -QR Code with cells each having a small render size
- -QR Codes out of scope of guaranteed operation

(Example: Micro QR Code, QR Code / Model 1, split or joined QR Codes, etc.)

Scanning/Faxing Forms and documents

This section describes how to scan or fax in the Form that has been filled in, together with the documents targeted for processing.

Placing the Form with documents

Forms and documents are represented in the following manner.







Standard Form

Separator Form

Document

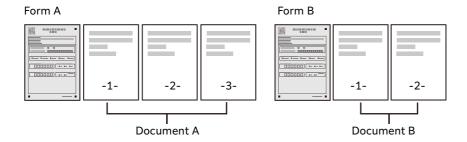
When 1 Form is for 1 document

After stacking up the documents, stack the Form on top.



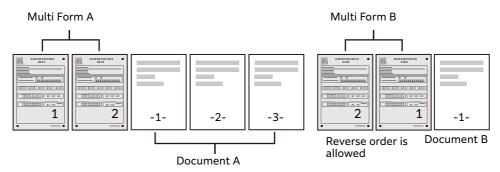
When handling multiple Forms and documents altogether

Place Form A > Document A, Form B > Document B ...



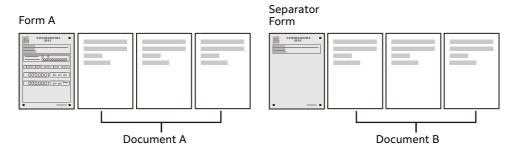
When using multiple Forms

When using a Form with multiple pages defined as a Multi-page Form, stack in the following order. Page order of the Form does not matter. If the number of pages for the Form is less than the number of pages defined, an error will occur.



To execute the same instructions multiple times

Use the Separator Form. For the following example, the instructions on Form A will be applied for document A and document B.



Scanning

- 1. Stack the Form(s) and document(s) and set them into the document setting area of the device.
- 2. Select the scan function.
- 3. Set in the following manner for the read settings. Color mode: [Full Color] or [Black & White (Text)]

Scan resolution: 200 dpi and above

When using the QR Code, 300 dpi and above is recommended.

Reading intensity: [Normal]



Do not select [Grayscale], [Photo], or [Photo & Text].

4. Specify a saving location, and execute scanning.



- Form analysis may be impossible in the following cases.
- When color images undergo image conversion processing and are binarized before the Form is analyzed, due to processing set to the flow or other software
- When enlarged or reduced then scanned

Sending in via fax

- $oldsymbol{1}$. Stack the Form(s) and document(s) and set them into the document setting area of the device.
- 2. Select the fax function.
- 3. Set in the following manner for the read settings.

Image quality: [Text]
Intensity: [Standard]
Resolution (dpi): [Fine]

When using the QR Code, it is recommended to select [Superfine].

4. Enter the fax number of the multifunction device at the delivery destination, and send the fax.



Enlarging or reducing and faxing may cause Form analysis to be impossible.

Notes on using [Form Analysis] feature

- At [Form Analysis] feature settings, even if [Include Form Image File in output document] is not specified and only the Form is input during actual job processing, that Form image will be output as the document image data.
- At [Form Analysis] feature settings, when [Ignore error and continue processing] is specified and Form detection fails during actual job processing, that Form image will be output as the 1st page of the document image data.

When "DocumentFormat" (Document Format) is not specified at instructions by Form (or when Document Format is specified as [None]), the [Form Analysis] feature will use the format of the input image as it is. Image will not be processed even if the following specifications have been set on the Form.

- Compression (Document Image Specification)
- DocumentFileForm (Document File Save Format)
- When [DocuWorks] or [PDF] is specified for "DocumentFormat" (Document Format) at instructions by Form, [Form Analysis] feature saves the file in multi-page format.
 Due to this, [Single] (Single Page) of "DocumentFileForm" (Document File Save Format) will not be applied even if it is set.

- [Form Analysis] feature will not set attribute values for the following cases. Please take note when using these values for any processing method or delivery destination within the Flow.
 - When attributes used in the Form are not included in Form analysis results.
 - When using a Selection Group Control set to "Do not control when null" and there is no user specification.
- [Form Analysis] feature outputs "AnalysisStatus" (Form Analysis Status) as an attribute to show the success or failure of Form analysis. As this attribute has a value showing the status of Form analysis attached to it, it can be used for the delivery conditions, etc. However, this attribute is enabled only when "Ignore error and continue processing" is specified. Without this specification, the value of attribute cannot be used, as job processing at Flow Management Option will stop when an error occurs for Form analysis.
- The [Form Analysis] feature outputs "FormAnalysis" (Form analysis results) as an attribute that contains all Form analysis results. The format of the value set to this attribute is described in XML text. This XML description has to be analyzed in order to refer to this attribute and retrieve required information from it.
- When Clip Area Control is included in the Form, [Form Analysis] feature clips this area and converts it to a monochrome binary bitmap image, and outputs as an attribute value. The following processing is required to use this image data for Processing Methods placed after Form Analysis Tool, and for use as the delivery destination.
 - Clipped images are encoded in Base64 and output as a text-type attribute. Encoded images must have their text decoded with Base64 before they can be used.
 - The attribute name storing the image after area clipping cannot be retrieved during Flow Management Option Flow setting. To use this attribute, it is necessary to analyze the XML included in "FormAnalysis" (Form analysis results) output by [Form Analysis] feature to retrieve the attribute name given to the clipped area image.
- [Form Analysis] feature splits documents by using Forms as units. Whether document images are handled as individual file formats or as formats to store to folders are decided by the number of pages of the split document. This format difference is important when saving the document for the delivery destination. For example, the storage format of document images saved in folders will differ depending on this format. If splitting results show 1 file/multi-page, "File format" will be used, whereas "Folder storage format" will be used for other cases. When format conversion is specified at the Form, the conversion will follow format conversion specifications of Flow Management Option.
- There are 3 processes in the output of Form image by [Form Analysis] feature, "Include Form Image
 File in output document", "Completed Form Image Backup", and "Completed With Error Data
 Backup". If the Separator Form was input, the output Form image will displace the normal Form
 image that was one place before it.
 However, if no normal Form image was input before the Separator Form, the Separator Form will be
 output as the Form image the way it is.
- When Multi-Element Control and its subordinate controls are deployed at the Form, and analysis
 results of its subordinate controls are retrieved using "Multi-value separator linking", take note of
 the following.
 - For example, there are 3 subordinate controls, with the values "A", "B", and "C" retrievable from each of the controls. Commas(,) are set as separators, and the value after linking becomes "A,B,C".
 - The resulting values in the event one of the values is irretrievable, for example, when only "A" and "C" are retrieved, is "A,C".
 - When you want to retain only the existence of the value which was irretrievable, that is when you want to set it as "A,,C", select [Use default value when null] at the subordinate control settings to set nothing to the default value.

- When using the Multi-page Form and attributes specified for each individual Form have the same name, the value is determined by the analysis results of the last input Form. For example, when the first Form input and the last Form input both contain "DocumentFormat" (Document Format), the document format set at the Form last input will be used.
- When [2 Sided] is selected, the reverse side of the Form will be treated as the first page of the document.
 - If the Form's reverse side is blank, you can remove this first page by specifying [Yes] for [Remove Blank Space for Top Page] in advance on the Form.
 - If the scanned image happens to have a lot of noise due to problems from the document reader mechanism of the scanner, detection of whether the first page is a blank page may not be possible, and the first page may not be removed.
- When using color images imported from a color scanner, do not input images processed or converted using external applications to Flow Management Option.
- Form analysis settings may fail when Form analysis is selected at Flow creation before installing Paper Form Management, even if Paper Form Management is installed thereafter. In this case, please restart ApeosWare Management Suite Flow Management Service.

Notes on using Paper Form Manager

- There is a registration limit for the quantity of each of the resources which can be registered in Paper Form Management. The limits are as follows. Please use Paper Form Management to delete the unneeded resource when the limit is exceeded.
 - Form Management Group has a maximum registration quantity of 32 groups.
 - Each Form Management Group can have a maximum of 32 Form Templates registered to it.
 - Each Form Template can have a maximum of 256 Form Files registered to it.
- The World Wide Web Publishing and Task Scheduler services must be running in order to use Paper Form Management. Please start these services before using Paper Form Management tool.
- (1) Log in with administrator privileges and open [My Computer].
- (2) Click the [Folder Options] in the [Tool] menu and click the [View] tab.
- (3) Remove the check from [Share Simple File (Recommended)] in the [Detail Settings] list.
- (4) Click the [OK] button.
- By default, folders without Authenticated Users permissions exist in Windows OS with User Account Control (UAC) enabled. When Paper Form Management is installed in these folders, used, and then reinstalled after uninstalling, the log files become unaccessible. This happens if the Paper Form Management administrator user specified during reinstallation differs from the user specified during initial installation. In such a case, add Paper Form Management administrator user full control permissions for all file access rights under the "{Installation Folder}\log" folder.
- Part of the header text may not switch even if the Web browser language is switched. In this case, display the correct language by clicking the [Home] or [Administrator Page] button.
- If different Form Deletion condition (Form Validity Period, Form Deletion Start Time) is set for 2 nodes in Microsoft Failover Cluster environment, the form will be deleted at a different timing from that in the screen setting. Ensure the setting for Form Deletion condition is the same.
- Only usage in an intranet environment is supported. Operation is not guaranteed when used in the Internet environment.
 - When accessing Paper Form Management, open [Internet Options] from the [Tools] menu of the Web browser used, and configure the following.
 - Select [Intranet], [Custom level] in order from the [Security] tab. Specify [Enable] for [Active Scripting] at the security settings screen.

- Select the [Advanced] tab and select the [Send UTF-8 URLs] check box.
- Select [LAN settings] from the [Connections] tab, and select the [Bypass proxy server for local addresses] check box from [Proxy server]. Next, select [Advanced] from [Proxy server], and enter the computer address on which Paper Form Management is installed, into the [Do not use proxy server for addresses beginning with] under the [Exceptions] item.
- When operations for form template or form fail, register the Paper Form Management site as [Trusted Sites] to cancel the protection mode of trusted sites.
- Do not open multiple Web browsers at the same time to run Paper Form Management on 1 computer.
- Only 1 administrator may access Paper Form Management at any one time. Do not log in multiple administrators at the same time and operate.
- The Form Template file registration size limit is 8 MB. The "Unable to display page" error screen will show when attempting to register a file exceeding 8 MB.
- If Japanese names are included in Form Files or Form Template files, the Japanese part of the file name will not display correctly during retrieval of the file by clicking [Open] from the [Download File] dialog box displayed. When [Save As] is clicked from [Save] of the [Download File] dialog box, the Japanese part of the file name displays correctly.
- When a long string is set for Form Template ID, during Form File retrieval, the title message of the [Download File] dialog box may not display correctly.
- During file retrieval, the file name may be cut short if it exceeds 16 characters.
- The Web browser's [Back], [Forward], and [Stop] buttons are not supported.
- If part of the resource name has continuous single-byte spaces, these spaces show as 1 space on the Web browser.
- Double-clicking buttons on Paper Form Management screens may be treated as having performed the related feature twice.
- To shorten download times, the Form File retrieval process reduces Form File size by reducing color used by Forms to 256 colors. Due to this, the color specified for Form Files during Form Template file creation may not be faithfully reproduced.

7 What if?

Frequently Asked Questions and Answers

This section answers frequently asked questions for Flow Management.

If you have a trouble, see "Features Guide Flow Management Option Messages".



The described error messages can be checked in the error notification e-mail, operation log file or [Job Details] page.



- Operation log file

 "Features Guide Flow Management Option Messages"
- [Job Details] page ⇒ "Displaying Details of Jobs Completed with Errors" (P.205)

Language and Locale

When setting a folder, if the folder name is specified with the language other than selected with [Language for non-Unicode programs], "Folder does not exist" message will appear.

Please use the language selected with [Language for non-Unicode programs].

When Using Windows File System

Folder cannot be accessed.

When you specify a folder for the inbound channel, the following error may be occur at the start of the process.

Unable to access the folder {path name}.

When this happens, the required access rights are not set to the folder specified for the inbound channel. Add the [Read], [Write] and [Delete] rights of the access user to the specified folder.



File cannot be accessed.

Inbound channel folder cannot be encrypted with Windows Encryption File System (EFS) feature. The following error will occur when the inbound channel folder is encrypted with this feature.

"A system error has occurred. [SYSERR=32 The process cannot access the file because it is being used by another process.]"

In such a case, remove the encryption settings by following the below procedure.

- $oxed{1}$. Start the Explorer, right-click the encrypted folder and select [Properties] from the menu displayed.
- 2. Click [Advanced] in the [General] tab.
- 3. Deselect [Encrypt contents to secure data].

Notes on Using Shared Folder

When a shared folder is used for the features of Flow Management Option such as [Folder], [Save to Folder], [Document and Attributes Table Output], even if a different account is specified on each feature's settings screen, a connection will be established using Network Service account.

Therefore, if the service connecting to a shared folder using Network Service account is running on a same PC, there will be competition for resources and an error may occur.

When Folder on FAT32 Formatted Drive is Selected as Folder to Save File

On the detailed settings page of the [Save to Folder] feature, when [Local Folder on Server] is selected for folder type and a folder on a FAT32 formatted drive is selected for [Location of Local Folder on Server], the entered [User Name] will not be used.

When Sending FAX

When sending faxes, please select High Quality ($200 \times 200 \text{ dpi}$) or Superfine ($400 \times 400 \text{ dpi}$, $600 \times 600 \text{ dpi}$) as the resolution on the device side.

For fax-received documents having the standard resolution of 200×100 dpi or a resolution where the length and width are different, the images may be distorted as they will be processed in a resolution with equal length and width. In that case, the QR code may not be read.

When Scanning

For image quality adjustment during scan input, the QR code may not be read if Sharpness is set to "Less Sharp" and Contrast is set to "Less Contrast".

Importing Documents from a Device Folder

Documents cannot be imported from a device folder

When an error occurs while importing the document from a device folder, the following error messages are displayed. You deal with matters according to the situation.

- Disconnected from network scanner. Image data may be corrupt. (FNS_ERROR_INTERRUP/PWX_ERROR_INTERRUP)
- Image data is corrupt (FNS_ERROR_DECODE).
- Unable to create image data. Check that the disk and the network are working properly. (FNS_ERROR_ENCODE)

When data transmission from a device folder is interrupted, or invalid image data is imported, the errors described above occur. A [Completed With Error] job including the retrieved image data is created.

However, for some device models, the document with an error remains in the device folder and may not be processed. To restart the page processing, you disable the flow and enable it again.

When you cannot import the document by the above operation, and an error is repeated, check that the document registered in the device folder is correct by the activity report or job history report of the device.

(When "K7-07" is shown in the activity report, or "016-776" is shown in the job history report, the document is invalid.)



Refer

"Starting or Stopping the Flow Management Service" (P.70)



Note

When specifying [Perform Job Execution for Imported Document Even for Inbound Document Error (Processing Error or Corrupt Document)] on the detailed settings page of the [Device Folder] function, you can automatically continue the process from the page processing for the [Completed With Error] job.

- The network scanner cannot be found or its power is off. (FFNS_ERROR_SCANER/PWX_ERROR_SCANNER)
- Failed to connect to network scanner.
 (FNS_ERROR_CONNECT/PWX_ERROR_CONNECT)

The following causes may be suspected if these errors described above occur.

- The target device stops.
- Your network connection is disabled due to the network cable of the computer or device being unplugged.
- The flow is not changed after you assign the IP address of the device in communication with Network Scanner Utility 2 to the device in communication with a WebDAV (the same as vice versa).
- For the communication with Network Scanner Utility 2, the device does not reply within a timeout period when you access the device folder using a scanner driver with a heavy load on the network or device.
- The salutation port is not enabled for the device in communication with Network Scanner Utility 2.
- The SOAP port is not enabled for the device in communication with WebDAV.

When the errors described above occur frequently, confirm that the network or device status is correct.



Note

The timeout value when you access the device folder using a scanner driver is about 20 seconds by default of Windows. The timeout value may vary according to your computer performance. When the network load is temporarily high, and if the load is reduced, the response is processed successfully on the next polling cycle.

Communication data with network scanner is incorrect. (FNS_ERROR_DATA/PWX_ERROR_DATA)

To restart the page processing, you disable the flow and enable it again.

When you cannot import the document by the above operation, check that the document registered in the device folder is correct by the activity report or job history report of the device.

(When "K7-07" is shown in the activity report, or "016-776" is shown in the job history report, the document is invalid.)



Refer

"Starting or Stopping the Flow Management Service" (P.70)



Note

When specifying [Perform Job Execution for Imported Document Even for Inbound Document Error (Processing Error or Corrupt Document)] on the detailed settings page of the [Device Folder] function, you can automatically continue the process from the page processing for the [Completed With Error] job.

Cannot Access Device after Retrieving Document from Folder Using Network Scanner Utility 2

When you cannot access the device folder after retrieving documents from the device folder, the following error messages may be displayed.

Unable to delete file ({document number}) in device folder ({device folder number}) of {model name} {IP address/host name}) {error reason}

In that case, since the retrieved document remain in a temporary file of the scanner driver, the same document may be processed again.

In addition, when you cannot access the device, the following message is displayed simultaneously.

The network scanner cannot be found or its power is off. (FFNS_ERROR_SCANER/PWX_ERROR_SCANNER)

When this happens, check that the network cable and the device power supply are correct.

Deletion of Documents in Folder Fails after Retrieving Documents from Folder

For devices (ApeosPort-III/DocuCentre-III or later) that communicate with the WebDAV protocol, retrieve the document from the folders and generate a job, then delete the document within the folders. If communication with the device is not normal, then the document cannot be deleted and an error will occur.

In such a case, the document will remain in the folders and Flow Management Option will use an internal list to make sure the document is not retrieved if it already exists.

However, since this list is retained only by the Flow Management Option server that detected the error, be aware that the document may be retrieved again if the configurations are changed due to the following:

- When changing the data folder (uninstall to install)
- When switching to a different server in a configuration with multiple devices
- When failover occurs in Microsoft Failover Cluster

To avoid duplicate documents from being retrieved, follow the below steps.

Under normal operation

When you receive the following error message, take the measure given below:

Unable to delete file ({document number}) in device folder ({device folder number}) of {model name} {IP address/host name}) {error reason}

Check the log to confirm whether or not the document with the same document number was retrieved before the error occurred. After checking, delete the document using Internet Services or the device control panel. Refer to the manual of the device for details on deleting documents.

When configuration is changed

After taking the measure for normal operation, if the folder to save user data is changed or the server is switched, check if there are previously processed documents remaining in the folders of the monitored devices by referring to the registered dates using Internet Services or the control panel of the devices. If documents exist, save the documents to a different location or print them out before deleting them just to be safe. Refer to the manual of the device for details on retrieving, printing and deleting documents.

On a PC that uses multiple network cards, "Failed to connect to network scanner." occurs.

The following error may occur when importing document from folder if the PC containing 2 network cards joins the domain using Microsoft Cluster Service.

Failed to connect to network scanner (FNS_ERROR_CONNECT)

This symptom can be avoided by going to [Control Panel] > [System and Security] > [Windows Firewall] > [Allow a program or feature through Windows Firewall] and placing a check mark in the [Domain] of [Salutation Daemon].

The value of [Standby Interval] in the [Device Folder] function set before download is different from the value after a flow is uploaded.

[Standby Interval] set in the [Device Folder] function is common to all flows. Therefore, if you upload the flow including the [Device Folder] function, a different value from [Standby Interval] you have set in the flow may be displayed.

When a flow is uploaded to the newly set Flow Management, [Stanby Interval] is set to one minute. If [Stanby Interval] is already set in the [Device Folder] function, the value is used.

The device folder is not monitored at the specified [Standby Interval].

When you enable or disable the flow with the [Device Folder] function, the folder monitoring process of the flow with another available [Device Folder] function is initialized. When this happens, the device folder may not be monitored according to the specified [Standby Interval].

After enabling or disabling the flow, the device folder is monitored according to the specified [Standby Interval].

Can the document sent by Fax using the [same destination/batch send] function be split in the receiving end?

When the [same destination/batch send] function is set for the fax device of sending end, the device in the sending end puts multiple documents sent to the same recipient in a certain time into one document.

The document sent using this function cannot be split into the original multiple documents in the fax device of receiving end. The document is described as one job in the activity report of the receiving end. When this fax document is received in Flow Management, it is processed as a single job.

How does Flow Management work when a special character code is included in the sender ID?

When a special character code (Character codes that can not be used on Windows, Example: 0xF0) is included in the sender ID of the fax received document, and you use it as a document name, the special character code is replaced with an underscore (_) character.

