Configuring

Preparing to use workflows

A workflow defines a set of steps that a job follows through the system. When you define a workflow, you specify what phases and, within those phases, what steps the job passes through during processing.

In this section:

Creating a workflow

RICOH ProcessDirector provides several sample workflows. To create a workflow, you can modify one of these workflows or, to create a workflow that is similar to an existing workflow, you can copy the existing workflow and edit it. Also, you can create a new workflow that has only two steps, SetJobPropsFromTextFile and RemoveJobs, with a connector between them.

Adding conditional processing to a workflow

You can add conditional processing to a workflow by specifying rules for the connectors between steps. For example, a rule might specify jobs with fewer than 20 pages. The connector with that rule sends jobs to steps that request a cut sheet printer. Another connector sends all other jobs to steps that request a continuous forms printer.

Renaming a step in a workflow

You can rename a step in a workflow if needed.

Creating a step chain

If you use the same set of connected steps in many of your workflows, you can create a step chain with those steps to use in your workflows.

Copying step templates

RICOH ProcessDirector provides step templates that you can use to create custom step templates. You can then use the custom step templates to define steps that you can add to workflows.

Setting job defaults in a workflow

When RICOH ProcessDirector assigns a workflow to a job, the **SetJobPropsFromTextFIle** step processes all of the steps in the workflow and assigns values to job properties set by those steps. Those values are used throughout the workflow unless an **AssignJobValues** step or a step that can set job properties from a file changes them, such as **SetDocPropsFromConditions**.

Tuning step templates

Tuning a step template lets you specify how much system resource the step requires for processing. You can also specify which computers can run the steps created from the step template.

Using workflow annotations

You can create annotations to write comments or reminders directly in your workflow. Add descriptions or comments to the steps, step chains, or connectors by using the annotations.

Creating step resources

A step resource identifies a file that is used by a workflow step for its processing. Some step templates allow you to specify a file for the step to use when processing jobs. Some of these files might be created on your workstation but need to be available to the workflow when it processes jobs. You can view, retrieve, and replace the file by editing the step resource object.

Hints for using step templates

These hints for using step templates help you choose the steps to place in a workflow, order the steps in the correct sequence, and take advantage of conditional processing capabilities. The Workflow Editor does not validate workflows to make sure that steps are in the correct sequence or that conditional processing rules work.

Adding a step that makes a job wait

You can add a step based on the **Wait** step template to a workflow to cause a job to wait a set amount of time or until a specified time to continue processing.

Assigning workflows

When an input file enters the RICOH ProcessDirector system, one of the first actions that the input device does is to assign a workflow to it. After the input device assigns the workflow, the job can begin to move through the processing steps. There are several methods through which the input device can assign the workflow. You configure the method to meet the requirements of the installation.

Comparing workflows

The workflows comparison feature helps you analyze differences and similarities between two workflows directly from the Workflow Editor. You can easily identify changes and similarities between steps, step chains, connectors, branches, or annotations in the workflows.

Associating service policies with workflows

You can associate a service policy with one or more workflows. The service policy calculates the planned checkpoints and the SLA deadline for all jobs that use the workflow. Each workflow can have one associated service policy. To measure the performance of jobs using an SLA deadline, you must also identify an SLA target step for the workflow.

Replacing your control files with the sample files

When you install a new version of RICOH ProcessDirector, the installer automatically adds new sample control files to the `/aiw/aiw1/samples` directory and copies them to your control files directory, `/aiw/aiw1/control_files`. It does not overwrite any of your customized control files in `/aiw/aiw1/control_files`. You can use the copyConfigurationFiles script to install the default control files or to overwrite your customized control files.

Workflows for printing

You can define a workflow that lets you track a job that contains PDF data through the system.

Holding jobs

If you do not want jobs to move through their workflow without human intervention, you can configure the workflows to hold jobs at a given point. You can then have the operators do an action to release the jobs.

External steps

RICOH ProcessDirector lets you add steps that run a program outside of RICOH ProcessDirector. The external program can do special job-processing tasks and it can run on the same computer that has the RICOH ProcessDirector base product installed. It can also run on a Linux system that has a RICOH ProcessDirector secondary server feature installed, or on a Windows system that has an application server installed on it.