Importing or Saving Documents from or in Folder

Documents cannot be Retrieved from Shared Folder

For check of connection to the shared folder, ping is used. Therefore, in the environment where ping cannot be used, the following error is recorded in the log, and documents cannot be retrieved from the shared folder.

The share server: <<<%s>>> can't be connected now. (%s refers to the server name.)

A message "Document may be in use" was displayed, although not in use.

When you input a large size file in a folder of the inbound channel, Flow Management may detect an error while the file is copied. When it happens, the following message is displayed.

The document {file path name} that you have attempted to retrieve cannot be accessed. It may be in use.

For example, if you copy a TIFF file with one page, gray scale, uncompressed, 300 dpi and 2A0 (long) to the folder in the inbound channel, the error described above occurs.

Even after this error has occurred, Flow Management tries to retrieve the file regularly. The job is processed normally after the file has been copied.

Restrictions for Importing Long File Names

If [Folder] has been set for the inbound channel and a file with a file name exceeding about 100 bytes is imported, copying of the file may fail and the job may not be processed.

When this error occurs, shorten the name of the file to be imported, and store the file again in the inbound channel folder.



In Flow Management Option, the working folder in its data directory will be used when importing files. This occurs when the combined "Working Folder Path" and "File Name" of the import file exceed 255 characters.

This working folder path contains the "user data folder" and "PC name where Flow Management Option is installed" specified when installing the Flow Management Option, and changes depending on the installation environment. Therefore, 100 characters for the "file name" is a guide.

Be sure to execute the job in advance and confirm that this error does not occur.

Attributes When Sorting Documents and Saving Them to Subfolder

- When [Sort Documents and Save to Created Subfolder] is selected for the storage location and the subfolder name is specified with attributes, the created subfolder cannot be deleted if during the flow's job processing the following reserved words of Windows have been specified as attributes. CON, AUX, NUL, PRN, LPT1 to LPT9, COM1 to COM9, CLOCK\$
- When an attribute contains "." or "..", a subfolder is not created. The file will be output below the storage folder.

For example, the above mentioned problem may occur if the OCR result containing the these words is used as the subfolder name attribute. In this case, reset the attributes to their defaults by entering any string such as an underscore (_) to the subfolder name.

Using Link to Web Applications

[Link to Web Applications] feature.

Notes on Using Link to Web Applications

- Do not use the buttons displayed on the Device Control Panel toolbar while accessing Web Applications on the device.
 - An error message may appear if the Refresh button on the toolbar is used. If an error occurs, press the [Exit] or [X] button to exit the Web Applications screen, and then retry the operation.
- When flows using the [Link to Web Applications] feature, in which OCR is set, are executed in
 devices which do not support OCR because they are not equipped with the Scan Extension Kit,
 although jobs may complete normally, OCR results are not output.
 Execute flows in devices which are equipped with the Scan Extension Kit when using OCR with the
- When the device scan feature is restricted on the device or related products, local authentication on the device must be performed to scan via Link to Web Applications. The scanning should be performed after a user who can use the scan feature has been authenticated on the device.
- If the disconnect operation of Web Applications is performed or the device panel is reset while the preview screen on the device control panel is being displayed, the applicable jobs cannot be run afterwards. In this case, wait 15 minutes and then display the preview screen again.

I would like to use server certificates on a local network.

When you communicate with encryption of document data from a device by server certificate issued from Microsoft Certificate Services on a local network without internet connection, the Microsoft Certificate Services must be running in a local area network.

If you cannot access the computer in which the Microsoft Certificate Services is running, you receive an error stating that "Access error of link to application (027-724)". After this error has occurred, even if you run the Microsoft Certificate Services, the same error may occur whenever you operate the device.

When this happens, connect your local network to the internet temporarily, and then perform the link to web applications function on a device.



For the detailed information on how to set a network, see the Microsoft support data page.

Processing the Image

Is there a notice when the image is smoothened and converted to high resolution?

When you select the [Resolution Conversion] check box in [Image Processing/Edge Erase/Resolution Conversion] of the [Image Processing] function, and select [Smoothen Image and Convert to High Resolution], the resolution of the converted image is increased. However, you cannot reproduce the image quality faxed or scanned by the same resolution after conversion.

For example, if you convert the image scanned at 200 dpi to a high resolution of 300 dpi, the quality may be inferior to the image scanned at 300 dpi.

When this happens, scan the image at 300 dpi without setting high resolution.

Image is not rotated by setting auto rotation

When you specify [Auto Rotation] in the [Image Processing] function and process the image including only dither-processed or outline characters, the characters may not be rotated to the right direction for reading the characters.

This is because the auto rotation process recognizes the text within the image (OCR processing) and rotates it to the right direction for reading the characters. However, only dither-processed or outline characters cannot be recognized as characters.

The image processing stores the previous processing result as cache internally. As a result, the image including only dither-processed or outline characters may be rotated to the right direction for reading according to the stored cache contents.

Converting the Format

Notes on Converting the Format of DocuWorks Documents Created From Application

When converting a DocuWorks document created from an application to PDF or other formats, image files will be retrieved from the DocuWorks document. As the image files will use the resolution that was used (default: 600 dpi) when the DocuWorks document was created, take note that their file sizes may be bigger than the original DocuWorks document's. For example, after a DocuWorks document created from Word has been converted to the PDF format, its file size may be increased by 150 times.

In addition, if the DocuWorks document has been created with image data, there will be not much difference in size between the DocuWorks document itself and the image data. Therefore, the file size of this DocuWorks document after format conversion is mostly unchanged from the original data.

Restrictions for Importing Image Files When Converting to DocuWorks

Imported image files and uncompressed intermediate image data is generated during conversion to DocuWorks. For example, if an A1 paper size, grayscale, 600 dpi Packbits single-page TIFF file (13234 KB) is imported, the uncompressed intermediate image data may be up to 273 MB.

Notes When Converting Images Over A3 size to DocuWorks

The process when converting an image over A3 size to DocuWorks with the [Format Conversion] feature is as follows.



When generating a DocuWorks document of a standard paper size from an image file, the sizes considered to be A3 are 220×307 mm or larger and 307×430 mm or smaller.

DocuWorks Document Version: Ver. 7

Output Paper Size: Any of the following paper sizes

- A2 (420 x 594 mm)
- A1 (594 x 841 mm)
- A0 (841 x 1189 mm)
- 2A0 (Long Paper) (841 x 2378 mm)

Output Image:

- Fully scaled input image with the center as the origin
- 2A0 paper size (841 x 2378 mm) and bigger sections are cut off

However, if DocuWorks 8 or later is installed, [Set Maximum Standard Size to A3] can be selected at the size specification setting.

If [Set Maximum Standard Size to A3] is set, the conversion process is as follows.

DocuWorks Document Version: Ver.4 Output Paper Size: A3 (297 x 420 mm)

Output Image:

- Fully scaled input image with the center as the origin
- A3 paper size (297 × 420 mm) and bigger sections are cut off.

Restrictions When Converting TIFF (JPEG compression) Document to DocuWorks Document

When using the [Format Conversion] feature to convert from TIFF (JPEG Compression) Document to DocuWorks Document, the paper size and resolution may be changed.

Is there a notice when a TIFF format file is used?

The [Format Conversion] function does not support the LZW compression TIFF format.

An LZW compressed TIFF file may be created automatically while operating the Windows application. For example, if you perform the following operations, the compression format of TIFF file is converted to LZW.

- When saving a TIFF file using [Image and Fax Viewer].
- When opening [Property] of the TIFF file on Explorer, switching to the [Outline] tab, and then clicking [OK].
- Opening a TIFF file from [Image and Fax Viewer] and closing [Image and Fax Viewer] after [Rotation] is executed without saving it.

Please note that processing these LZW compressed TIFF files by Flow Management results in an error.

A file name cannot be displayed in the header part of the PDF file.

For the PDF file created in the [Format Conversion] function, [Fit page to window size] is set for [Window Options] on the open setting. When you open this PDF file using Adobe Reader 6.0, only the title attribute of the document properties is displayed as the window header, but the file name is not displayed.

To display the file name in the window header, open the PDF file using Adobe Acrobat 5.0 or 6.0, deselect the [Fit page to window size] check box on the [Open Setting] tab of [Document Properties].

A TIFF file with color pages cannot be displayed or edited.

When you select [TIFF (Multi-Pages)] for the format to be converted in the [Format Conversion] function, and select [Grayscale], [Color] or [Color & B/W Mixed] for [Output Color], a TIFF file including color pages and grayscale pages is created. This TIFF file may not be displayed or edited on some applications or compression methods.

When this happens, you should use other applications to edit the file, or select a different format in the [Format Conversion] function.



- Only black and white pages may be displayed for a TIFF file with [Color & B/W Mixed].
- When you edit a black and white page immediately before a color page in a TIFF file with [Color & B/W Mixed], a message, such as the following is displayed and the image may not be displayed: "Invalid or unsupported format is included in the requested page."

For OCR Processing

If on-access scanning is enabled for an operating environment installed with antivirus software, job processing may stop if the work file is in use during OCR processing.

To ensure correct operation, exclude the folders below in the on-access scanning settings.

• {Windows system drive}\mediadrive\WinReader PRO User Data_AppData_\13.0\Temp2

- {Windows system drive}\WinReader PRO User Data_AppData_\13.0\Temp2
- {Windows system drive}\MdcTemp2

The above folders may differ depending on the Windows version or WinReader PRO version being used. Specify one of the actual folders.

What is the character recognition accuracy during the OCR process?

For the OCR process of Flow Management, the OCR function module of DocuWorks installed in the Flow Management server is used. Therefore, the character recognition accuracy of OCR in Flow Management depends on the DocuWorks OCR character recognition accuracy.

However, if you specify the OCR zone in [Zone OCR], the result may not be the same result as in DocuWorks. In that case, the recognized character size is about 1.8 mm to 15 mm cubes.

In addition, the items that can be set for the [OCR] function in Flow Management depends on the DocuWorks OCR function.

The following section describes the difference between Flow Management and DocuWorks for the OCR functions.

- You can select from three levels, [Low], [Normal] or [High] for reducing noise in DocuWorks.While in Flow Management, you can select from four levels, [None], [Lower], [Normal] or [Higher]. This setting is only applied to the OCR processing, but not applied to the document processed in Flow Management.
- In Flow Management, the followings are operated as:
 - Spaces: not entered
 - Auto skew correction: done

The setting of auto skew correction is only applied to the OCR processing, but not applied to the document processed in Flow Management.



For the items of OCR (character recognition) on the setting screen of DocuWorks, see the help of DocuWorks.

Notes When Using WinReader PRO as the OCR Process

If on-access scanning is enabled for an operating environment installed with antivirus software, job processing may stop if the work file is in use during OCR processing.

To ensure correct operation, exclude the folders below in the on-access scanning settings.

- {Windows system drive}\mediadrive\WinReader PRO User Data_AppData_\13.0\Temp2
- {Windows system drive}\WinReader PRO User Data_AppData_\13.0\Temp2
- {Windows system drive}\MdcTemp2

The above folders may differ depending on the Windows version or WinReader PRO version being used. Specify one of the actual folders.

When running OmniPage OCR processing

 When you convert the formats to PDF file or Word document using OmniPage(R) OCR feature, fonts in the documents generated may differ from the original fonts.
 The accuracy of format conversion depends on Kofax OmniPage(R) Capture SDK used by OmniPage(R) OCR. • When you execute OCR processing by OmniPage(R) OCR feature, large-sized fonts or bond texts are determined as graphics and OCR processing may fail.

The accuracy of OCR processing depends on Kofax OmniPage(R) Capture SDK used by OmniPage(R) OCR.

When processing with OmniPage(R) Barcode Reader

There are image size restrictions when using the zone file in the zone settings for OmniPage(R) Barcode Reader. An error will occur if a zone file exceeding the size restrictions is selected.

6 Refer

"Supported Paper Sizes" (P.335)

When processing QR code

 When splitting a document containing multiple QR codes and All Pages is specified for Recognition Scope, the contents of the QR codes read from all pages are concatenated into a string for splitting and then used as attributes. At this point, the contents of QR codes on pages that failed to be read are not included in the concatenated string. Therefore, the column number to retrieve for output attributes may contain the contents of unexpected QR codes.

The following is an example.

Page configuration of input document

Page 1 (QR code), page 2 (QR code), page 3 (QR code), page 4, page 5, page 6

Settings of document process processing

Do not set the following menu.

[Split Document Before the Page With QR Code]

QR Code Split Output Settings

QR Code to Split

[Concatenated QR Code for Entire Document]

Split Method

[Split as CSV Format]

Output Attribute

Column Number to Retrieve: 1 (Assumed as QR code of page 1)

Attribute Display Name: Employee ID

Default When Attribute Retrieval Failed: NO_NUMBER

In the above example, if the QR code on page 1 fails to be read, the content of the QR code on page 2 will be output in "Column Number to Retrieve: 1".

The same output result will occur if [First QR Code Read in Document] is specified for QR Code to Split.

In this situation, configure a flow which specifies the attributes of [QR Code Count] output by QR Code Reader for the delivery condition, or uses a different delivery for an unexpected QR code count. Also, when actually splitting attributes by specified pages, it is recommended to add the QR Code Reader of the specified pages to the flow processing method and specify [Read QR Code for Specified Page(s)] for Recognition Scope.

- The [QR Code Reader] feature in Flow Management Option does not support TIFF saved in multistrip format. The document may be corrupted when TIFF saved in multi-strip format is processed with [page processing] in [QR Code Reader] feature.
 - When using [page processing] in [QR Code Reader], always test in advance with the document to be handled to check if the output document can be displayed in the viewer.
 - If the document cannot be displayed, convert document to TIFF format with [Format Conversion] feature before using [page processing] in [QR Code Reader]. The document is thus converted to TIFF in single strip format and the page processing in [QR Code Reader] feature can be done correctly.
- When enlarging or reducing images containing QR code during image processing or scanning, the QR code image may become smaller than the default cell size or become distorted. In that case, an error may occur when reading the QR code.

In this situation, please follow the methods below.

- Before processing with the QR Code Reader, check that the image is not enlarged, reduced or skewed.
- Increase the size of the QR code.
- · Raise the level of error correction.
- · Increase the cell size.

Also, selecting [Higher Recognition Rate] in [Recognition Settings] of QR Code Reader will increase the recognition rate.

• Copying or faxing a document containing QR code will cause its image quality to deteriorate from the original image.

When [Auto Reduction Reception] is set in [FAX Settings] of a device, the QR code image is reduced and may become smaller than the designated cell size or distorted and fail to be read by the QR code reader. When processing copied or faxed documents in QR code reader, check that the following settings allow those documents to be read by the QR code reader.

- Scan resolution, Fax resolution
- · QR code size
- Error correction level
- · Cell size
- Refer to "Specifications of QR Code Reader" (P.338) for the recommended values for scan resolution, fax resolution and QR code size.

In addition, the recommended QR code size is the size read in QR code reader. If the image is reduced as mentioned above, you must increase the QR code size beforehand.

- The memory required for reading QR code increases in proportion to the input image size. More memory is required especially when "Higher Recognition Rate" is selected in Recognition Settings. The following is data for reference.
 - Minimum memory space necessary for 600 dpi image of A3 size 66 MB (Scan setting "Standard")

149 MB (Scan setting "Higher Recognition Rate")

Minimum memory space necessary for 300 dpi image of 2A0 size

266 MB (Scan setting "Standard")

598 MB (Scan setting "Higher Recognition Rate")

There is no correlation with the color mode, format, and number of pages of an input document.

If the required amount of memory cannot be acquired, the "Insufficient memory available." error will occur, causing an error to the job processing.

• When using Auto Rotation in QR Code Reader, the operation is not guaranteed for the input of image data exceeding the following conditions.

• Paper size: Larger than A3

· Resolution: Higher than 600dpi

When auto rotation is performed for image data which the operation is not guaranteed, the "Insufficient memory error" may occur even when the virtual memory required for its processing has been acquired.

In that case, the operation may become unstable and you may need to restart your computer.

For Interaction Process

• The operation of ApeosWare Management Suite is not guaranteed on a tabbed browser. When the [Interaction Process] feature is specified for the flow, and multiple pages of the job's [Operate Suspended Jobs] page are opened on the tabbed browser, the operation may fail with the following message displayed.

Timeout has occurred because no operation was performed within certain period of time. Retry connection.

In this case, open the [Operate Suspended Jobs] page again and retry the operation to continue.

 On a PC's web browser, if the web browser is closed while the [Operate Suspended Jobs] page is being displayed, the applicable jobs cannot be run immediately afterwards.
 In this case, wait 15 minutes, then display the [Operate Suspended Jobs] page again.

Print or Fax Output

Fax or print cannot be performed.

When performing the following operations, you may not send documents to print or fax in a device, or not monitor jobs.

- Update the device information in a device or ApeosWare Management Suite, such as an LPD port number.
- Delete devices in ApeosWare Management Suite and register the same devices again. In that case, edit the flow to set [Output Device] on the [Print/Fax Output Settings] page again.

The correct number of pages cannot be output.

When the image compression is disabled in the printer driver print settings, and a large amount of color page data is printed, the correct number of pages may not always be output. When this happens, set the image compression to [Standard] so that you can print the data properly.

Perform the following procedure to specify [Standard] for the image compression.

- (1) Open the Properties of a printer driver.
- (2) Open the [Advanced] tab and click [Printing Defaults].
- (3) Open the [Detailed Settings] tab and set [Standard] for [Image Compression] in [Other Settings (Graphics Settings)].
- (4) Click [OK].



The item name to be set may vary depending on the printer driver. In that case, perform the procedure required for the printer driver you are using.

The image quality faxed by Flow Management is different from when it is faxed by a device directly.

When you import the scan document with color or grayscale to Flow Management and then send it by fax, the image quality output from the fax destination may be different from that faxed by a device directly.

For example, for the scan document imported and faxed by Flow Management, the image quality looks worse than the image when the document is faxed by a device with the [Photo & Text] or [Photo] setting of [Original Type], such as the color of images, characters and lines is lighter, and black spots appear on the background of the document.

When you specify [Black & White] for the output color and fax the scan document by a device, the difference of the image quality is reduced.

The document cannot be output with the paper size specified by a printer driver

When you print with the [Printer Output] function, some documents may not be output with the paper size selected from the properties of the printer driver > [Advanced] > [Printing Defaults]. The following reasons are possible for the wrong paper size.

- Selecting [Keep Original Size (Image size)] for [Reduced Print]
- Selecting [Auto Select Paper Size] to select the check box for the output paper size other than the size selected by the properties of the printer driver

In that case, based on the input original size (image size), the document is output with the paper size that you have selected the check box for [Auto Select Paper Size].

For example, when the following settings are configured, the original A4 job is output with A4 size, even if you specify B5 for the output paper size in the properties of the printer driver.

- Selecting [Keep Original Size (Image size)] for [Reduced Print]
- Selecting [Auto Select Paper Size] to select the check boxes for all paper sizes

Do not select [Auto Select Paper Size] when outputting the job with the size selected by the properties of the printer driver.

Is there any notice when a fax is set on the IPv6 network environment?

When you execute the flow on the IPv6 network environment, the IPv6 global address must be set in the device specified for the sender.

In addition, when adding devices in the [Printer Output] function, you specify the IPv6 global address for [IP Address/Host Name].

When the IPv6 global address is not set in the device, or the IPv6 link-local address is specified in the [Printer Output] function, the device job status may not be retrieved until the timeout is reached, which is specified by [Monitor Job].

The image quality is inferior when you print the faxed document.

When faxed documents are printed by the [Printer Output] function of Flow Management, When documents are undergone format conversion by Flow Management and printed by application software. The image quality of the following documents may be inferior to those printed on paper from the device directly.

This is because the image is enhanced (corrected) when faxed documents are output directly from a device, but not when they are converted to digital data.

When this happens, add the [Image Processing] function to the processing method of the flow, and select the [Resolution Conversion] check box on the [Image Processing/Edge Erase/Resolution Conversion] tab, and then select [Smoothen Image and Convert to High Resolution].

The image quality is inferior when you print a DocuWorks document.

When printing a DocuWorks document after setting [Printer Output] on the flow definition, it may take a longer time to print and the print quality may be lower as compared to printing the application-created DocuWorks document from DocuWorks.

However, there is no such problem for a DocuWorks document created from image data.

Blank pages are printed.

When [Printer Output] is specified for the flow's delivery destination, and Skip Blank Pages is specified on the printer driver or fax driver, blank pages may still be printed.

For example, when printing a DocuWorks document, it will be first converted to image data before being processed by the printer driver or fax driver. Therefore, blank pages will also be printed as white image data.

To prevent blank pages from being printed, configure the following for the flow processing method. Go to "Format Conversion". Set [Format] to TIFF.

Go to "Image Processing". On the [Blank Page Processing/Document Splitting] tab, select the [Process Blank Page/Split Document] check box, and select [Skip Blank Pages During Processing].

As the imported DocuWorks document will be converted to TIFF format with the above settings, to deliver this DocuWorks document format to other than [Printer Output], create another flow which does not have the above processing method specified and set the same inbound channel.

Timeout occurs, and the job is completed with error.

When monitoring a job with the [Printer Output] feature, a timeout may occur due to a network or device status, causing the job may complete with error. When the job has completed with error due to timeout, check the job status in the job history of the device. Take note when restarting jobs completed with error as some of the jobs may have been printed or have their faxes sent.

In addition, if this problem keeps on occurring, the following flow setting may help to improve the situation.

- Enable [Retain Job Order] for flow settings.
- On the [Print/Fax Output Settings] page, increase the timeout period for [Monitor Job].

The resolution of the file cannot be retrieved.

When printing an image data file that does not contain resolution information using the [Printer Output] feature, the following message will be recorded to the log and printed.

 $Unable\ to\ retrieve\ the\ resolution\ of\ file\ [\{Document\ File\ Name\}].\ It\ will\ be\ processed\ at\ a\ resolution\ of\ 200\ dpi.$

In this case, the resolution of the data to output will be fixed (200 dpi), and it may not be printed at an appropriate size.

When the service is stopped while processing a job

If ApeosWare Management Suite Flow Management service is stopped while a printer output feature job is in process, the job may complete with error and the following log may be included in the job details.

Job (xxx-xxx) recovery process failed. Job will end with an error. The processing of job (xxx-xxx-xxx) has completed with error.

There is a possibility that the print/fax output of the device may end normally even if this log appears. For this reason, after restarting the ApeosWare Management Suite Flow Management service and running the job completed with error again, check the running status of the print/fax output job to the corresponding output device.

Using Link to Application

Can I start the application with an attached window?

You cannot start the application with an attached window in the [Link to Application] function.

Can I start the application in which the user settings are required?

When the user account of the executable file is not specified in the [Link to Application] function, NETWORK_SERVICE account will be used. In this case, if the linked application is dependent on the user settings, it may not be able to run the operation.

For example, when you specify ContentsBridge by our company as an executable file of the link to application function, a dialog box to confirm print is displayed during execution. Since the [Output Destination/Printer Name] of the printer in use is blank, ContentsBridge is not performed properly.

If executing applications that use standard output, job will end with error

If standard output is used in an application that runs from the [Link to Application] feature, one of the following errors will occur and the job will end with error.

0006-020013-DOCFLOW" Processing of message (*****) has failed. ,0006-020131-DOCFLOW: Error occurred when processing with subprocess (pipe:/axis2/services/AWFSProcessing).; 0006-020043-DOCFLOW: Failed to retrieve response.; 0006-020045-DOCFLOW: Invalid header (******).

0006-020013-DOCFLOW" Processing of message (*****) has failed.,0006-020131-DOCFLOW: Error occurred when processing with subprocess (pipe:/axis2/services/AWFSProcessing).; 0006-020043-DOCFLOW: Failed to retrieve response.; 0006-020041-DOCFLOW: Failed to retrieve response header (Content-Length:null).

For applications linking with the [Link to Application] feature, please do not use standard output.

Using Document and Attributes Table Output

How do I handle a message "Unable to change file attribute."?

The following error may occur during output for writing to the same CSV file from different user accounts.

Output File {path name}: Unable to change file attribute

The required access rights may not be set to the folder specified for the storage location. Add the [Read], [Write] and [Delete] rights of the access user to the specified folder.



Problems of Specific Flow

Notes on Attribute Values for [Printer Output] Feature and [Send E-mail

(SMTP)] Feature

For the flow with following contents, some attribute values will not be output with [Document and Attributes Table Output] feature.

Flow Contents

Inbound Channel: Link to Web Applications

Processing Method: None

Delivery Destination: Printer Output - Document and Attributes Table Output, or Send E-mail (SMTP)

- Document and Attributes Table Output

• Attribute values not output

Attribute name, "Output Date/Time" of [Printer Output] feature

Attribute name, "Date/Time Sent" of [Send E-mail (SMTP)] feature

Above attribute values will be output properly if any feature is added to the processing method.

Notes on Attribute Values for [Printer Output] Feature and [Send E-mail (SMTP)] Feature

For the flow with following contents, the attribute value for the date and time output by [Notification E-mail] feature will be in ISO 8601 format.

Flow Contents

Inbound Channel: Link to Web Applications

Processing Method: None

Delivery Destination: Printer Output - Notification E-mail, or Send E-mail (SMTP) - Notification E-mail

• Attribute value output in the ISO 8601 format

Attribute name, "Output Date/Time" of [Printer Output] feature

Attribute name, "Date/Time Sent" of [Send E-mail (SMTP)] feature

Output example: 2011-11-01T21:02:27.146+09:00

Above attribute values will be in YYYY-MM-DD HH:mm:ss format (e.g. 2011-11-01 21:02:27) if any feature is added to the processing method.

Flow Settings

When multiple jobs are running image processing concurrently and cause burden to the job processing, the screen display may be slower compared to when such a burden does not exist. For example, the following operations may cause the screen display to become slow when multiple jobs perform image processing and OCR concurrently.

- Display of [Edit Flow] page
- Display of [Suspended Job List] page
- Display of the preview for Link to Web Applications

Executing Jobs

Memory shortage occurs during the job execution

When multiple flow jobs with a lot of functions are executed, and the following conditions are satisfied, the jobs may not be executed because memory capacity is insufficient.

- There are jobs with the [Suspended] status in the interactive operations.
- Flow creation and editing operations are performed at the same time.

In this case, the following message is displayed in the activity log.

Due to insufficient free memory, process definition could not be arranged.

In this case, please perform the following operations.

- (1) Reduce the number of functions set in the flow (When creating a flow, a warning is displayed if the number of functions is too large. Please set functions until such a warning appears.)
- (2) If there are jobs with the [Suspended#] status, restart those jobs or cancel them.
- (3) Close the page if multiple users have the [Create New Flow] page or the [Edit Flow] page open at the same time.
- (4) Restart the Flow Management Service.

When Using Multiple Flow Management Option

Operation is not guaranteed if the same folders and device folders are specified as the inbound channels for multiple sessions of Flow Management Option. Specifying them this way may cause unexpected errors to occur on the device and may also cause the same job to be processed more than once.

When Adding Software and/or Drivers after Installing Flow Management Option

When installing software such as DocuWorks and Network Scanner Utility 2, or installing or updating printer/fax drivers after installing Flow Management Option, you must restart the ApeosWare Management Suite Flow Management service.

If it's not restarted, an error may occur with the added feature, and job may complete with error.

Maintenance

Backup and Restore

Backup and restore the system of ApeosWare Management Suite in its entirety.

When Flow Management is restored, the following information is not restored, and the default value is set.

- Job information
- Submitted documents



- The form deletion conditions specified in the [Form Schedule Deletion Settings] page of Paper Form Management are not subject to backing up or restoring.
- [Clear Job History Settings] in [Service Settings] and [System Error Notification Settings] in [Common System Settings] are not subject to backing up or restoring.
- Stop the Flow Management service and then execute backup and restoration so that job processing will not be executed.

For details and procedure to back up and restore, refer to "Backup and Restore" in "Features Guide".

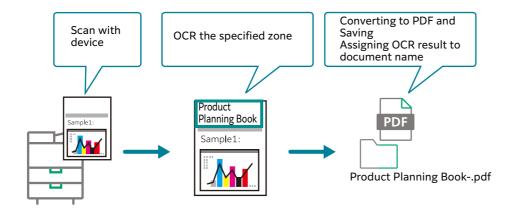
Case Study

This section describes the examples of flows created in Flow Management.

Case 1: Converting the Scan Document to PDF and Assigning Document Names

An example to create the following flow is described.

- Import a document scanned on a device via the device folder.
- OCR the data on the first line of the first page, and assign it as the document name.
- Convert the document to high compression PDF, and save it in a shared folder.
- If an error occurs during the flow process, notify an administrator by e-mail.



The following functions are set to the flow in this example.

Items	Features	Setting example
Inbound channel	Folder	FUJIFILM Apeos C6580
Processing method (1)	OCR	Zone OCR Start position: 10 mm from top, 10 mm from left Dimension: 70 mm width, 10 mm height
Processing method (2)	Format Conversion	High Compression PDF
Processing method (3)	Document name	Specify pages for OCR text
Delivery destination	Save to Folder	Saved to a shared folder
Error notification	Notification e-mail	Subject: "An error has occurred during processing"

- 1. Perform the following settings before creating a flow.
 - "Configuring the Environment to Import Documents" (P.49)
 - "Preparing Folders" (P.53)
- 2. Display the [Create New Flow] page.



- 3. Enter [Flow Name] and [Flow Description].

 For example, enter "Case 1" and "Scan a document and save it as a named PDF"
- 4. Select [Device Folder] from [Add] in [Inbound Channel].
- 5. Set the details of the [Device Folder] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "C6580-device folder".
 - (2) Click [Select Device].
 - The [Device Folder Device Folder Input Settings] page is displayed.
 - (3) Specify [Add from devices already registered in database].

 This example assumes that some devices are preregistered in the database of ApeosWare

 Management Suite. When no device is registered, you select [Add by searching network] or

 [Specify and add IP address/host name directly] to add a device.
 - (4) Click [Next].
 - (5) From the devices preregistered in the database, select the check box for the device to be added.
 - (6) Click [Add].
 - (7) On the [Device Folder Device Folder Input Settings] page, click [Specify and Add Device Folder] in [Device Folder].
 - Although there is a way to add the device folder from the list, this procedure shows the way to enter the device folder number directly.
 - (8) Enter the device folder number and password to import documents. When the login mode is set to the device, specify the account information to access the device.
 - (9) Click [Add to List].
 - (10) Confirm that the specified device folder is added to the list, and then click [Add].
 - (11) On the [Device Folder Device Folder Input Settings] page, click [OK].
- **6.** Select [OCR] from [Add] in [Processing Method].
- 7. Set the details of the [OCR] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "OCR_Page top row".
 - (2) In [OCR Region], select [Zone OCR].
 - (3) Click [Add] in [OCR Zone List].
 The [OCR Settings Page/Zone] page is displayed.
 - (4) Enter [Name for Selecting Attributes]. For example, enter "Page top row".
 - (5) Enter "1" in [Specify Page(s)].
 - (6) Enter "10" in A from top, "10" in B from left for [Start Position], and "70" in C width, "10" in D height for [Dimension].
 - (7) Click [OK].
 - (8) On the [OCR Settings] page, click [OK].
- 8. Select [Format Conversion] from [Add] in [Processing method].
- **9.** Set the details of the [Format Conversion] function in the following procedure.
 - (1) Select [PDF] from [Format].
 - (2) In [Name], enter the function name. For example, enter "PDF conversion".
 - (3) Specify [High Compression PDF] in [Compression Method].

- (4) Click [OK].
- 10. Select [Document Name] from [Add] in [Processing Method].
- 11. Set the details of the [Document Name] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "Document name".
 - (2) Click [Add] in [Document Name Element].
 The [Document Name Element Settings] page is displayed.
 - (3) Specify [Use Attribute].
 - (4) From the attribute list, specify [OCR Specified Zone Text page First line-1)]. The attribute name is changed according to [Name for Selecting Attributes] of the [OCR] function entered in Step 7. In this example, "page Top row" is entered.
 - (5) Select the [Byte Limit] check box, and enter "32".
 - (6) Click [OK].
 - (7) On the [Document Name Document Naming Settings] page, click [OK].
- 12. Select [Save to Folder] from [Add] in [Delivery Destination].
- 13. Set the details of the [Save to Folder] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "Save to folder".
 - (2) From [Folder Type], select [Shared Folder].
 - (3) Enter the path of the storage folder in [Shared Folder Location] (in UNC format, starts with \\ or //)).
 - (4) Enter the account of the user who can access the folder in [User name] and [Password]. When using the domain, specify the user name with the domain.

Specify one of the following formats for the domain user.

- {domain name}\{user name}
- {user name}@{domain name}
- (5) Click [OK].
- **14.** Add the error notification.
 - (1) Click the [Error Notification] tab.
 - (2) Select [Notification E-mail (SMTP)] from [Add] in [Error Notification].
- 15. Set the details of the [Error Notification] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "Error notification".
 - (2) Click [Specify Recipient] in [Recipient].
 - (3) On the page to specify recipients, click [Add by Direct Entry].

 When an e-mail address is registered for the user, the recipient can also be specified by clicking [Add From User List].
 - (4) Enter the administrator name and e-mail address to notify of an error.
 - (5) Click [OK].
 - (6) On the [Notification E-mail Recipient Settings Recipient Settings] page, click [OK].
 - (7) Click [Subject Settings].
 - (8) Specify [Enter Text], and then enter the subject. For example, "An error has occurred during processing" Enter as shown above.
 - (9) Click [OK].

- (10) On the [Notification E-mail Settings] page, click [OK].
- 16. On the [Create New Flow] page, click [OK]. The flow is created.
- 17. Enable the created flow in the following procedure.
 - (1) On the [Flow List] page, select the check box for the created flow.
 - (2) Click [Enable].
 - (3) On the [Confirm Enable Flow] page, click [OK].
- 18. Specify the scan to folder, and scan the document on the device specified for inbound channel.

 After a while, a PDF is created in the delivery destination folder.

Case 2: Confirming and Editing the Document in the Interaction Mode

An example to create the following flow is described.

- Add the interaction mode to the flow created as Case 1.
- Confirm and edit the OCR result in the interaction mode
- Assign the OCR result edited in the interaction mode to the document name.

The following functions are set to the flow in this example.

Items	Features	Setting example
Inbound channel	Folder	FUJIFILM Apeos C6580
Processing method (1)	OCR Interaction Process Notification Settings	Same as Case 1 Document attribute to handle: OCR specified zone text Subject: "An interaction process has occurred."
Processing method (2)	Format Conversion	Same as Case 1
Processing method (3)	Document name	Same as Case 1
Delivery destination	Save to Folder	Same as Case 1
Error notification	Notification e-mail	Same as Case 1



"Formats Previewed in Interaction Mode" (P.334)

- $oldsymbol{1}.$ Click $oldsymbol{ iny{c}}$ (Copy) of the flow created as Case 1.
- 2. Edit [Flow Name] and [Flow Description].

 For example, enter "Case-2" and "Confirming and editing the document in the interaction process".
- 3. In the processing method list, Click (Edit) of the [OCR] function. The [Edit Processing Method] page is displayed.
- 4. Click [Add Interaction Process].
- **5.** Set the details of the [Interaction Process] function in the following procedure.
 - (1) Enter [Name] and [Comment].

 For example, enter "User interaction" and "Perform user interaction to check OCR results".
 - (2) In [Document Attribute to Handle], click [Add].

- (3) From the attribute list, specify [OCR Specified Zone Text (page Top row-1)], and then click [OK]. The attribute name is changed according to [Name for Selecting Attributes] of the [OCR] functioning In this example, "page Top row" is entered.
- (4) In [User Interaction Settings], select [Read/Write] for the added attribute.
- (5) Click [OK].

The display returns to the [Edit Processing Method] page.

- **6.** Select [Notification E-mail (SMTP)] from [Add] in [Notification Settings].
- 7. Set the details of the [Notification Settings] function with the following steps. Set
 - (1) In [Name], enter the function name.
 For example, enter "Notification of user Interaction".
 - (2) Click [Specify Recipient] in [Recipient], and specify the e-mail address to notify the user of the interaction mode.
 - (3) Click [Subject Settings], and specify the subject. For example, enter "User interaction required".
 - (4) Click [OK].
- 8. On the [Edit Processing Method] page, click [OK].
- 9. On the [Edit Flow] page, click [OK]. The flow is created.

When [Retain Job Order] is enabled by setting the [interaction process], the following message "until previously received suspended jobs have been purged, the job will not be delivered even after a restart. "Do you want to continue with registration?" is shown. Clicking [OK] creates a flow.

- 10. Enable the created flow in the following procedure.
 - (1) On the [Flow List] page, select the check box for the created flow.
 - (2) Click [Enable].
 - (3) On the [Confirm Enable Flow] page, click [OK].
- 11. Specify the scan to folder, and scan the document on the device specified for inbound channel.

 After a while, the user specified in the [Notification Settings] function will receive an e-mail notice that "An interaction process has occurred".
- 12. Click the URL described in the e-mail. The [Operate Suspended Jobs] page appears.
- 13. Perform the following steps.
 - (1) In [OCR Specified Zone Text (page Top row-1)] of [Document Attribute], the OCR result is displayed. Confirm the settings, and edit the text.
 - (2) Click [Apply].
- 14. Click [Restart Job].

The job is restarted.

After a while, a PDF with the name entered in Step 13 is created to the delivery destination folder.

Case 3: Delivering the Fax Received Document to Each Sender ID.

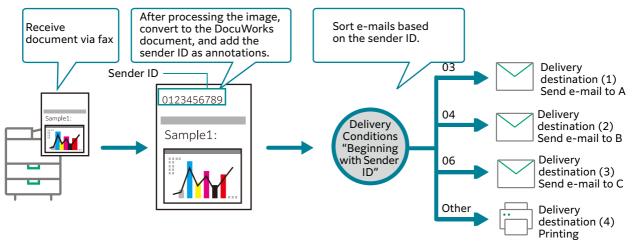
An example to create the following flow is described.

- Import the fax document received by a device via the device folder.
- Set Skew correction, Noise reduction and Auto rotation

- Convert to the DocuWorks document, and add the sender ID as annotations.
- Send e-mails to the following users based on the sender ID

For the ID beginning with "03": User A For the ID beginning with "04": User B For the ID beginning with "06": User C

• Print out the document for the sender ID that does not begin with the number "03", "04" or "06".



The following functions are set to the flow in this example.

Items	Features	Setting example
Inbound channel	Folder	FUJIFILM Apeos C7070
Processing method (1)	Image Processing	Skew correction, Noise reduction and Auto rotation
Processing method (2)	Format Conversion	DocuWorks document Add annotations, Pages and position to paste:1 page, 5 mm from top, and 5 mm from left
Delivery destination (1)	Email Delivery Conditions	User A (a.fuji@example.com) Deliver only documents matching all conditions
Delivery destination (2)	Email Delivery Conditions	User B (b.fuji@example.com) Deliver only documents matching all conditions
Delivery destination (3)	Email Delivery Conditions	User C (c.fuji@example.com) Deliver only documents matching all conditions
Delivery destination (4)	Printer Output Delivery Conditions	FUJIFILM Apeos C7070 Deliver documents not matching all conditions

- 1. Perform the following settings before creating a flow.
 - "Configuring the Environment to Import Documents" (P.49)
 - "Configuring the Print or Fax Environment" (P.55)
- 2. Display the [Create New Flow] page.



3. Enter [Flow Name] and [Flow Description].
For example, enter "Case-3" and "Deliver received fax documents based on sender ID.".

- 4. Select [Device Folder] from [Add] in [Inbound Channel].
- 5. Set the details of the [Device Folder] function as the same in Case 1.

6 Refer

Step 5 in "Case 1: Converting the Scan Document to PDF and Assigning Document Names" (P.288)

- **6.** Select [Image Processing] from [Add] in [Processing Method].
- 7. Set the details of the [Image Processing] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "Image correction".
 - (2) Select the [Skew Correction], [Noise Reduction] and [Auto Rotation] check boxes.
 - (3) Click [OK].
- 8. Select [Format Conversion] from [Add] in [Processing method].
- 9. Set the details of the [Format Conversion] function in the following procedure.
 - (1) Select [DocuWorks Document] from [Format].
 - (2) In [Name], enter the function name. For example, enter "Convert to DocuWorks".
 - (3) Click [Add] in [Annotation List].