Defining a workflow with preview printing

To print sample pages from a job so you can verify the output before you print the entire job, you must define a workflow that includes one or more steps based on the **PreviewPrint** step template.

Setting up a workflow that uses a Reformat step restart type

To move jobs from one printer to another, you might need to reformat the jobs. For example, a job is formatted to print 2-up on a continuous forms printer, but you need to move the job to a cut sheet printer where the data should be formatted 1-up. Scheduling the job to the printer is not enough because the data in the job must be reformatted to print correctly on the printer. You must set up the workflow to reformat the job for the printer.

Adding steps to process deleted jobs

You can add steps to your workflow that process deleted jobs before removing them from the system.

Adding steps to encrypt PDF files

You can add steps to your workflow that add password protection to PDF files and that restrict the actions that can be done to the PDF files.

Adding steps to decrypt PDF files

When RICOH ProcessDirector receives an encrypted PDF file, the file must be decrypted before it can be processed.

Defining workflows to process XML

To process XML jobs, you define one or more workflows that manipulate the XML.

Defining an error path in a workflow

You can add a branch in your workflow so that if a job goes into error state, the job continues processing in another path in the workflow instead of staying in the **Error** state. You can define a branch out of any step in the workflow.

Calling a REST web service from a workflow

To call a REST web service, identify the parameters used to call the REST web service. Test the exchange of data between RICOH ProcessDirector and the application. Then add a step based on the **CallRESTService** step template to the workflow.

Calling a SOAP web service from a workflow

To call a SOAP web service, identify the parameters used to call the SOAP web service. Test the exchange of data between RICOH ProcessDirector and the application. Then add a step based on the **CallSOAPService** step template to the workflow.

Defining a workflow that sends jobs to be transformed

To send print jobs to the RICOH ProcessDirector Transforms or the Advanced Transforms to be converted to a different data stream, you must define a workflow that includes one or more data stream conversion steps.

Defining workflows or printers that use a color mapping table

You can specify the color mapping table used to print jobs at the job level or at the printer level.

Defining a workflow to print AFP data to a PCL printer

You can define a workflow that accepts a print job in AFP format and sends it to a PCLOut printer. You cannot send PCL data to a PCLOut printer; you must send PCL print jobs to Passthrough printers.

Workflow to print jobs created in the Documents table

To print jobs that you create from documents in the Documents table, define a workflow that contains steps to create a job from the document, print the job, and do any other processing steps required. You select the workflow in the **Workflow** field on the Create a Job page when you use the **Create Job** action.

Adding a step to convert XML elements into document properties

You can add a step based on the **ApplyXSLTransform** step template to a workflow to convert XML elements and their attributes into RICOH ProcessDirector document properties.

Grouping child jobs

Hot folder input devices can generate child jobs if they are configured to use a batching method. LPD input devices can receive multiple input files on a print command. However, LPD input devices with a Linux parent server cannot create parent jobs with multiple children. As a result, one parent job and one child job are created for each input file. If the AFP Support feature is installed, Download input devices can create child jobs from multi-dataset jobs received from Download for z/OS and AFP Download Plus, or the input devices can merge the jobs into a single job.

Configuring steps to identify documents in AFP files

After you have linked document or job properties to index tags in a sample AFP file, you must configure the step that determines values for document or job properties in production AFP files. The step names the Visual Workbench control file that contains information about how properties are linked to index tags.

Adding steps to index AFP files

After you create page groups and index tags in a sample AFP file using RICOH Visual Workbench, you must add a step to one or more workflows to create page groups and index tags in production AFP files that use the workflows. The step names the Visual Workbench control file that contains definitions for the page groups and index tags.

Adding steps to edit AFP files

After you create barcodes, text, or hidden areas in a sample AFP file using RICOH Visual Workbench, you must add a step to one or more workflows to create barcodes, text, or hidden areas in production AFP files that use the workflows. The step names the Visual Workbench control file that contains the definitions for the barcodes, text, or hidden areas.

Adding steps to fill white space in AFP files

After you define white space in a sample AFP file using RICOH Visual Workbench, you must add a step to one or more workflows to fill the white space with content in production AFP files that use the workflows. The step names the Visual Workbench control file that contains the definitions for the white space.

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