 The [Format Conversion DocuWorks Conversion Settings Annotation Settings] page is displayed.
 - (4) Select [Text Annotation] from [Annotation Type].
 - (5) In [Paste Text as Annotation], specify [Use Attribute], and then select [Sender ID] from the drop-down list box.
 - (6) Configure the following settings.[Pages to Paste]: [Specified Pages], "1"[Position to Paste]: From Top "5" mm, From Left "5" mm
 - (7) Click [OK].
 - (8) On the [Format Conversion Format Conversion Settings] page, click [OK].
- 10. Select [Send E-mail (SMTP)] from [Add] in [Delivery Destination].
- ${f 11.}$ Set the details of the [Send E-mail] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "Recipient (1)".
 - (2) Click [Specify Recipient] in [Recipient], and specify the e-mail address of user A.
 - (3) Click [Subject Settings], and specify the subject. For example, "A fax has been received." Enter as shown above.
 - (4) In [Attachment], select the [Attach Document] check box.
 - (5) Click [OK].
- 12. Click (Edit) of the recipient (1) added in Step 11.
- 13. On the [Edit Delivery Destination] page, click [Add Delivery Condition].
- 14. On the [Add Delivery Condition] page, perform the following procedure.
 - (1) Select [Deliver Only Documents Matching All Conditions]
 - (2) Click [Next].

15. Set the details of the [Delivery Condition] function in the following procedure.

(1) In [Name], enter the function name.

For example, enter "Delivery condition A".

- (2) Select [Attribute Condition] from [Add] in Delivery Conditions].
- (3) Enter [Condition Name].

For example, enter "Sender ID D3".

- (4) Click [Add] in [Attribute Condition].
- (5) Configure the following settings, and then click [OK].

[Attribute]: [Sender ID]

[Comparison Condition]: [Begins With]

[Compare With]: [Keyword], "D3"

- (6) On the [Delivery Conditions Attribute Condition Settings] page, click [OK].
- (7) On the [Delivery Conditions Delivery Condition Settings] page, click [OK].
- (8) On the [Edit Delivery Destination] page, click [OK].
- 16. Add the "recipient (2)" and "recipient (3)" by copying the "recipient (1)". Edit the settings on the detailed settings page.
 - Delivery destination (2)

Recipient: User B (b.fuji@example.com)

Subject: "A fax has been received."

Delivery conditions: Begins with the sender ID "D4"

• Delivery destination (3)

Recipient: User C (c.fuji@example.com)

Subject: "A fax has been received."

Delivery conditions: Begins with the sender ID "D6"

- 17. Select [Printer Output] from [Add] in [Delivery Destination].
- 18. Set the details of the [Printer Output] function in the following procedure.
 - (1) In [Name], enter the function name.

For example, enter "C6580 print".

- (2) Select [Print] in [Output Method]
- (3) Click [Select Device] for [Output Device].

The [Add Device: Print/Fax Output Settings] page is displayed.

(4) Specify [Add from devices already registered in database].

This example assumes that some devices are preregistered in the database of ApeosWare Management Suite. When no device is registered, you select [Add by searching network] or [Specify and add IP address/host name directly] to add a device.

- (5) Click [Next].
- (6) Select a print device from the device list.
- (7) Click [Add].
- (8) On the [Print/Fax Output Settings] page, click [Select Driver].
- (9) From the list, select the printer driver.

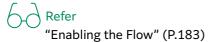
When no items are displayed in the list, printer drivers are not installed to the Flow Management server, or the server is not restarted after installation of the printer driver. Install a printer driver and restart the Flow Management server. After that, perform the step again.

(10) Click [OK].

- (11) On [Basic] and [Tray/Output] tabs, specify the desired paper size, paper tray and so on, and then click [OK].
- 19. Click \mathcal{D} (Edit) of the delivery destination (Ex:C6580 print) added in Step 18 in the recipient list.
- 20. On the [Edit Delivery Destination] page, click [Add Delivery Condition].
- 21. On the [Add Delivery Condition] page, perform the following procedure.
 - (1) Select [Deliver Documents Not Matching All Conditions].
 - (2) Click [Next].
- 22. Set the details of the [Delivery Condition] function in the following procedure.
 - (1) Enter the function name.
 For example, enter "Select Undelivered Document".
 - (2) Click [OK].
- 23. On the [Edit Delivery Destination] page, click [OK].
- 24. On the [Create New Flow] page, click [OK]. The flow is created.



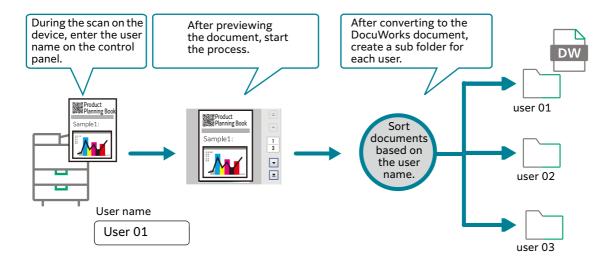
To start the created flow process, enable the flow.



Case 4: Scanning the Document Using Link to Web Applications

An example to create the following flow is described.

- Import the scanned document using the device with the link to web applications function.
- Set to enter the user name on the control panel during scan.
- Preview the document on the control panel, and start the process.
- Convert the scanned document to the DocuWorks document.
- Save the converted documents to a local folder. Create a sub folder with the name entered during scan, and sort the documents.



The following functions are set to the flow in this example.

Items	Features	Setting example
Inbound channel	Link to Web Applications	Preview Custom Text 1: Edit From Control Panel
Processing Method	Format Conversion	DocuWorks documents
Delivery destination	Save to Folder	Save documents to the local folder on the server Sort documents and save to created subfolder Use Attribute: Custom Text 1
Role settings	-	Add the user "user 01" to the [User (Register Jobs)] role.

- $oldsymbol{1}$. Perform the following settings before creating a flow.
 - "Configuring the Environment for Link to Web Applications" (P.49)
 - "Preparing Folders" (P.53)
- 2. Display the [Create New Flow] page.



- 3. Enter [Flow Name] and [Flow Description]. For example, enter "Case-4" and "Scan using Web Applications.".
- 4. Select [Link to Web Applications] from [Add] in [Inbound Channel].
- 5. Set the details of the [Link to Web Applications] function in the following procedure.
 - (1) In [Name], enter the function name. For example, enter "Web Applications".
 - (2) In [Preview Settings], select [Preview].

 If [Preview] is selected, [DocuWorks] cannot be selected for [Output Format Settings] in the Link to Web Application Settings. In this case, set the output format in [Format Conversion] for the Processing Method.
 - (3) In [Scan Settings], select [Auto].
 - (4) Configure the following settings for [Custom Text 1] of [Flow Attributes]. [Allow Change via Control Panel]: Select the check box [Control Panel Display Name]: "User name" [Default]: "Case study"
 - (5) Click [OK].
- **6.** Select [Format Conversion] from [Add] in [Processing method].
- 7. Set the details of the [Format Conversion] function in the following procedure.
 - (1) Select [DocuWorks Document] from [Format].
 - (2) In [Name], enter the function name. For example, enter "Convert DocuWorks".
 - (3) Click [OK].

- 8. Select [Save to Folder] from [Add] in [Delivery Destination].
- **9.** Set the details of the [Save to Folder] function in the following procedure.
 - (1) In [Name], enter the function name.

 For example, enter "Sorting documents and saving to the folder.".
 - (2) From [Folder Type], select [Local Folder on Server].
 - (3) Select [Select From Folder List].
 - (4) Click [Browse].
 - (5) From the list, select the storage folder.

If [Preview] is selected, [DocuWorks] cannot be selected for [Output Format Settings] in the Link to Web Application Settings. In this case, set the output format in [Format Conversion] for the Processing Method.

- (6) Click [OK].
- (7) Select the [Sort Documents and Save to Created Subfolder] check box in [Subfolder].
- (8) Click [Select].
- (9) Click [Add], in [Subfolder Name Element(required)].
- (10) Configure the following settings, and then click [OK].

Selection method: [Use Attribute].

Attribute: [Custom Text 1]

[Limit Character Count]: Yes, Character count: "10"

- (11) On the [Save to Folder Subfolder Naming Settings] page, click [OK].
- (12) On the [Save to Folder Folder Save Settings] page, click [OK].
- 10. Register the user to use the link to web applications function in the following procedure. Perform the following steps.
 - (1) Click the [Role Settings] tab.
 - (2) Click [Add] in [User (Job Registration)].
- 11. On the [Specify User] page, perform the following procedure.
 - (1) Enter the search condition.
 - (2) Click [Search].
 - (3) In the user list, select the check box for the user to be registered.



Note

The display order of [Last Name] and [First Name] displayed in the user list varies according to [Display Settings] in [Common settings].



Refer

[Display Settings] \rightarrow "2 System Settings/Server Monitoring" in "Features Guide"

- (4) Click [OK].
- (5) Select the [Grant this role the permission to operate job] check box.

 To preview the document in the link to web applications function, you must select this check box.
- 12. On the [Create New Flow] page, click [OK].

The flow is created.

- 13. Enable the created flow in the following procedure.
 - (1) On the [Flow List] page, select the check box for the created flow.
 - (2) Click [Enable].
 - (3) On the [Confirm Enable Flow] page, click [OK].

The following steps are performed on the device side.

14. Access the Flow Management on the Web Applications menu of a device.

Refer
Operation ⇒ "Scanning (Registering Jobs)" (P.216)

- 15. From the flow list, select the flow. In this example, select "Case-4".
- 16. Click [Configure].
- 17. Select the [Flow Attributes] tab.
 The value set in the [Link to Web Applications] function of Step 5 is displayed for the flow attributes.
 In this example, "Case study" is displayed.
- 18. Change the flow attributes to any value, and press [Confirm].
- 19. Put the document to be scanned, and press [Start].

 The scanned document is transferred to Flow Management and a job is created.

 To configure the settings again, press [Configure].
- 20. Confirm the settings when the preview screen is displayed, and press [Resume Job]. After a while, the scanned document is created in the delivery destination folder. When pressing [Rescan], you can scan the document by setting the scan parameter and flow attribute again. The job previewed on the screen is deleted, and a new job is created. When you press [Delete Job], the job is deleted.

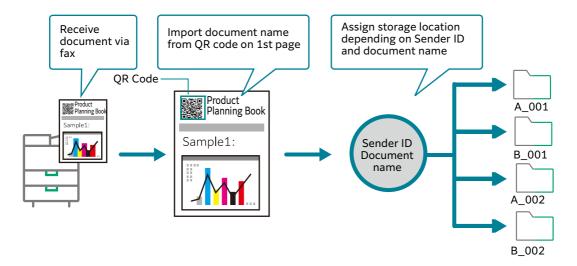
Case 5: Sorting documents using attribute mapping

The following 3 cases show examples of using Attribute Mapping to assign documents.

Case 5-1: Attribute Mapping Using AND Condition

- Importing via Folder a document with QR code attached and received via machine fax
- Import document name from QR code on 1st page
- If Sender ID starts with "001" and document name includes "Planning", save to subfolder "A_001".
- If Sender ID starts with "001" and document name includes "Report", save to subfolder "B_001".
- If Sender ID starts with "002" and document name includes "Planning", save to subfolder "A_002".

• If Sender ID starts with "002" and document name includes "Report", save to subfolder "B_002".



For this example, describe the mapping data file as follows.

Sender ID, Document name, Subfolder name 001, Planning, A_001 001, Report, B_001 002, Planning, A_002 002, Report, B_002

For the [Attribute Mapping] feature, set the [Condition for Comparison] as follows.

Attribute	Comparison Condition	Compared Column(s):
Sender ID	Begins with	1
Document name	Contains	2

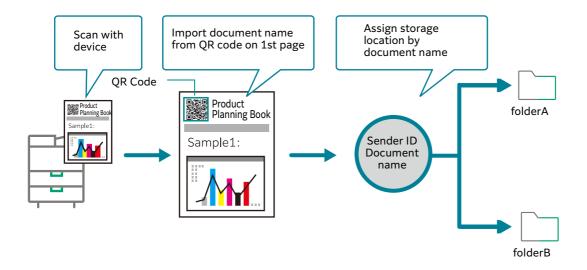
Also, set the [Output Column] to "3".

For the [Save to Folder] feature, specify storage location folder name for the "Subfolder name" attribute that is output by the [Attribute Mapping] feature.

With these settings, you can assign storage location according to Sender ID and document name.

Case 5-2 Attribute Mapping Using OR Condition

- Importing via Folder a scanned document with QR code attached
- Import document name from QR code on 1st page
- If document name contains "Planning", "Schedule", "Design", or "Forecast", save to subfolder "folderA"
- If document name contains "Report", save to subfolder "folderB"



For this example, describe the mapping data file as follows.

```
Document name, subfolder name
Planning, folderA
Schedule, folderA
Design, folderA
Forecast, folderA
Report, folderB
Report, folderB
```

For the [Attribute Mapping] feature, set the [Condition for Comparison] as follows.

Attribute	Comparison Condition	Compared Column(s):
Document name	Contains	1

Also, set the [Output Column] to "2".

For the [Save to Folder] feature, specify storage location folder name for the "Subfolder name" attribute that is output by the [Attribute Mapping] feature.

With these settings, you can assign storage location per document name.

Case 5-3: Attribute mapping example with multiple delivery destinations specified

- Import the fax document received by a device via the device folder.
- The output destination folder changes according to each sender ID and an e-mail notification is sent Sender IDs starting with "001":

Saved in sub-folder "A_001" and a notification e-mail is sent to user A

Sender IDs starting with "002":

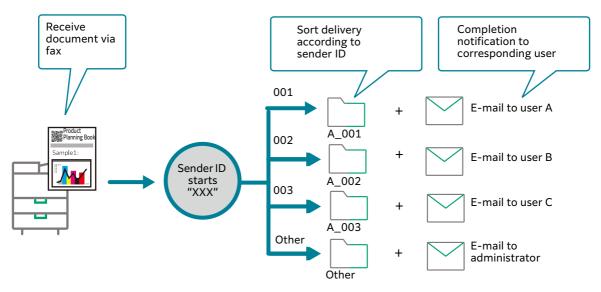
Saved in sub-folder "A_002" and a notification e-mail is sent to user B

Sender IDs starting with "003":

Saved in sub-folder "A_003" and a notification e-mail is sent to user C

None of the above conditions match:

Saved in sub-folder "Other" and an e-mail is sent to the administrator



For this example, describe the mapping data file as follows.

```
Sender ID, subfolder name, recipient 001, A_001, a.fuji@example.com 002, A_002, b.fuji@example.com 003, A_003, c.fuji@example.com
```

For the [Attribute Mapping] feature, set the [Condition for Comparison] as follows.

Attribute	Comparison Condition	Compared Column(s):
Sender ID	Begins with	1

Also, set the first [Output Column] to "2", and the second to "3".

For the [Save to Folder] feature, specify storage location folder name for the "Subfolder name" attribute that is output by the [Attribute Mapping] feature.

For the [Notification E-mail] feature, specify the "E-mail recipient" attribute, output by the [Attribute Mapping] feature, as the notification destination.

With these settings, you can assign storage location and notification destination according to Sender ID.

Setting example

Describes a settings example for "Case 5-3: Attribute mapping example with multiple delivery destinations specified".

The following functions are set to the flow in this example.

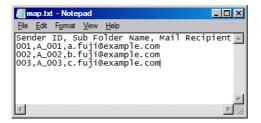
Items	Features	Setting example
Inbound channel	Folder	FUJIFILM Apeos C7070
Processing Method	Attribute Mapping	Import to map.txt

Items	Features	Setting example
Delivery destination	Save to Folder	 Save documents to the local folder on the server Sort documents and save to created subfolder Read storage folder from attribute mapping
Completion notification	Notification e- mail	Read notification destination from attribute mappingSubject "Process complete."

- $oldsymbol{1}$. Perform the following settings before creating a flow.
 - "Configuring the Environment to Import Documents" (P.49)
 - "Preparing Folders" (P.53)
- 2. Create a mapping data file in CSV format.

 Open a text editor and create a new file with the following content.

 In this example, the file is saved as "map.txt".



3. Display the [Create New Flow] page.



- 4. Enter [Flow Name] and [Flow Description].

 As an example, enter "Case 5" and "Sorting documents using attribute mapping".
- 5. Select [Device Folder] from [Add] in [Inbound Channel].
- **6.** Set the details of the [Device Folder] function as the same in Case 1.



Step 5 in "Case 1: Converting the Scan Document to PDF and Assigning Document Names" (P.288)

- 7. Select [Attribute Mapping] from [Add] in [Processing Method].
- f 8. Set the details of the [Attribute Mapping] function with the following steps.
 - (1) In [Name], enter the function name. For example, enter "Mapping".
 - (2) Click [Edit].
- **9.** On the [Attribute Mapping Edit] page, perform the following steps.
 - (1) In [Mapping data file to be imported], click [Browse] and specify "map.txt" which was created in step 2.
 - (2) Specify the first row of [Comparison] as follows:
 - [Attribute]: [Sender ID]
 - [Comparison Condition]: [Begins With]
 - [Compared Column(s)]: [1]
 - (3) Select [Treat first line in mapping data file as display name of output attribute]. If this item is selected, [Display Name for Output Attribute] cannot be entered.

- (4) Enter "2" in the first row of [Output Column(s)] and "Other" in [Output Attribute Value When All Conditions Are Not Matched].
- (5) Enter "3" in the second row of [Output Column(s)] and "admin@example.com" in [Output Attribute Value When All Conditions Are Not Matched].
- (6) Click [OK].
- 10. On the [Attribute Mapping Settings] page, click [OK].
- 11. Select [Save to Folder] from [Add] in [Delivery Destination].
- 12. Set the details of the [Save to Folder] function in the following procedure.
 - (1) In [Name], enter the function name.
 For example, enter "Sort with attribute mapping".
 - (2) From [Folder Type], select [Local Folder on Server].
 - (3) Select [Select From Folder List].
 - (4) Click [Browse].
 - (5) Select the storage folder from the folder list in the [Save to Folder Select Local Folder on Server] page and click [OK].
 - If folders do not display, see "Registering folders/files to be used in functions" (p.72) and register the folders.
 - (6) Select the [Sort Documents and Save to Created Subfolder] check box.
 - (7) Click [Select].
 - (8) On the [Save to Folder Subfolder Naming Settings] page, click [Add] in [Subfolder Name Element].
 - (9) Specify the following in the [Save to Folder Subfolder Naming Settings] page and click [OK]. Selection method: Use attribute

Attribute:Sub-folder name

Setting source: Mapping

The "Sub-folder name" is the [name] in the first row of the mapping data file created in step 2, "Mapping" corresponds to the attribute mapping name entered in step 8. These may differ depending on the specified values.

- (10) Confirm the settings, and click [OK].
- (11) On the [Save to Folder Folder Save Settings] page, click [OK].
- 13. Click $\overline{\mathcal{D}}$ for the [Folder] function created in step 12.
- 14. Select [Notification E-mail (SMTP)] from [Add] in [Postprocessing].
- 15. Set the details of the [Notification Settings] function with the following steps.
 - (1) In [Name], enter the function name.
 For example, enter "Process Complete Notification e-mail".
 - (2) Click [Specify Attribute] in [Recipient].
 - (3) On the [Notification E-mail Recipient Settings Specify Attribute] page, specify the following attribute and click [OK]

Attribute: Recipient of e-mail

Setting source: Mapping

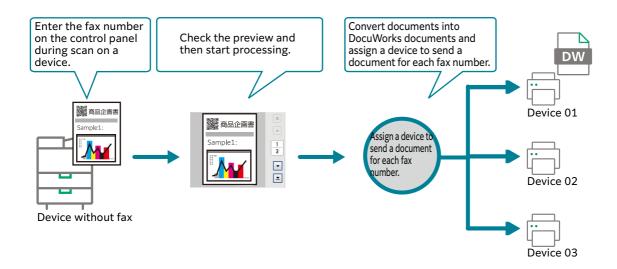
The "Recipient of e-mail" is the [name] in the first row of the mapping data file created in step 2, "Mapping" corresponds to the attribute mapping name entered in step 8. These may differ depending on the specified values.

- (4) Click [Subject Settings] and enter the subject in the [Notification E-mail Subject Settings] page, and click [OK].
 - For example, enter "Process complete".
- (5) Confirm the settings, and click [OK].
- 16. On the [Edit Processing Method] page, click [OK].
- 17. On the [Create New Flow] page, click [OK]. The flow is created.

Case 6: Sending scanned documents by fax from a device without a fax function

An example to create the following flow is described.

- Import the scanned document using the device with the link to web applications function.
- Enter the fax number on the control panel during scan.
- Assign the devices to send document using fax numbers in the delivery conditions.
- Send a document from a device with a fax function to the fax number specified on the operation panel.





- Image may be cut halfway due to a feeding failure, etc. when it is output in a standard size. Check if the document is scanned correctly using preview, etc.
- In fax sending, a document is processed based on the device at the receiving side. For instance, when sending an A4 landscape document to a device, which can output only the A4 portrait width, at the receiving side, an A4 landscape document may be reduced to the A4 portrait width. In operation, there is a need to consider the scan orientation based on a receiving device.
- When you connect multiple fax output devices and assign an output device based on the conditions, set the same line type and settings to all fax output devices. Otherwise, fax may be sent to an unintended destination.

In this example, the following features are set in a flow.

Item	Feature	Setting example
Inbound Channel	Link to Web Applications	Preview Custom text 1: Edit from control panel
Delivery destination	Output fax	Output to a device with fax
Role settings	-	Add "user01" to the [User (Job Registration)] role.

- 1. Make the following preparations before creating a flow.
 - "Configuring the Environment for Link to Web Applications" (P.49)
 - "Configuring the Print or Fax Environment" (P.55)
- 2. Display the [Create New Flow] page.
 - Refer
 "Creating a Flow" (P.82)
- 3. Enter [Flow Name] and [Flow Description].

 As an example, enter "Case 6", "Sending scanned documents by fax from a device without a fax function."
- 4. Select [Link to Web Applications] from [Add] of [Inbound Channel].
- **5.** Set the details of the [Link to Web Applications] features in the following procedure.
 - (1) In [Name], enter the feature name.
 For example, enter "Web Applications."
 - (2) In [Preview Settings], select [Preview].

 If [Preview] is selected, [DocuWorks] cannot be selected for [Output Format Settings] in the Link to Web Application Settings. In this case, set the output format in [Format Conversion] features for the Processing Method.
 - (3) In [Scan Settings], select [Auto].
 - (4) Select the check box of [Show fax number input field on device control panel] in [Fax Settings].



- To use this feature, an option license of "Link to Web Applications" is required.
- This feature is not available in some countries. For details, contact our local representatives.
- (5) Configure the following settings for [Custom Text 1] of [Flow Attributes].

[Edit From Control Panel]: Select the check box.

[Control Panel Display Name]: "User name"

[Default]: "Case study"

- (6) Click [OK].
- **6.** Select [Printer Output] from [Add] in [Delivery Destination].
- 7. Set the details of the [Printer Output] features in the following procedure.
 - (1) In [Name], enter the feature name.

 For example, enter "Sorting documents and sending fax."
 - (2) Select [Fax] in [Output Method].
 - (3) Specify the target device with [Select Device] for [Output Device].

- (4) Select one fax driver in [Select Driver].
- (5) In [Monitor Job], enter [Timeout] to monitor the output status of the fax on the device.
- (6) On the [Fax Settings] tab, specify the recipient of the fax.
- (7) On the [Basic] tab, specify the details of the fax output method, such as paper size, reduced print, reduce/enlarge rate and so on.
- (8) On the [Communication Settings] tab, specify the communication method such as the communication mode.
- (9) Click [OK].
- 8. Register the user to use Link to Web Applications. Perform the following steps.
 - (1) Click the [Role Settings] tab.
 - (2) Click [Add] in [User (Job Registration)].
- 9. On the [Specify User] page, perform the following procedure.
 - (1) Enter the search condition for the user.
 - (2) Click [Search].
 - (3) In the user list, select the check box for the user to be registered.
 - (4) Click [OK].
 - (5) Select the [Grant this role the permission to operate job] check box.

 To preview the document in the link to web applications features, you must select this check box.
- 10. On the [Create New Flow] page, click [OK]. The flow is created.
- 11. Enable the created flow in the following procedures.
 - (1) On the [Flow List] page, select the check box for the created flow.
 - (2) Click [Enable].
 - (3) On the [Confirm Enable Flow] page, click [OK].

The following steps are performed on the device side.

12. Access the Flow Management on the Web Applications menu of a device.



Operation steps ⇒ "Scanning (Registering Jobs)" (P.216)

- 13. From the flow list, select the flow with "fax number unspecified."

 The "Enter fax number" screen is displayed.
- 14. Enter the fax number and press [OK].

 The "Enter fax number" screen is displayed again.
- 15. Enter the fax number again and press [OK].

 The "Flow Attributes Confirmation" screen that shows the entered fax number is displayed.



When a fax number different from the one entered in step 14 is entered, the fax number shown in the "Enter fax number" screen is cleared, and re-entry is required.

- 16. Change the flow attributes to any value, and press [Confirm].
- 17. Put the document to be scanned, and press [Start].
 The scanned document is transferred to Flow Management and a job is created.
 After scanning is executed, the fax number is cleared. When executing scanning with the same flow, enter a new fax number.
- 18. When the Preview screen is displayed, check the content and press [Resume Job]. The scanned document is sent by fax.

When pressing [Rescan], you can scan the document by setting the scan parameter and flow attribute again. The job previewed on the screen is deleted, and a new job is created. When you press [Delete Job], the job is deleted.

8 Appendix

Document Attributes List

This section describes the list of document attributes retrieved in Flow Management. There are the following two types of attributes.

Job attribute

The attributes you can change are as follows.

Attribute name	Туре	Value
User ID of job flow	Text	Fixed to the User ID used for login when the [Link to Web Applications] feature is set and "NETWORK SERVICE" when the feature is not set.
Accept a job	Text	Job acceptance date Display format: yyyyMMddHHmmssfff yyyy: year, MM: month, dd: day, HH: hour, mm: min, ss: sec, fff: msec Example: 20201030144321225

Document attribute

The document attributes you can retrieve are as follows.

Inbound Channel - Folder

Attribute name	Туре	Value
Plugin Name	Text	Fixed as "Folder"
User name	Text	User name to access folders and directories. String displayed in [User Name] on the detailed settings page for the [Folder] function. When this is not set, null characters are used.
Directory	Text	Folder name to be monitored
Original document name	Text	Document name (excluding extensions) Ex: For "ABC.tif", "ABC" is set.

Inbound Channel - Device Folder

Attribute name	Туре	Value
Plugin Name	Text	Function name
IPv4 address (127.0.0.1)	Text	IPv4 address for the target device
IPv4 address (127000000001)	Text	IPv4 address for the target device
IPv6 address (2001:0000:0000:0000:0 000:0000:0000:1234)	Text	Used only for the WebDAV access Full form of the IPv6 address for the target device without ":"
IPv6 address (20010000000000000000 00000001234)	Text	Used only for the WebDAV access Full form of the IPv6 address without ":" for the target device
IPv6 address (2001:0:0:0:0:0:0:1234)	Text	Used only for the WebDAV access Short form of the IPv6 address for the target device The compressed "::" field is not used.
Host name	Text	Host name of the device set for the flow
Model Name	Text	 Device name set for the flow while accessing Network Scanner Utility 2 Device name retrieved from the device while accessing WebDAV When not retrieved: Device name set for the flow.
Device folder number	Integer	Device folder number
Device folder name	Text	Used only for the WebDAV access Device folder name retrieved from the device When not retrieved: Null characters
Sender ID	Text	For the WebDAV access, this becomes any of: • F code • Sender number • Counterpart station ID • Counterpart station name • Dial-in number
Document number	Integer	Number of document
Document name	Text	Used only for the WebDAV access Name assigned when stored in the device folder Display format img-MDDHHMMSS M: month (X represents October, Y represents November, Z represents December, DD: day, HH:, Time, MM: minute, SS: second)
Document size	Integer	Size of document
Entry type	Text	This is any of: • Scan File • File for Free Polling • Secure Fax File • Print Pooled File • E-mail Pooled File • IP Fax Received • Unknown File Type Note [E-mail Pooled File] is a document received by Internet Fax.
The number of pages	Integer	Number of document pages

Attribute name	Туре	Value
Compression format	Text	This is any of: • MMR • MR • MH • RAW • JPEG • JBIG • Unknown Compression Format
Paper size	Text	This is any of:
Received date	Text	Received date of document Display format YYYY/MM/DD YYYY: year, 4 digits, MM: month, 2 digits, DD: date, 2 digits
Received time	Text	Received time of document Display format hh:mm:ss hh: hour, 2 digits, mm: minutes, 2 digits, ss: seconds, 2 digits
Received date and time (yyyymmddhhmmss)	Text	Received date and time of document Display format: YYYYMMDDhhmmss yyyy: year, MM: month, DD: day, hh: hour, mm: min, ss: sec
Received date and time (yymmddhhmm)	Text	Received date and time of document Display format YYMMDDhhmm YY: year, MM: month, DD: date, hh: hour, mm: minutes

Attribute name	Туре	Value
Original document name	Text	Display format: {IP address or host name} - {device folder number} - {document number} - {received date and time}
		IPv4 address: The delimiter "." is omitted. Each field is displayed as three digits. (0 is displayed when the field is two digits or less.) IPv6 address: The delimiter ":" is omitted. Each field is displayed as four digits. (0 is displayed when the field is three digits or less.) Host name: The maximum character count is 64 characters.
Document status	Text	Used only for the WebDAV access The status of the document retrieved from the device folder. "SUCCEEDED" for the normal status "ERROR: {Text}" when an error occurs
F code	Text	Used only for the WebDAV access F code when a fax or IP fax (SIP) document retrieved from the device folder is received
Resolution	Text	Used only for the WebDAV access This is any of: • 100 dpi • 200 dpi • 300 dpi • 400 dpi • 600 dpi • 100 dpi equivalent • 200 dpi equivalent • 300 dpi equivalent • 400 dpi equivalent • The Others
Line type	Text	Used only for the WebDAV access Line type when a fax or IP fax (SIP) document retrieved from the device folder is received. This is any of: • Public line • PBX • Unknown Note • This is blank when the entry type is [IP Fax Received]. • When IP fax (SIP) is used, the value of [Line Type] may be "unknown" for some models.
Channel number	Text	Used only for the WebDAV access Line channel number when a fax or IP fax is received.
Sender ID	Text	Used only for the WebDAV access Sender identifier when a fax or IP fax is received.
Sender name	Text	Used only for the WebDAV access Sender name when a fax or IP fax is received. E-mail address of the sender when the entry type is [E-mail Pooled File]. Output 32 characters from the beginning

Attribute name	Туре	Value
Communication mode	Text	Used only for the WebDAV access Communication mode when a fax or IP fax is received. This is any of:
Sender number	Text	Used only for the WebDAV access Sender number when a fax or IP fax is received.
Dial-in number	Text	Used only for the WebDAV access Dial-in number when a fax or IP fax is received.

Link to Web Applications

Attribute name	Туре	Value	Supplemental remarks
Original size	Text	This is any of: ISO-A6LEF ISO-B4SEF ISO-B5SEF ISO-B5LEF JIS-B4SEF JIS-B5SEF JIS-B6SEF JIS-B6SEF JIS-B6LEF JIS-B6LEF JP-PostCardSEF CN-16KaiSEF CN-16KaiSEF TW-16KaiSEF TW-16KaiSEF TW-16KaiSEF NA-3.5x5SEF NA-3.5x5SEF NA-3.5x5SEF NA-4x6SEF NA-4x6SEF NA-4x6SEF NA-5x7SEF NA-5x7SEF NA-5x7SEF NA-5x8.5SEF NA-7.25x10.5SEF NA-7.25x10.5SEF NA-8x10EF NA-8x10EF NA-8x10EF NA-8x10EF NA-8x10EF NA-8x10EF NA-8.5x11EF NA-8.5x11SEF NA-8.5x11SEF NA-8.5x11SEF NA-8.5x11SEF NA-8.5x13SEF NA-8.5x14SEF NA-8x10SEF NA-8x10SEF	The meaning of the value is: A6 LEF B4 (ISO) SEF B5 (ISO) LEF B5 (ISO) LEF B4 (JIS) SEF B5 (JIS) SEF B6 (JIS) LEF B6 (JIS) LEF Postcard SEF Postcard LEF 16 K (China) SEF 16 K (China) SEF 16 K (Taiwan) SEF 16 K (Taiwan) SEF Photo frame L size SEF Photo frame L size LEF Postcard-US SEF Postcard-US SEF Photo frame 2 L size LEF Photo frame 2 L size LEF Statement/Invoice SEF Statement/Invoice SEF Executive SEF Executive LEF 8.0" x 10.0" SEF 8.0" x 10.0" SEF Letter SEF Letter SEF Letter SEF Ledger SEF 11.0" x 15.0" SEF A4-Cover LEF Mixed Unknown
Original orientation	Text	This is any of: Portrait Landscape Mixed Unknown	The meaning of the value is: Portrait Landscape Mixed Unknown
Original type	Text	This is any of: Text Halftone Mixed	The meaning of the value is: Text Printed picture Text and printed picture

Attribute name	Туре	Value	Supplemental remarks
Output Color	Text	This is any of: FullColor Grayscale BlackAndWhite	The meaning of the value is: Color Gray scale Black and white
Resolution	Text	This is any of: • 200 x 200/dpi • 300 x 300/dpi • 400 x 400/dpi • 600 x 600/dpi	The meaning of the value is: • 200 dpi • 300 dpi • 400 dpi • 600 dpi
Output size	Text	Same as Original size	
Scan impressions	Text	The number of impressions is displayed as a text Ex: 2, 3	
Custom text 1	Text	String set on the detailed settings	
Custom text 2	Text	page of the [Link to Web Applications] function, or string	
Custom text 3	Text	entered during scan.	
Custom text 4	Text	32 double-byte characters or 64	
Custom text 5	Text	single-byte characters	

Processing Method

Function name	Attribute name	Туре	Value
Image Processing	The number of the split documents	Integer	When documents are split, the number of documents after the split. 1 when not split
	Document page count	Integer	When documents are split, the number of pages for each document after the split.
Format Conversion	Output format	Text	This is any of: • TIFF • JPEG • TIFF/JPEG Mixed • XDW • PDF
	Annotation	Text	DocuWorks document only For text annotations, a text of the text annotation For sticky notes annotations, a text of the text annotation put in sticky notes When multiple annotations are set, the annotation text added last becomes the attribute value.
	Title	Text	PDF only Title of document
	Subtitle	Text	PDF only Subtitle of document
	Creator	Text	PDF only Creator of document
	Keyword	Text	PDF only Keyword of document

Function name	Attribute name	Туре	Value
Format Conversion	DocuWorks title	Text	DocuWorks document only Title of document
	DocuWorks subtitle	Text	DocuWorks document only Subtitle of document
	DocuWorks creator	Text	DocuWorks document only Creator of document
	DocuWorks keyword	Text	DocuWorks document only Keyword of document
	DocuWorks comment	Text	DocuWorks document only Comment of document
OCR	Full page OCR for all pages' text	Text	OCR text when [Full Page OCR for All Pages] is selected on the detailed settings page of the [OCR] function.
	Full page OCR for each page text	Text	OCR text when [Full Page OCR for All Pages] and [Save OCR Results as Corresponding Attributes on Each Page] are selected on the detailed settings page of the [OCR] function.
	Specify pages for OCR text {page list}	Text	OCR text when [Full Page OCR for Specified Pages] is selected on the detailed settings page of the [OCR] function. Example: Specify pages for OCR text (1, 3-5)
	Specify pages for OCR text {page number}	Text	OCR text when [Full Page OCR for Specified Pages] and [Save OCR Results as Corresponding Attributes on Each Page] are selected on the detailed settings page of the [OCR] function. Example: Specify pages for OCR text - page 1 Specify pages for OCR text - page 3
	Zone OCR text ({zone name})	Text	OCR text when a zone is selected on the detailed settings page of the [OCR] function. Example: When the zone name is "A", "Zone OCR text (A)"
	Zone OCR text {zone name} - {page number} page	Text	OCR text when a zone is specified and [Save OCR Results as Corresponding Attributes on Each Page] is selected on the detailed settings page of the [OCR] function. Example: When the zone name is "A", Zone OCR text (A- page 2)" Zone OCR text (A- page 3)"
Document name	Document name	Text	Document name you have set

Function name	Attribute name	Туре	Value
QR Code Reader	QR code text	Text	Text of the QR code recognized first in each document (only one)
	QR code text (with page numbers)	Text	The page on which the QR code is recognized is added to the QR code text. The format is shown below. : {page number}: {QR code text}
			When [Delete Pages With QR Code] is specified on the detailed settings page of the [QR Code Reader] function, {page number} becomes the page number used before deletion.
	All QR code texts	Text	Texts of the QR code recognized for all pages or specified pages are concatenated without delimiters in order of appearance
	All QR code texts (with page numbers)	Text	The page on which the QR code is recognized and the QR code text length are added to the QR code text. The format is shown below.
			: {page number}: {QR code text length}: {QR code text} Note
			When [Delete Pages With QR Code] is specified on the detailed settings page of the [QR Code Reader] function, {page number} becomes the page number used before deletion.
	Number of QR codes	Integer	The number of concatenated QR code texts
	Number of QR codes ignored to read	Integer	The number of QR codes that could not be read, although they are detected as QR codes
	Delimiter between all QR code texts	Text	The delimiter used for concatenating the texts in [All QR code texts]
OmniPage(R) OCR	Full page OCR for all pages' text	Text	OCR text when [Process All Pages] is selected on the detailed settings page of the [OmniPage(R) OCR] function.
	Full page OCR for each page text	Text	OCR text when [Process All Pages] and [Save OCR Results as Corresponding Attributes on Each Page] is selected on the detailed settings page of the [OmniPage(R) OCR] function.
	Specify pages for OCR text (({page list})	Text	OCR text when [Process Specified Pages Only] is selected on the detailed settings page of the [OmniPage(R) OCR] function. Example: "OCR text (1, 3-5)

Function name	Attribute name	Туре	Value
OmniPage(R) OCR	Specify pages for OCR text {page number} page	Text	OCR text when [Process Specified Pages Only] and [Save OCR Results as Corresponding Attributes on Each Page] is selected on the detailed settings page of the [OmniPage(R) OCR] function. Example: "OCR Text - 1 page" "OCR Text - 3 page"
	Specified zone OCR text ({Zone name})	Text	OCR text when [Zone OCR] is selected on the detailed settings page of the [OmniPage(R) OCR] function. Example: When the zone name is "A", "OCR text (A)"\
	Specified zone OCR text ({zone name}-{page number} page)	Text	OCR text when [Zone OCR] and [Save OCR Results as Corresponding Attributes on Each Page] is selected on the detailed settings page of the [OmniPage(R) OCR] function. Example: When the zone name is "A", "OCR Text - (A- 2 page)" "OCR Text - (A- 3 page)"
	Output format	Text	Converting the Format This is any of: Text format: "txt" Text (separated by commas) format: "csv" PDF format: "pdf" Rich text: "rtf" Excel 2007: "xlsx" Word 2007: "docx" PowerPoint 2007: "pptx" WordPerfect: "wpd" When there is no format conversion "NO_CONVERSION"
OmniPage(R) Barcode Reader	Barcode Text ({zone name} - {page number} Page)	Text	For the value of the barcode read (up to 255 characters), only the number of combinations of pages and zones read will be output (maximum 64). Note When [Specify All Pages] is selected on the detailed settings page of the [OmniPage(R) Barcode Reader] feature, the string, "All Pages" is displayed as {Page Number}.

Function name	Attribute name	Туре	Value
Attribute Mapping	{Attribute display name}	Text	The [Output Column(s)] selected in the [Attribute Mapping] function detailed settings page Note • {Attribute display name} is the [Display Name for Output Attribute] text that is set in the [Attribute Mapping] function detailed settings page. • This attribute exists only in the number of output attributes that are set in the detailed settings page.
Form Analysis	FormDocumentId	Text	An ID that is assigned to a document after it is being split by the form
	AnalysisStatus	Integer	A flag that shows whether form analysis completed successfully 1 There is no form 0 Form analysis failed 1 Form analysis is successful (When the form is input by placing it over the top of the document) 2 Form analysis is successful (When only the form is input)
	FormAnalysis	Text	Total Results of Form Analysis
	FormTemplateId	Text	Form Template ID of the input form When there are multiple forms, the respective IDs will be joined together by commas (,) and output as a string.
	FormId	Text	Form ID of the input form. When there are multiple forms, the respective IDs will be joined together by commas (,) and output as a string.
	FormDocumentPageNumber	Integer	Number of pages of output document.
Database Query	Database Value	Text	 Note If there are multiple records in the search results, the record which is obtained first will be set as the attribute value, and a warning message will be output to the log. When there are multiple columns in the search results, the value of each column joined by a comma (,) will be set.
Load Attributes	Attribute Data	Text	Text data read from the attribute file
	Directory	Text	Path of source folder of attribute file
	Plugin Name	Text	Function name
Separate CSV Attributes	ATTRCSVSET {Column(s) to Retrieve} - {Attribute Display Name in Hexadecimal}	Text	Column value retrieved from the retrieved attribute value

Function name	Attribute name	Type	Value
Join CSV Attributes	CSV Data Creation	Text	Attribute value retrieved which is enclosed in double quotes When joining multiple values, use commas (,) to separate them. Example: "AAA", "BBB",, "XXX°±

Delivery destination

Function name	Attribute name	Туре	Value
Save to	User name	Text	User name
Folder	Directory	Text	Directory name
	Output file name	Text	Path of output file When the output document is a folder, the path of the folder.
	IP Address	Text	IP address or host name of FTP server Null characters when you specify a local folder or shared folder.
	Computer name	Text	IP address or host name of FTP server Null characters when you specify a local folder or shared folder.
	FTP directory	Text	Virtual path to all directories including sub directories Null characters when you specify a local folder or shared folder.
	Output date and time	Text	Output date and time of document "year/month/date, hour:minute:second" (YYYY/ MM/DD hh:mm:ss) format Example: 2020/12/7 10:5:28
	Single page file name	Text	Output path name and file name For multiple names, delimit them with spaces.
	Document ID	Text	This is set according to the settings of [Document Name Format] in the [Save to Folder] function. • Add sequential number to name: For 5 digits: "1 to 99999"
			For 8 digits: "1 to 99999999" • Append system generated unique ID to name: 32-digit texts
			Replace name with date/time saved: Integer value representing the value of "1 to 99999999"
			Retain name: Null character
			For example, when a 5-digit sequential number, "00003" is appended, the attribute value becomes "3".

Function name	Attribute name	Туре	Value
Email	Subject	Text	Subject of e-mail
	Send date and time	Text	Send date and time of e-mail "year/month/date, hour:minute:second" (YYYY/ MM/DD hh:mm:ss) format Example: 2020/12/7 10:5:28
	Address	Text	Recipient of e-mail For multiple recipients, delimit them with commas (,).
	СС	Text	CC of e-mail For multiple recipients, delimit them with commas (,).
	BCC	Text	BCC of e-mail For multiple recipients, delimit them with commas (,).
	Message body	Text	Content of e-mail
	Attached document name	Text	File name of attached document For multiple files, enclose the file name in double quotations (") and delimit files with spaces.
Printer Output	outputTime	Text	Output date and time of document "year/month/date, hour:minute:second" (YYYY/ MM/DD hh:mm:ss) format
	outputFile	Text	File name of output target For multiple files, enclose the file name in double quotations and delimit files with spaces.
	faxNumeber	Text	Fax recipient number When the destination specification method is "Speed dial", add "(Speed dial)" at the end of the recipient number.
Link to	Executable file	Text	Name of executable file
Application	Output date and time	Text	Output date and time of document "year/month/date, hour:minute:second" (YYYY/ MM/DD hh:mm:ss) format Example: 2020/12/7 10:5:28
			When [Launch Application for Each Split Document] is selected on the detailed settings page of the [Link to Application] function, the output date and time for each split document is applied.
	Parameter	Text	Parameter that was passed to the application during execution When [Launch Application for Each Split Document] is selected on the detailed settings page of the [Link to Application] function, this is a parameter for each split document.
Save	Attribute File Name	Text	File Name of Attribute File
Attributes to File	Document Name	Text	File Name of Delivered Document

Supported Input Formats

This section describes the input or output formats supported by the functions of Flow Management.

Input Formats Supported by the features of the processing method

The following input formats are supported by the function of processing method.

O: Supported

-: Not supported

Format	Image Processing	Format Conversion	OCR	QR Code Reader	OmniPage OCR	OmniPage Barcode Reader	Form Analysis
TIFF (Multi-Pages)	0	0	0	0	0	0	0
TIFF (Single-Pages)	0	0	0	0	0	0	0
TIFF-FX Profile S	0	0	0	0	0	-	0
TIFF-FX Profile F	0	0	0	0	0	-	0
TIFF-FX Profile J	0	0	0	0	-	-	0
TIFF-FX Profile C	0	0	0	0	-	-	0
JPEG	0	0	0	0	0	0	0
TIFF-JPEG mixed	0	0	0	0	-	0	0
DocuWorks document	-	0	0	-	-	-	-
DocuWorks binder	-	0	0	-	-	-	-
PDF	-	-	-	0	0	0	-
BMP (bitmap)	-	0	0	-	0	0	0
Files other than above	-	-	-	-	-	-	-



The compression method and restrictions supported by the functions are described in the following pages.

- "Formats Supported by the [Image Processing] Function" (P.322)
- "Formats Supported by the [Format Conversion] Function" (P.323)
- "Input Formats Supported by the [OCR] Function" (P.328)
- "Input Formats Supported by the [QR Code Reader] Function" (P.329)
- "Formats supported by [OmniPage(R) OCR] feature" (P.329)
- "Supported Formats of the [OmniPage(R) Barcode Reader] Function" (P.331)
- "Formats Supported by the [Form Analysis] Function" (P.333)



- Documents in unsupported formats are not processed. For example, if you try to process the document in a BMP format using the flow where [Image Processing] and [OCR] are set, the document is not processed in the [Image Processing] function, but processed in the [OCR] function.
- DocuWorks documents of Ver. 8 or later ([Type] in Properties is "Ver. 8" or later) are not supported.

Formats Supported by the [Image Processing] Function

Input format

The following input formats are supported by the [Image Processing] function.

Supported Formats	Compression method
TIFF (Multi-Pages) TIFF (Single-Pages)	G4 G3MH G3MR JBIG Packbits No compression JPEG6
	JPEG7 (The mixed compression methods are supported.)
TIFF-FX Profile S	G3MH
TIFF-FX Profile F	G4 G3MH G3MR
TIFF-FX Profile J	JBIG
TIFF-FX Profile C	JPEG
JPEG	JFIF EXIF
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG

The following limitations apply.

- When no resolution is specified for the input document, 200 x 200 dpi is automatically set. When either resolution in vertical or horizontal direction is not specified, the same resolution is used in both vertical and horizontal directions.
- [Noise Reduction], [Split Before Blank Page], [Skip Blank Pages During Processing] and [Smoothen Image and Convert to High Resolution] are only applicable for black and white pages. The process of the pages except black and white pages are skipped.
- Profiles of TIFF-FX that are mixed cannot perform [Auto Rotation].
- The formats which can be processed by [Smooth Image to Get High Resolution] are single page TIFF and multi-page TIFF only. TIFF-FX Profile S, F, J and C are not supported. For the TIFF/JPEG mixed format, only TIFF black and white pages are processed.
- The formats which can be processed by [Adjust Size] are single page TIFF, multi-page TIFF, JPEG, and TIFF/JPEG (Mixed). For TIFF-FX documents, [Adjust Size] processing is skipped.

Output format

The processed document is output in the same format as the input document format. However, there are restrictions for the combination of the image width and resolution in some formats. When the condition is not met, the image width and resolution may be converted and output. Refer to "Restriction for the combination of image width and resolution" (P.326).

Formats Supported by the [Format Conversion] Function

Input format

The following input formats are supported by the [Format Conversion] function.

Supported Formats	Compression method
TIFF (Multi-Pages)	G4
TIFF (Single-Pages)	G3MH
	G3MR
	JBIG
	Packbits
	No compression
	JPEG6
	JPEG7
	(The mixed compression methods are supported.)
TIFF-FX Profile S	G3MH
TIFF-FX Profile F	G4
	G3MH
	G3MR
TIFF-FX Profile J	JBIG
TIFF-FX Profile C	JPEG7
JPEG	JPEG
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG
DocuWorks document	-
DocuWorks binder	-
BMP (bitmap)	-

The following limitations apply.

- DocuWorks must be installed.
- DocuWorks documents of Ver. 4 or prior ([Type] in Properties is "Ver. 4" or prior) are not supported.
- The DocuWorks document with security features is not processed.
- The DocuWorks document linked to TrustMarkingBasic is not processed. However, the document without security features can be processed.
- The valid resolution is 10 to 600 dpi. When the resolution is over 600 dpi, the document is converted as 600 dpi. When the resolution is less than 10 dpi, the document is converted as 10 dpi.
- In the case that the output limit of the resolution is specified, when the resolution exceeds the output limit, the output limit is applied. If there is no information on the resolution or the resolution is 0, 200 dpi is applied.
- The following documents cannot be processed.
 - · When each page exceeds 1 GB in the uncompressed state
 - · When [Convert by Image] is specified and the size of a primary file for conversion exceeds 1 GB

Output format

The following output formats are supported by the [Format Conversion] function.

Supported output formats	Compression method
TIFF (Single-Pages)	G4 G3MH G3MR JBIG Packbits No compression
TIFF (Multi-Pages)	In addition to the above-mentioned compression methods, JPEG6 and JPEG7 are supported. Fine, Standard and High Compression can be selectable for PEG6 and JPEG7. The mixed compression methods are supported.
TIFF-FX Profile S	G3MH
TIFF-FX Profile F	G4 G3MH G3MR
TIFF-FX Profile J	JBIG
TIFF-FX Profile C	JPEG7
JPEG	JPEG
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG
DocuWorks document*1 *2	Standard DocuWorks High compression DocuWorks (Standard) High compression DocuWorks (High Quality) High compression DocuWorks (High Compression)
PDF 1.3	Normal PDF High Compression PDF Searchable PDF
PDF 1.5	Searchable PDF

^{*1} DocuWorks must be installed.

TIFF

For converting to TIFF-FX Profile S, F, J or C, there are restrictions for the combination of the image width and resolution. When the condition is not met, the image width and resolution may be converted and output.



Refer

"Restriction for the combination of image width and resolution" (P.326)

DocuWorks document

When the document is converted to the DocuWorks document, there are the following restrictions.

- Multi-page TIFF and TIFF-FX Profile C with CMYK color space cannot be processed.
- Annotations, [Security Settings], or [Select Document Properties] cannot be set when the input document is a signed DocuWorks document.
- When the document size is larger than 2A0 long vertical or horizontal size, it is reduced to 2A0 long vertical or horizontal size.

^{*2} DocuWorks documents of Ver. 8 or later ([Type] in Properties is "Ver. 8" or later) are not supported.

- When the input document is DocuWorks document, [Attach Original Document], [Size] and [Convert to High Compression DocuWorks] are ignored during conversion.
- The high compression DocuWorks is available when the input document format is TIFF, JPEG or BMP.

PDF

When the document is converted to PDF, the following restrictions are applied.

- When the resolution in horizontal direction and in vertical direction is different, the greater resolution is applied.
- An error occurs during processing if the input format is PDF.
- The high compression PDF is available for grayscale pages and color pages, not for black and white pages.
- For the format conversion to PDF with high compression, the size of the compressed file depends on the document type. There may not be any difference in compression for document with little character information.



"Operation when you specify the high compression PDF in the [Format Conversion] function" (P.325)

Operation when you specify the high compression PDF in the [Format Conversion] function

For the format conversion to PDF with high compression, the compression process varies depending on the page type in the input document.

The following table shows the operation of the high compression PDF for each page type of the input document.

Input	First page	Second page	Action
TIFF	Black and white	None	No compression
	Gray scale	None	Compression
	Color	None	Compression
	Black and white	Black and white	No compression
	Black and white	Gray scale	Compression of the second page only
	Black and white	Color	Compression of the second page only
	Gray scale	Gray scale	Compression of the first and second pages
	Gray scale	Color	Compression of the first and second pages
	Color	Color	Compression of the first and second pages

Input	First page	Second page	Action
DocuWorks	Black and white	None	No compression
(From images)	Gray scale	None	Compression
	Color	None	Compression
	Black and white	Black and white	No compression
	Black and white	Gray scale	Compression of the second page only
	Black and white	Color	Compression of the second page only
	Gray scale	Gray scale	Compression of the first and second pages
	Gray scale	Color	Compression of the first and second pages
	Color	Color	Compression of the first and second pages
DocuWorks	Black and white	None	No compression
(Creating applications)	Gray scale	None	No compression
	Color	None	Compression
	Black and white	Black and white	No compression
	Black and white	Gray scale	No compression
	Black and white	Color	Compression of the second page only
	Gray scale	Gray scale	No compression
	Gray scale	Color	Compression of the second page only
	Color	Color	Compression of the first and second pages
JPEG	Gray scale	None	Compression
	Color	None	Compression

Restriction for the combination of image width and resolution

When you specify [Image Processing] or [Format Conversion], there are the restriction for the image width and resolution of the output file. The combinations of image width and resolution for TIFF-FX Profile S, F, J or C are shown in the following table.

Format	Image width (pixel)	Resolution (dpi)
TIFF-FX Profile S	1728	204 x 98 204 x 100 204 x 196 204 x 200 200 x 98 200 x 100 200 x 196 200 x 200

Format	Image width (pixel)	Resolution (dpi)
TIFF-FX Profile F	1728 2048 2432	200 x 100 204 x 98 200 x 200 204 x 196 204 x 391
	2592 3072 3648	300 x 300
	3456 4096 4864	408 x 391 400 x 400
TIFF-FX Profile J	1728 2048 2432	200 x 100 204 x 98 200 x 200 204 x 196 204 x 391
	2592 3072 3648	300 x 300
	3456 4096 4864	408 x 391 400 x 400
TIFF-FX Profile C	864 1024 1216	100 x 100
	1728 2048 2432	200 x 200
	2592 3072 3648	300 x 300
	3456 4096 4864	400 x 400

When these restrictions are not applied, the image width and resolution are converted as shown below.

- When the image width is not matched:
 - 1. When it is smaller than the minimum limit value, the minimum limit value is applied.
 - 2. When it is larger than the maximum limit value, the maximum limit value is applied.
 - 3. When it is within +1% of the limit value, the image is reduced in accordance with the limit value.
 - 4. When it is within -5% of the limit value, the image is placed at the center in the left and right direction of a blank paper with the width of the limit value. The image is not increased and the image height is not changed.

- When the resolution conditions are not matched:
 - 1. When the vertical resolution matches the limit value and the horizontal resolution does not match it, the resolution is determined as shown below based on the combination of available horizontal resolutions for the vertical resolution.
 - a. When it is smaller than the minimum limit value, the minimum limit value is applied.
 - b. When it is larger than the maximum limit value, the maximum limit value is applied.
 - c. When it is within ±5% of the limit value, the limit value is applied.
 - d.The closest limit value that is larger than the current resolution is applied.
 - 2. When the horizontal resolution matches the limit value and the vertical resolution does not match it, the close resolution is selected based on the combinations of available vertical resolutions for the horizontal resolution.

Input Formats Supported by the [OCR] Function

The following input formats are supported by the [OCR] function.

Supported Formats	Compression method
TIFF (Multi-Pages)	G4
TIFF (Single-Pages)	G3MH
	G3MR
	Packbits
	No compression
	JPEG6
	JPEG7
	(The mixed compression methods are supported.)
TIFF-FX Profile S	G3MH
TIFF-FX Profile F	G4
	G3MH
	G3MR
TIFF-FX Profile J	JBIG
TIFF-FX Profile C	JPEG
JPEG	JFIF
	EXIF
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG
DocuWorks document	-
DocuWorks binder	
BMP (bitmap)	-

The following limitations apply.

- The DocuWorks document with security features is not processed.
- The DocuWorks document linked to TrustMarkingBasic is not processed. However, the document without security features can be processed.
- [OCR of All Pages] cannot be applicable to the signed (electronic certificate or signature) DocuWorks document. [Zone OCR] can be applicable.
- When OCR processing is performed on a DocuWorks document, characters that cannot be mapped
 to the Shift-JIS code such as JIS 3rd level Kanji and JIS 4th level Kanji cannot be processed. When
 full text OCR processing is executed on a DocuWorks document that includes JIS 3rd level Kanji and/
 or 4th level Kanji in its text information, these characters are converted into question marks (?) and
 output to the document attribute as OCR result.

• For the flow with the [Zone OCR] setting, an error occurs if a document without the specified area is input.

Input Formats Supported by the [QR Code Reader] Function

The following input formats are supported by the [QR Code Reader] function.

Supported Formats	Compression method
TIFF (Multi-Pages)	G4
TIFF (Single-Pages)	G3MH
	G3MR
	JBIG De aldrita
	Packbits No compression
	JPEG6
	JPEG7
	(The mixed compression methods are supported.)
TIFF-FX Profile S	G3MH
TIFF-FX Profile F	G4
	G3MH
	G3MR
TIFF-FX Profile J	JBIG
TIFF-FX Profile C	JPEG
JPEG	JFIF
	EXIF
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG
PDF	PDF
	High Compression PDF

The following limitations apply.

- The PDF version supported is 1.3. Only version 1.3 is available for processing.
- Encrypted documents or documents protected by security features cannot be processed.
- The following documents cannot be processed.
 - · PDF with the information other than image (text objects, etc.)
 - · PDF with operators other than q, Q, cm, Do, cs, g, rg, sc, scn
- [Split Document Before the Page With QR Code] and [Delete Pages With QR Code] are not applicable to the document in a PDF format.

Formats supported by [OmniPage(R) OCR] feature

Input format

The following input formats are supported by the [OmniPage(R) OCR] feature.

Supported Formats	Note
TIFF	The following compression methods are supported. • G4 • G3 • Packbits • No compression • JPEG (Only compression-tag=7 is supported. Compression-tag=6 is not supported.)

Supported Formats	Note
TIFF-FX	The following formats are supported. • Profile S • Profile F
JPEG	-
PDF	-
BMP (bitmap)	-

The following limitations apply.

- Up to PDF version 1.5 is supported.
- Encrypted documents or documents protected by security features cannot be processed.
- Image resolutions that can be OCR processed are 75 to 2400dpi. Images with different resolutions for the main and vertical scanning directions are supported.
- If either the vertical or the horizontal of an image has more than 8400 pixels, an error occurs. For correct OCR processing, it is recommended to use an image file up to A3 size with 300 dpi per page.
- The size of images which can be processed depends on the amount of free system memory.

Output format

The following output formats are supported by the [OmniPage(R) OCR] function.

Supported output formats	extensi on	Note
Text (plain)	txt	At the end of each line, the new line is the output text. If table data is included, margins are set above and on the left of the table. The values of table cells are separated by tabs. Zones recognized as figures are not output.
Text (separated by commas)	CSV	Text that is separated by a comma (,). Line and cell content are enclosed in double quotation marks ("). Ranges recognized as 1 cell vary by the [Custom Layout] in [Conversion Settings] and by the OCR zone settings. Zones recognized as figures are not output.
Adobe PDF *1	pdf	This is a PDF file that can be searched and edited. The created PDF file is displayed in a format close to the original. PDF With PDF files, text with the same location as the original is recognized in the file. The [OmniPage(R) OCR] function chooses a font close to the font used in the original document and displays the recognized text. However, the output document may differ in appearance from the original document.
PDF With Image Substitutes *1	pdf	This is a PDF file that can be searched and edited. With PDF files, text with the same location as the original is recognized in the file. The [OmniPage(R) OCR] function chooses a font close to the font used in the original document and displays the recognized text. If a text cannot be recognized by the OCR process, save that section as an image fragment and copy it to the same location on the output document. The created PDF file is displayed in a format close to the original.
PDF Searchable Image *1	pdf	This is a PDF file that can be searched and edited. On each page of the created PDF file, recognized text data is below the image. Due to this, PDF files created in this format are closer to the original documents than PDF files created in the [Adobe PDF] format.
Word 2007	docx	This is a Microsoft Office Word 2007 document format. The fonts, layout, the position of letters of the output document may differ in appearance from the original document.

Supported output formats	extensi on	Note
Excel 2007	xlsx	This is a Microsoft Office Excel 2007 document format. The fonts, layout, the position of letters of the output document may differ in appearance from the original document.
PowerPoint 97 (RTF)	rtf	This is a Microsoft [®] PowerPoint [®] 97 rich text document format. Recognized text is displayed as slide text. Zones recognized as figures are not output.
PowerPoint 2007	pptx	This is a Microsoft Office PowerPoint 2007 document format. The fonts, layout, the position of letters of the output document may differ in appearance from the original document.
Publisher 98 (RTF)	rtf	This is a Microsoft [®] Publisher 98rich text document format.
WordPerfect9/10	wpd	This is a Corel WordPerfect 9 or Corel WordPerfect 10 document format.

^{*1} The PDF version is 1.3.



When the output format is converted, the page image same as the original one can be created. Refer to "Setting [OmniPage(R) OCR] Function" (P.120).

Supported Formats of the [OmniPage(R) Barcode Reader] Function

Input format

The input formats of documents which can be processed by the [OmniPage(R) Barcode Reader] feature are as follows.

Supported Formats	Compression method	Document Splitting
TIFF (Multi-Pages)	G4	Possible
TIFF (Single-Pages)	G3MH	
	G3MR	
	Packbits	
	No compression	
	JPEG6	
	JPEG7	
	(The mixed compression methods are supported.)	
JPEG	JPEG	Possible
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG	Possible
PDF1.3	Normal PDF	Not Possible
	High Compression PDF	
	Searchable PDF	
PDF1.5	Searchable PDF	Not Possible
BMP (bitmap)	-	Not Possible

The following limitations apply.

- Encrypted documents or documents protected by security features cannot be processed.
- Depending on the format, there are documents which cannot be split. When formats that do not support document splitting are input, error occurs.
- The number of documents and pages that can be processed is a maximum of 1,000 for either item. If documents exceeding this limit are entered, an error will occur.
- Image size which can be input is A3 (11.69 x 16.54 inches) in the case of 300 x 300 dpi. The higher the resolution, the smaller the size which can be input.

- When either the vertical or horizontal side of an image exceeds 8400 pixels, error occurs at the time of processing. For example, in the case of 200 x 200 dpi, the processing of a paper size exceeding 1066 x 1066 mm will result in error.
- The optimum resolution of an input document for processing is 300 dpi or 400 dpi for B&W image and 150 to 300 dpi for gray scale and full color image.
 An error will occur if you attempt to process documents exceeding the range of 75 to 2400 dpi in resolution.
- TIFF-FX is not supported.

Barcodes which can be recognized

The barcode types and characters which can be recognized by the [OmniPage(R) Barcode Reader] feature are indicated in the following table.

The [Default state] in the table represents target barcode when [Auto] is selected for barcode [Type] at the advanced settings page of the feature.

Types of barcodes	Default Status	Descriptions
Codabar	Target	 0-9 numbers Special symbols (minus (-), dollar (\$), colon (:), slash (/), period (.), plus (+)) Start-Stop Code (A - D) Any Number of Digits
Code 128	Target	 ASCII Code 128 characters (numbers 0 - 9, English characters, special symbols) Any Number of Digits
Code 39	Target	 Numbers 0 - 9 English alphabets (A - Z) Special symbols (minus (-), dollar (\$), percent (%), slash (/), period (.), plus (+), Space) Asterisk (*) used as start-stop code Any Number of Digits
EAN 8/13	Target	 Numbers 0 - 9 2 types of number of digits, 8-digit and 13-digit
ITF (2 of 5 Interleaved)	Target	Numbers 0 - 9 Any Number of Digits
ITF (Check Digit)	-	Barcode with check digit of ITF (2 of 5 Interleaved) The value of check digit is deleted from the read results which are output.
Postnet	-	• Numbers 0 - 9
UPC	-	Numbers 0 - 9 Version A: 12-digit Version E: 8-digit
UCC Code 128	-	ASCII Code 128 characters (numbers 0 - 9, English characters, special symbols) Any Number of Digits

- The maximum length for the value that can be recognized for each barcode is ITF: 128 bytes, Non-ITF: 64 bytes.
- For Postnet, tilt of up to 10 degrees can be recognized. For other types of barcodes, tilt of any direction can be recognized.
- If multiple barcodes exist in 1 zone, the results that could be recognized will be linked and output.

- A minimum of 3 pixels is required for the bar thickness of the barcode, as well as for the space between bars. For example, for a resolution of 300 dpi, a bar thickness of 0.25 mm (0.01 inches) and above is required.
- If lines with same length as the target barcode for recognition exist within a 6 mm (0.25 inches) range of the barcode, the barcode cannot be recognized correctly.
- The maximum number of bar codes that can be recognized for 1 job is 256 items.
- UPC and EAN are identical standards. The same applies for UCC Code 128 and Code 128. Due to this, even if [Auto] is selected for barcode [Type], UPC or UCC Code 128 barcodes may be recognizable. However, to recognize barcodes accurately, please select the suitable target barcode type to be read.
- If there is an error with the checksum or check digit, any bar code containing checksum or check digit cannot be recognized correctly.

Formats Supported by the [Form Analysis] Function

Input format

The following input formats are supported by the [Form Analysis] function.

Supported Formats	Compression method
TIFF (Multi-Pages) TIFF (Single-Pages)	G4 G3MH G3MR Packbits No compression JPEG6 JPEG7 (The mixed compression methods are supported.)
TIFF-FX Profile S	G3MH
TIFF-FX Profile F	G4 G3MH G3MR
TIFF-FX Profile J	JBIG
TIFF-FX Profile C	JPEG
JPEG	JFIF
TIFF-JPEG mixed	Same as TIFF (Single Page) and JPEG
BMP (bitmap)	-

Output format

The format that can be output by the [Form Analysis] function is the same as the format supported by the [Format Conversion] function (The actual output format is specified by the Form).

There are restrictions to the settings' combination during format conversion. For details, refer to "Output format" (P.324)of "Formats Supported by the [Format Conversion] Function".

Formats Previewed in Interaction Mode

The following input formats are supported by the [Form Analysis] function.

Supported Formats	Compression method
TIFF (Multi-Pages)	• G3MH • G3MR • G4 • JBIG • JPEG • JPEG6



The following formats are not supported.

- TIFF (Single-Pages)
- JFIF
- PDF
- DocuWorks document and binder
- XPS (XML Paper Specification)

Formats Supported by the [Printer Output] Function

The following formats are available for print and fax in the [Printer Output] function.

Supported Formats	Note
TIFF (Multi-Pages) TIFF (Single-Pages)	The following compression methods are supported. The mixed compression methods are also supported. • No compression • G3MH • G3MR • G4 • Packbits • JBIG • JPEG
TIFF-FX	The following formats are supported. • Profile S • Profile F • Profile J • Profile C
JPEG	-
DocuWorks	The followings are supported. • DocuWorks document • DocuWorks binder
PDF	Only the following PDFs are supported. • PDF generated by the [Format Conversion] function • PDF created by devices of our company or Fuji Xerox
BMP (bitmap)	Bitmap format of Windows

- The following documents cannot be processed.
 - Document with security features
 - DocuWorks document linked to TrustMarkingBasic

Searchable PDF

- PDF with the information other than image, such as text information

Supported Paper Sizes

This section describes the paper sizes supported by the functions of Flow Management.

Supported Input Paper Sizes

The available input paper sizes for each feature are as follows.

Features	Restriction details				
Image Processing	The maximum input paper size is 2A0 (long) (841 x 2378 mm), and the maximum resolution is 600 dpi .				
	When [Auto Rotate] is selected on the detailed settings page of the [Image Processing] feature, the maximum paper size which can be input is A3, and maximum resolution is 600 dpi.				
	When [Adjust Size] is selected on the detailed settings page of the [Image Processing] feature, the maximum paper size which can be input is A2. When using Rotation or Skew Correction, the maximum specifiable paper size for Color Image is 2A0 (Long Paper), and the maximum resolution is 200 dpi. The job may complete with error caused by an "Insufficient memory error" even if the size is smaller than 2A0 (Long Paper). In such cases, please lower the resolution of the image.				
Format Conversion (DocuWorks document)	The maximum input paper size is 2A0 (long) (841 \times 2378 mm), and the maximum resolution is 600 dpi.				
	When [Image Size] is specified for [Size] on the detailed settings page of the [Format Conversion] function, the maximum input paper size is A3, and the maximum resolution is 600 dpi. However, to generate the uncompressed intermediate image data during conversion to DocuWorks, there are the following restrictions.				
	 The size of the image file must be 1 GB or less. When the image file is JPEG, the size for a single file must be 1 GB or less. Each page size of the image file must be 1 GB or less. The size of the DocuWorks document after conversion must be 1 GB or less. When an image file is attached as original data, the file size must be 50 MB or less. The size of the Bitmap data which is temporarily created during processing must not exceed 1 GB 				
Format Conversion (PDF/Searchable PDF)	The maximum input paper size is A3, and the maximum resolution is 600 dpi.				
Format Conversion (TIFF)	The maximum input paper size is 2A0 (long) (841 x 2378 mm), and the maximum resolution is 600 dpi .				
Format Conversion (JPEG)	The maximum input paper size is A3, and the maximum resolution is 600 dpi.				
OCR	The maximum input paper size is $2400 \times 2400 \text{ mm}$. 2A0 (banner size), A0, A1, and A2 are supported as a defined paper size.				

Features	Restriction details		
QR Code Reader	The maximum input paper size is A3, and the maximum resolution is 600 dpi.		
OmniPage(R) OCR	You can enter up to A3 size (2970 x 4200 mm) at 300 dpi for the image. If the resolution is higher than this, the size of image you can input will be smaller than A3. In addition, the maximum resolution is 600dpi and the resolutions in the following range are supported. Images with different resolutions in horizontal/vertical directions are also supported. 90-110, 160-240, 280-320, 400, 600 (dpi).		
OmniPage(R) Barcode Reader	You can enter up to A3 size (2970 x 4200 mm) at 300 dpi for the image. If the resolution exceeds 300dpi, the size that can be entered will be smaller than A3. If the vertical or horizontal size of the image exceeds 8400 pixels, the job may complete with error. For example, if the resolution is 200dpi, and you attempt to process a paper size exceeding 1066x1066mm, the job may complete with error.		
Form Analysis	The maximum input paper size is A3.		
Printer Output	The maximum input paper size is 2A0 (long) (841 x 2378 mm), and the maximum resolution is 600 dpi. Refer to "Output Paper Sizes in the [Printer Output] Function" (P.336) for the Output Paper Size.		

In addition, the maximum file size that can be processed by the [Format Conversion], [Image Processing], [OCR], [QR Code Reader], and [OmniPage(R) Barcode Reader] features is less than 2 GB. If the file size to be processed is above 2 GB, or becomes larger than 2 GB during the processing, the job may complete with error.

Output Paper Sizes in the [Printer Output] Function

The following paper sizes are used for the output in the [Printer Output] function.

A and B size

Unit: mm

				Width		
		to [148 + threshold]	to [182 + threshold]	to [210 + threshold]	to [257 + threshold]	over [257 + threshold]
	to [210 + threshold]	A5	B5	A4	B4	А3
_	to [257 + threshold]	B5	B5	A4	B4	А3
Height	to [297 + threshold]	A4	A4	A4	B4	А3
#	to [364 + threshold]	B4	B4	B4	B4	А3
	over [364 + threshold]	А3	А3	А3	A3	А3

U.S.Size

Unit: mm

		Width		
		over [215.9 + threshold]		
Т	to [279.4 + threshold]	Letter		
leight	to [330.2 + threshold]	Folio		
#	over [330.2 + threshold]	Legal		

Unit: inch = 25.4 mm

		Width
		over [8.5 + threshold/25.4]
He	to [11 + threshold/25.4]	Letter
ight	to [11 + threshold/25.4] to [13 + threshold/25.4]	Folio
	over [13 + threshold/25.4]	Legal

Specifications of QR Code Reader

Flow Management supports the following QR code specifications.

Usable QR Codes

QR codes that can be read by QR code reader are as follows.

Sp	ecification	Descriptions	
Model		Model 2 is supported. Model 1 and Micro QR code are not supported.	
Version		All versions from 1 to 40 are supported.	
Error co	rrection level	All levels L, M, Q and H are supported.	
Mode	Numeric	0 to 9	
	Alphanumeric 0 to 9, A to Z Space, \$, %, *, +, -, ., /, :		
	8 bit byte (binary) The following characters can be recognized. JIS-X-0201 Latin JIS-X-0201, Kana Shift-JIS Space, <tab>, <cr>, <lf> Shift-JIS code character based on JIS-X-0208 (Shift-JIS code character is e using binary mode)</lf></cr></tab>		
Kanji Shift-JIS code character based on JIS-X-0208		Shift-JIS code character based on JIS-X-0208	
Mixed Combination of above		Combination of above	
Code co	ncatenation	2 to 16 divisions are supported.	



ECI mode and FNC1 mode are not supported.

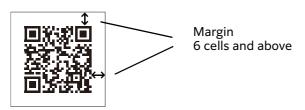
- When the QR code is encoded with character sequences which are not handled as a character set of Microsoft code page 932 in 8 bit byte mode or kanji mode, the QR code cannot be recognized.
- When multiple QR codes are included in a single page, an error occurs.
 However, for the QR code split by concatenation mode, the recognized QR codes concatenated in order are output as document attributes. If one of the split QR codes cannot be recognized, the recognition of all QR codes is ignored as failure.
- When the QR code is detected but not recognized, or it is recognized but ignored, an error code
 indicating the cause is output to the log of FLow Management.
 However, multiple ignored QR codes are included in a single page, an error code only for the first
 detected QR code is output.

Notes When Using QR Codes on Documents

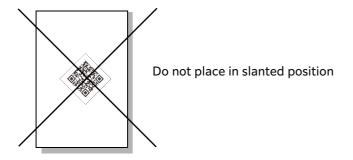
When using QR codes on documents, take note of the following.

Positioning of QR Codes

• There must be a margin of 6 cells and above (blank space) around the QR code.



• QR code is positioned upright and flat on the paper.



When Included in Document as Image

- The background color must be white. Transparent background cannot be used.
- The QR code and its margin (blank space) should not overlap with other image data or stamps.
- QR code with irreversible compression image like JPEG is unusable.
 QR code with irreversible compression image may not be correctly read as it contains noise like moire.

When Printing

- Prints on white, plain paper. It cannot be used with paper with color, paper with lines, or paper with patterns.
- QR code is printed in black.
- Printing that uses the TrustMarkingBasic Watermark function cannot be used. If you print with the Watermark function, the QR code cannot be read as the watermark will overlap with the information in the background pattern of the QR code.
- The size of the QR code to print can be decided by taking into consideration the version, error correction level, printing device and the scan resolution.



Print size of QR code

When scanning the printed QR code with the QR code reader, the size of the printed QR code that suits the QR code version and scan resolution must be considered.

The recommended values for print size is as follows.



- \bullet The print size is the size of the QR code on the printed paper.
- The print size includes the margin (blank space).
- If there is a mixture of alphanumeric mode and kanji mode, the number of characters will be counted in kanji mode.

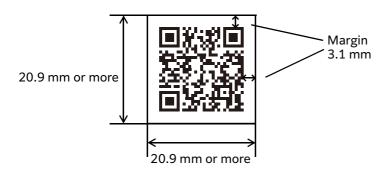
QR code	Number of characters [characters]		Print size [mm or more]				
version	Alphanumeric	sion Alphanumeric	Alphanumeric Kanii Mada		Scan re	solution	
	Mode	Ranji Wode	200 dpi	300 dpi	400 dpi	600 dpi	
1	20	8	25.2	16.8	12.6	8.4	
2	38	16	28.2	18.8	14.1	9.4	
3	61	26	31.3	20.9	15.7	10.5	
4	90	38	34.3	22.9	17.2	11.5	
5	122	52	37.4	24.9	18.7	12.5	
6	154	65	40.4	27.0	20.2	13.5	
7	178	75	43.5	29.0	21.8	14.5	
8	221	93	46.5	31.0	23.3	15.5	
9	262	111	49.6	33.1	24.8	16.6	
10	311	131	52.6	35.1	26.3	17.6	
11	366	155	55.7	37.1	27.9	18.6	
12	419	177	58.7	39.2	29.4	19.6	
13	483	204	61.8	41.2	30.9	20.6	
14	528	223	64.8	43.2	32.4	21.6	
15	600	254	67.9	45.3	34.0	22.7	
16	656	277	70.9	47.3	35.5	23.7	
17	743	310	74.0	49.3	37.0	24.7	
18	816	345	77.0	51.4	38.5	25.7	
19	909	384	80.1	53.4	40.1	26.7	
20	970	410	83.1	55.4	41.6	27.7	
21	1035	438	86.2	57.5	43.1	28.8	
22	1134	480	89.2	59.5	44.6	29.8	
23	1248	528	92.3	61.5	46.2	30.8	
24	1326	561	95.3	63.5	47.7	31.8	
25	1451	614	98.3	65.6	49.2	32.8	
26	1542	652	101.4	67.6	50.7	33.8	
27	1673	692	104.4	69.6	52.2	34.8	
28	1732	732	107.5	71.7	53.8	35.9	
29	1839	778	110.5	73.7	55.3	36.9	

QR code	Number of characters [characters]		Print size [mm or more]			
version	Alphanumeric Kanii Mada	Scan resolution				
	Mode	Kanji Mode	200 dpi	300 dpi	400 dpi	600 dpi
30	1994	843	113.6	75.7	56.8	37.9
31	2113	894	116.6	77.8	58.3	38.9
32	2238	947	119.7	79.8	59.9	39.9
33	2369	1002	122.7	81.8	61.4	40.9
34	2506	1060	125.8	83.9	62.9	42.0
35	2632	1113	128.8	85.9	64.4	43.0
36	2780	1176	131.9	87.9	66.0	44.0
37	2894	1224	134.9	90.0	67.5	45.0
38	3054	1292	138.0	92.0	69.0	46.0
39	3220	1362	141.0	94.0	70.5	47.0
40	3391	1435	144.1	96.1	72.1	48.1

The QR code margin (blank space) is printed with the following size according to the scan resolution.

Scan resolution	Margin size [mm]		
200 dpi	4.6		
300 dpi	3.1		
400 dpi	2.3		
600 dpi	1.6		

Example: Print size when reading a QR code of version 3 with 300 dpi



Accessory tools

This section describes accessory tools provided by the Flow Management.

- Original document retrieval tool
- Output situation monitoring setting tool
- Form analysis data sharing tool
- Save Form Analysis to File mode switching tool
- FlowConverter
- JobCreator authority update tool

Original document retrieval tool

The original document retrieval tool is a tool for collectively retrieving the original document files of jobs which have not been completed.

Collective retrieval of original document files

This section describes the method to collectively retrieve original document files.

- $oldsymbol{1}$. Log on to the Flow Management server with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder}\FM\tools\DocRetrieve



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Enter the following command, and then press the <Enter> key.

AwfmGetJobOriginalDoc.bat -F {Flow name} -P {Output folder}

Parameter	Descriptions
-F {flow name}	Specify a flow for retrieving an original document. If "-F" is not specified, target all flows. For a job to which no flow has been allocated (one which became an error from execution waiting), specify a null character (""). A flow name must be surrounded by double quotes ("). If not surrounded by double quotes, it is not processed correctly. If a double quote (") is included in a flow name, it cannot be specified. Without specifying a flow name, retrieve it.
-P {output folder}	Specify a folder for saving a retrieved original document. "-P" is necessary. Only a local folder can be specified for an output destination. If something other than a local folder is specified to an output destination, it is not processed correctly. When a relative path is specified, a document is output in {installation folder}/tmp/YYYYMMDD-HHMMSS. (*1) When you specify a folder that is not included in the output folders, the folder is created. An output folder must be surrounded by double quotes ("). If not surrounded by double quotes, it is not processed correctly.

^{*1 {}Installation folder} is a folder path in which the original document retrieval tool is installed and as shown in the following.

[&]quot;{Installation destination folder}\FM\tools\DocRetrieve"

In the case of a normal finish, 0 returns.

An original document file is saved under a specified folder.

Output situation monitoring setting tool

There is a function to monitor the output situation of the print/fax on the device in the [Printer Output] functions of the Flow Management. There are a mode to monitor the output situation on the device and mode not to monitor the output situation on the device in this function. The output situation monitoring setting tool is a tool to check and change the mode of the output situation monitoring function on the device.

Mode to monitor output situation on device

Monitor the output situation after the document is transferred to the device until the print/fax processing is finished at the device. If no print/fax document can be transferred to the device such as a case where the device cannot be connected and there is no response from the device, execute the retry processing of document transfer eight times. If no print job/fax document can be transferred even if retry processing is executed or if [Timeout] for monitoring the output situation set during retry processing is exceeded, set the job to an error and finish the monitoring.

Mode not to monitor output situation on device

After the document is transferred to the device, whether the print/fax processing is finished at the device is not monitored. If the transfer of the document to the device fails, no retry is executed. Set the job to an abnormal finish. Whether print/fax processing is finished must be checked with the job log of the device etc.Compared with the mode to monitor the output situation on the device, job processing can be completed early.

Check monitoring mode for output situation on device

This section describes the method to check the monitoring mode for the output situation on the device.

- 1. Log on to the Flow Management server with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder} \FM\awfmPrintJobMonitoringCommand\bin\



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Check the mode.

Enter the following command, and then press the <Enter> key.

awfmPrintJobMonitoringCommand.bat -getmode

Output result	Descriptions
True	It has been set to the mode to monitor the output situation on the device.
False	It has been set to the mode not to monitor the output situation on the device.

5. Check the execution result of the tool.

As the execution result of the tool, the following value is output to the standard output. If another error occurs, the error information is output also to the standard error output.

Return value	Descriptions
0	Normal finish
1	Activation error. Case where you try to activate two or more tools in same PC
2	Parameter error. Case where parameter is any of following statuses No parameter has been specified. A parameter has been specified after "-getmode". A parameter other than "-getmode" has been specified.
3	Operation environment error. Case where Flow Management service is not activated
99	Other errors. Processing errors other than above

In a case other than the normal finish, refer to the error information, remove the cause and execute the tool again.



If you want to save information output to the standard output/standard error output, redirect as shown in the following example to save it.

Example) Case where output result is saved to D: \temp\log.txt awfmPrintJobMonitoringCommand.bat {-getmode} >> D:\temp\log.txt 2>&1

Change monitoring mode for output situation on device

This section describes the method to change the monitoring mode for the output situation on the device.

- 1. Log on to the Flow Management server with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder} \FM\awfmPrintJobMonitoringCommand\bin\



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Change the mode.

Enter the following command, and then press the <Enter> key.

• For changing to mode to monitor output situation on device

awfmPrintJobMonitoringCommand.bat -setmode true

• For changing to mode not to monitor output situation on device

awfmPrintJobMonitoringCommand.bat -setmode false

5. Check the execution result of the tool.

As the execution result of the tool, the following value is output to the standard output. If another error occurs, the error information is output also to the standard error output.

Return value	Descriptions
0	Normal finish
1	Activation error. Case where you try to activate two or more tools in same PC
2	Parameter error. Case where parameter is any of following statuses No parameter has been specified. No parameter has been specified after "-setmode" or something other than "true" and "false" has been specified. A parameter other than "-setmode true" and "-setmode false" has been specified.
3	Operation environment error. Case where Flow Management service is not activated
99	Other errors. Processing errors other than above

In a case other than the normal finish, refer to the error information, remove the cause and execute the tool again.



If you want to save information output to the standard output/standard error output, redirect as shown in the following example to save it.

Example) Case where output result is saved to D: $\t D: \t D: \t 2>\&1$ awfmPrintJobMonitoringCommand.bat {-setmode{ true|false}} >> D: $\t D: \t D: \t$

Form analysis data sharing tool

The form analysis data sharing tool is a tool to export/import data required for the form analysis of the Paper Form Management.

Export

This section describes the export method for form analysis data.

- 1. Log on to the server of an export source in which the Paper Form Management is installed with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder} \Paper Form Management\tools\awfmPfmDbExportImportCommand\exportpfmdb



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Execute the command.

Enter the following command, and then press the <Enter> key.

exportpfmdb.bat {Export folder} {User ID password}

Parameter*1	Descriptions
Export Folder*2	Specify a folder for an export destination (full path).
User ID	They are user ID in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.
Password	It is a password in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.

^{*1} If a semicolon (;), comma (,), equal sign (=), one-byte space or tab is included in the string of an argument, the argument must be enclosed by double quotes (").

If no user ID and password have been specified, access with Windows authentication by user ID logging in to the PC.

A pfmdb.bak file is created as export data under the folder specified as an export destination. Also if there is a pfmdb.bak file under the specified folder at the time of the execution of the tool, the existing pfmdb.bak file is deleted and a file is created newly.

5. Check the execution result.

As the execution result of the export, the following value is output to the standard output. If another error occurs, the error information is output also to the standard error output.

Return value	Descriptions
0	Normal finish
1	Parameter error. Case where parameter is any of following statuses No parameter has been specified. Two or four or more parameters have been specified.
2	Case where it is impossible to access specified folder path
3	Case where sql cannot be executed Case where database of export source cannot be found
91	Case where there is pfmdb.bak under folder specified in folder_path and deletion of the pfmdb.bak file fails
99	Other errors. Processing errors other than above

In a case other than the normal finish, refer to the error information, remove the cause and execute the tool again.



If you want to save information output to the standard output/standard error output, redirect as shown in the following to save it.

Example) Case where output result is saved to D: \temp\log.txt exportpfmdb.bat folder_path [userid password] >> D:\temp\log.txt 2>&1

^{*2} In a configuration in which database is separated, exported files must be stored in the database server. As {Import Folder}, specify the folder that stores exported files in the database separation server.

Import

This section describes the import method for form analysis data.

- 1. Log on to the server of an import destination in which the Paper Form Management is installed with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt.
 {Installation destination folder} \Paper Form
 Management\tools\awfmPfmDbExportImportCommand\importpfmdb



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Execute the command.

Enter the following command, and then press the <Enter> key.

importpfmdb.bat {Import source folder} {User ID password}

Parameter*1	Descriptions
Import folder	Specify a folder in which a file to be imported (pfmdb.bak) is saved (full path). pfmdb.bak is a file exported by exportpfmdb.bat.
User ID	They are user ID in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.
Password	It is a password in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.

^{*1} If a semicolon (;), comma (,), equal sign (=), one-byte space or tab is included in the string of an argument, the argument must be enclosed by double quotes (").

If no user ID and password have been specified, access with Windows authentication by user ID logging in to the PC.

The pfmdb.bak file under the folder specified as an import source is imported.



We do not guarantee an operation in a case where a folder in which something other than a file exported by exportpfmdb.bat is saved is specified in folder_path.

^{*2} In a configuration in which database is separated, exported files must be stored in the database server. As {Import Folder}, specify the folder that stores exported files in the database separation server.

5. Check the execution result.

As the execution result of the export, the following value is output to the standard output. If another error occurs, the error information is output also to the standard error output.

Return value	Descriptions
0	Normal finish
1	Parameter error. Case where parameter is any of following statuses No parameter has been specified. Two or four or more parameters have been specified.
2	Case where it is impossible to access specified folder path
3	Case where sql cannot be executed Case where database of import destination cannot be found
4	Case where there is no pfmdb.bak file under specified folder or even if there is file, size is 0
99	Other errors. Processing errors other than above

In a case other than the normal finish, refer to the error information, remove the cause and execute the tool again.



If you want to save information output to the standard output/standard error output, redirect as shown in the following to save it.

Example) Case where output result is saved to D: \temp\log.txt portpfmdb.bat folder_path [userid password] >> D:\temp\log.txt 2>&1

Save Form Analysis to File mode switching tool

In the [Save Form Analysis to File] function, no form analysis results are output in relation to a document in which an analysis error occurs in the [Form Analysis] function. The Save Form Analysis to File mode switching tool is a tool to switch "Mode not to output form analysis result when analysis error occurs" (default) and "Mode to output form analysis result regardless of analysis error occurrence".

Save Form Analysis to File mode switching

This section describes the method to switch the Save Form Analysis to File mode.

- 1. Log on to the server in which the Flow Management Option and Paper Form Management are installed with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder}\FM\tools\outputcsvsettingtool



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Execute the command.

Enter the following command, and then press the <Enter> key.

• If setting to mode to output form analysis result regardless of analysis error occurrence

adddshcsvregkey.bat

• If setting to mode not to output form analysis result when analysis error occurs (default)

deletedshcsvregkey.bat



- For both commands, nothing is displayed if a normal finish is executed.
- For both commands, a message from Windows is displayed if an abnormal finish is executed.
- 5. Restart the server.

The Save Form Analysis to File mode is switched.

- **6.** Log on to the server of an export source in which the Paper Form Management is installed with the user in the Administrators group.
- 7. Display the command prompt window with the authority of the Administrators group.
- 8. Move to the following folder with the command prompt.
 {Installation destination folder} \Paper Form
 Management\tools\awfmPfmDbExportImportCommand\exportpfmdb



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

9. Execute the command.

Enter the following command, and then press the <Enter> key.

exportpfmdb.bat {Export folder} {User ID password}

Parameter ^{*1}	Descriptions
Export Folder	Specify a folder for an export destination (full path).
User ID	They are user ID in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.
Password	It is a password in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.

^{*1} If a semicolon (;), comma (,), equal sign (=), one-byte space or tab is included in the string of an argument, the argument must be enclosed by double quotes (").

If no user ID and password have been specified, access with Windows authentication by user ID logging in to the PC.

A pfmdb.bak file is created as export data under the folder specified as an export destination. Also if there is a pfmdb.bak file under the specified folder at the time of the execution of the tool, the existing pfmdb.bak file is deleted and a file is created newly.

10. Check the execution result.

As the execution result of the export, the following value is output to the standard output. If another error occurs, the error information is output also to the standard error output.

Return value	Descriptions
0	Normal finish
1	Parameter error. Case where parameter is any of following statuses No parameter has been specified. Two or four or more parameters have been specified.
2	Case where it is impossible to access specified folder path
3	Case where sql cannot be executed Case where database of export source cannot be found
91	Case where there is pfmdb.bak under folder specified in folder_path and deletion of the pfmdb.bak file fails
99	Other errors. Processing errors other than above

In a case other than the normal finish, refer to the error information, remove the cause and execute the tool again.



If you want to save information output to the standard output/standard error output, redirect as shown in the following to save it.

Example) Case where output result is saved to D: \temp\log.txt exportpfmdb.bat folder_path [userid password] >> D:\temp\log.txt 2>&1

Import

This section describes the import method for form analysis data.

- 1. Log on to the server of an import destination in which the Paper Form Management is installed with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt.
 {Installation destination folder} \Paper Form
 Management\tools\awfmPfmDbExportImportCommand\importpfmdb



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Execute the command.

Enter the following command, and then press the <Enter> key.

importpfmdb.bat {Import source folder} {User ID password}

Parameter ^{*1}	Descriptions
Import folder	Specify a folder in which a file to be imported (pfmdb.bak) is saved (full path). pfmdb.bak is a file exported by exportpfmdb.bat.
User ID	They are user ID in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.

Parameter*1	Descriptions
Password	It is a password in a case where SQL authentication is used for an access to a database. Specify them if accessing a database with SQL authentication. If only user ID or a password is specified for a parameter, it becomes an error.

^{*1} If a semicolon (;), comma (,), equal sign (=), one-byte space or tab is included in the string of an argument, the argument must be enclosed by double quotes (").

If no user ID and password have been specified, access with Windows authentication by user ID logging in to the PC.

The pfmdb.bak file under the folder specified as an import source is imported.



We do not guarantee an operation in a case where a folder in which something other than a file exported by exportpfmdb.bat is saved is specified in folder_path.

5. Check the execution result.

As the execution result of the export, the following value is output to the standard output. If another error occurs, the error information is output also to the standard error output.

Return value	Descriptions
0	Normal finish
1	Parameter error. Case where parameter is any of following statuses No parameter has been specified.Two or four or more parameters have been specified.
2	Case where it is impossible to access specified folder path
3	Case where sql cannot be executed Case where database of import destination cannot be found
4	Case where there is no pfmdb.bak file under specified folder or even if there is file, size is 0
99	Other errors. Processing errors other than above

In a case other than the normal finish, refer to the error information, remove the cause and execute the tool again.



If you want to save information output to the standard output/standard error output, redirect as shown in the following to save it.

Example) Case where output result is saved to D: $\t 0$: $\t 2>&1$ portpfmdb.bat folder_path [userid password] >> D: $\t 2>&1$

Save Form Analysis to File mode switching tool

In the [Save Form Analysis to File] function, no form analysis results are output in relation to a document in which an analysis error occurs in the [Form Analysis] function. The Save Form Analysis to File mode switching tool is a tool to switch "Mode not to output form analysis result when analysis error occurs" (default) and "Mode to output form analysis result regardless of analysis error occurrence".

Save Form Analysis to File mode switching

This section describes the method to switch the Save Form Analysis to File mode.

- 1. Log on to the server in which the Flow Management Option and Paper Form Management are installed with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder}\FM\tools\outputcsvsettingtool



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Execute the command.

Enter the following command, and then press the <Enter> key.

• If setting to mode to output form analysis result regardless of analysis error occurrence

adddshcsvregkey.bat

• If setting to mode not to output form analysis result when analysis error occurs (default)

deletedshcsvregkey.bat



Note

- For both commands, nothing is displayed if a normal finish is executed.
- For both commands, a message from Windows is displayed if an abnormal finish is executed.
- 5. Restart the server.

The Save Form Analysis to File mode is switched.

FlowConverter

FlowConverter is a tool to output a flow file (.awfm) downloaded in the flow management screen as a CSV file.

You can browse flows as text without displaying the details of each flow.

The conceivable use cases are shown below.

- Manage the corresponding name and content of a flow.
- Manage the change history by creating text when a flow is changed.

Output of flow file

This section explains the method to output a flow file as a CSV file.

- $oldsymbol{1}$. Log on to the Flow Management server with the user in the Administrators group.
- 2. Display the command prompt window with the authority of the Administrators group.
- 3. Move to the following folder with the command prompt. {Installation destination folder}/FM/tools/FlowConverter/bin



By default, {Installation destination folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS."

4. Enter the following command, and then press the <Enter> key.

flowConverter.bat -f {Flow file} -o {Output folder}

Parameter	Description
Flow file	Specify the exported flow file with the absolute path or relative path. When the flow file name contains a single byte space, enclose the file name with double quotes (").
Output folder	Specify the output folder of a CSV file with the absolute path or relative path. When the output folder name contains a single byte space, enclose the folder name with double quotes ("). When the folder does not exist in the specified path, the folder is created. When the specified path contains an unusable letter, output is completed with errors.

When output is completed correctly, 0 is returned.

A CSV file is saved under the specified folder.

For details of processing, refer to "AWFM-FlowConverter-Date.log" under the {Folder of data storage directory}\Logs\FM\tools.



- This tool is applicable to the flows downloaded with version 2.2 or later.
- An output CSV file and display on the setting screen may not be matched completely. Since flow information is used as a base, information that exists only in the setting screen, such as classification, is not output.
- Information on features that are added separately from those that are provided by Flow Management is not guaranteed.
- It takes about 30 seconds to process 20 general flows. The processing time is increased according to the flow complexity and number of flows.

JobCreator permission update tool

JobCreator permission update tool is a batch setting tool for permission of user's JobCreator.



- JobCreator permission refers to a permission for operation of "User (registration of a job)." For operation permission, refer to "Types of Roles" (P.38).
- Do not perform the operation of updating a user or a group other than this tool while executing this tool.
- Do not perform the existing flow operation such as editing, deletion, and copying while executing this tool.
- Only one unit of this tool can be started at a time.
- Processing may take time when a large number of users belong to a group to be updated or when updating a large among of flows and user permissions.
- Screen display of a flow may take time when registering a large number of users into "User (registration of a job)."

- The apeos_admin (system administrator) user cannot be set in this tool.
- This tool is valid only for a flow where the "Link to Web Applications" function is set.

JobCreator permission batch update

This section describes how to collectively update JobCreator permission of users affiliated with a UM group.

- 1. Log on to the Flow Management server as an Administrators group user.
- 2. Open a command prompt window with the Administrators group permission.
- 3. In the command prompt, navigate to the following folder. {Installation folder}\FM\tools\awfmUpdateAuthority\bin



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Enter the following command, and then press the <Enter> key.

awfmSetAuthority.bat -f {Flow ID} {Group ID}

Parameter	Descriptions
-f {Flow ID}	Specify one target Flow ID.
Group ID	Specify one or more IDs of the UM groups with which the users to be set as JobCreator permission users are affiliated. To specify two or more UM group IDs, use a half-width space as a delimiter. If the UM group ID to specify includes any half-width space, enclose the ID with double quotation marks (") to specify the ID. Example: awfmSetAuthority.bat -f <flowid> AAA BBB "C CC"</flowid>

5. Check the tool execution result.

As the tool execution result, one of the following values is output to the standard output. If any other error occurs, the error information is also output to the standard error output.

Return value	Descriptions
0	Normal finish
1	Activation error. Case where you try to activate two or more tools in same PC
2	Parameter error. Case where parameter is any of following statuses • No definition of -f • No space before and after -f • No Flow ID specified after -f • One or more group IDs not specified for the parameter
3	Group specified by Group ID does not exist in UM.
4	No user affiliated with the UM group specified by Group ID
5	No flow exists with the specified Flow ID
6	No web applications link exists for the specified Flow ID
11	The number of users affiliated with the group or sub-groups exceeds the upper limit
99	Other errors. Processing errors other than above

JobCreator permission user update by JobCreator permission user list file

Update the JobCreator permission users for the flow specified by the Flow ID with the UM users described in the JobCreator permission user list file specified by a file path.

- $oldsymbol{1}$. Log on to the Flow Management server as an Administrators group user.
- 2. Open a command prompt window with the Administrators group permission.
- 3. In the command prompt, navigate to the following folder. {Installation folder}\FM\tools\awfmUpdateAuthority\bin



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Enter the following command, and then press the <Enter> key.

awfmImportAuthority.bat -f {Flow ID} {File path}

Parameter	Descriptions
-f {Flow ID}	Specify one target Flow ID.
File path	Specify the path to the JobCreator permission setting file. If the path includes any half-width space, enclose the path with double quotation marks (") to specify. Example: awfmImportAuthority.bat -f FlowID "c:\Program Files\setauth\auth.txt"

5. Check the tool execution result.

As the tool execution result, one of the following values is output to the standard output. If any other error occurs, the error information is also output to the standard error output.

Return value	Descriptions
0	Normal finish
1	Activation error. Case where you try to activate two or more tools in same PC
2	Parameter error. Case where parameter is any of following statuses • No definition of -f • No space before and after -f • No Flow ID specified after -f • No {File path} is specified or more than one {File path} is specified
5	No flow exists with the specified Flow ID
6	No web applications link exists for the specified Flow ID
7	No file exists at the path specified by {File path}.
8	None of the users described in the file exists in UM.
9	The CSV format specified by {File path} is incorrect.
99	Other errors. Processing errors other than above

Creation of JobCreator permission user list file

The file is a text file that lists the users to be set as JobCreator permission users.

Use the following format to describe the user IDs to be set with JobCreator permission.

{Domain name}\{User ID]}(CRLF)



- · Create a file as a Shift-JIS format text file.
- {Domain name} is the "domain name" displayed on the UM domain list screen. As the {Domain name}, only a "domain name" linked with Active Directory in UM can be specified.
- {User ID} is the "user ID" of a user displayed on the user list screen. Only one {User ID} exists in {Domain name} of UM.
- The ID of a UM group is the "User Group ID" displayed on the property screen of the User Group of UM.
- {Domain name} and {User ID} can contain up to 255 and 64 characters respectively that are defined by ASCII (from 0x20 to 0x7e, excluding 0x5c(\)). The newline code is CRLF and the last line does not require a newline.

Example of file description:

domein-1\user-1 domein-1\user-2 domein-2\user-1 domein-1\user-99

JobCreator permission batch update by JobCreator permission file

Add, delete, or update JobCreator permission users specified in the JobCreator permission setting file.

- $oldsymbol{1}$. Log on to the Flow Management server as an Administrators group user.
- 2. Open a command prompt window with the Administrators group permission.
- 3. In the command prompt, navigate to the following folder. {Installation folder}\FM\tools\awfmUpdateAuthority\bin



By default, {Installation folder} is "C:\Program Files (x86)\FUJIFILM\ApeosWare MS".

4. Enter the following command, and then press the <Enter> key.

awfmUpdateAuthority.bat {File path}

Parameter	Descriptions
File path	Specify the path to the JobCreator permission setting file. If the path includes any half-width space, enclose the path with double quotation marks (") to specify. Example: awfmUpdateAuthority.bat "c:\Program Files\setauth\auth.csv"



Where there are several pieces of the same flow IDs in the permission setting file, an error occurs.

5. Check the tool execution result.

As the tool execution result, one of the following values is output to the standard output. If any other error occurs, the error information is also output to the standard error output.

Return value	Descriptions
0	Normal finish
1	Activation error. Case where you try to activate two or more tools in same PC
2	No {File path} is specified or more than one {File path} is specified.
7	No file exists at the path specified by {File path}
9	The CSV format specified by {File path} is incorrect.
11	The number of users affiliated with the group or sub-groups exceeds the upper limit
99	Other errors. Processing errors other than above

Creation of JobCreator permission setting file

The file is a CSV file that describes the users or groups to be set as JobCreator permission users.

Create the file in the following format.

{Process},{ID of flow to be processed},{Range of JobCreator permission users},{User ID} or {Group ID}

As the process, specify "A" (add), "D" (delete) or "R" (update).

As the range of JobCreator permission users, specify "G" (group) or "U" (user).



- Create a file as a UTF-8 (BOM) format CSV file.
- {User ID} is the "user ID" of a user displayed on the user list screen.
- {Group ID} is the "User Group ID" displayed on the property screen of the User Group of UM.
- {User ID} or {Group ID} can contain up to 64 characters defined by ASCII (from 0x20 to 0x7e, excluding 0x5c(\)).

Example of file description:

R,flow-ID1,G,Grpup-1,U,user-1,U,user-2 A,flow-ID2,U,user-3 D,flow-ID3,G,Grpup-2