

Overview

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Running the StepChainDemo sample workflow

The **StepChainDemo** workflow presents an example of step chain usage by showcasing how to group a collection of steps with a well-defined function. After you create a step chain, you can include it in other workflows, making the process easier and visually simplifying the workflow.

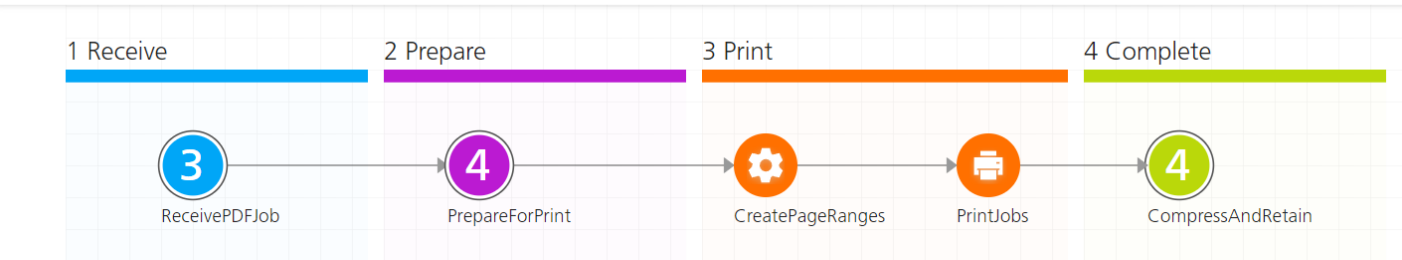
The sample objects and files used in this workflow include:

- Workflow: StepChainDemo
- Sample step chains:
  - ReceivePDFJob
  - PrepareForPrint
  - CompressAndRetain
- Sample input device: HotFolderStepChain
- Sample PDF file: /aiw/aiw1/testfiles/Demo.pdf

The illustrations below show the sample workflow as a series of phases containing step chains and steps corresponding to the processing steps that your jobs pass through. The step chains appear as a single steps in the workflow with numbers as their icons, indicating how many steps are contained in the step chains. The color of the step chains match the color of the phase they are in.

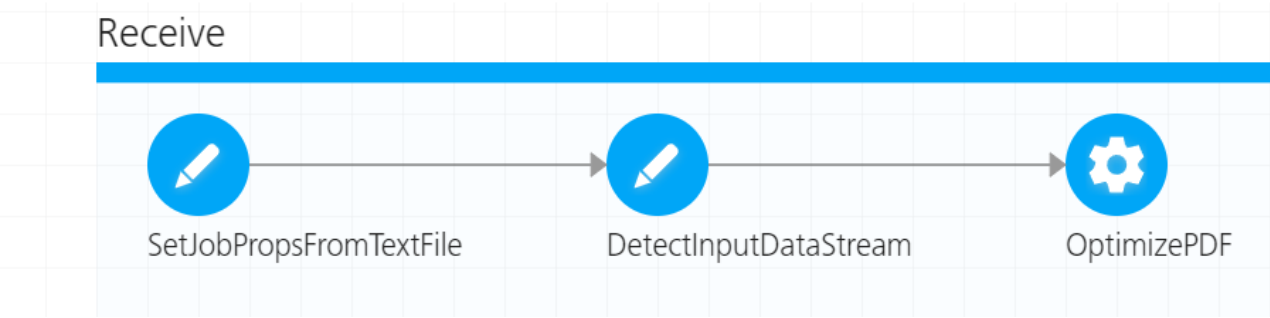
Review the sample workflow and run a sample job to understand how step chains work.

StepChainDemo



The **Receive** phase sets the initial values of job properties and optimizes PDF jobs. In this phase, the **ReceivePDFJob** step chain is executed, which includes the following steps: **SetJobPropsFromTextFile**, **DetectInputDataStream**, and **OptimizePDF**.

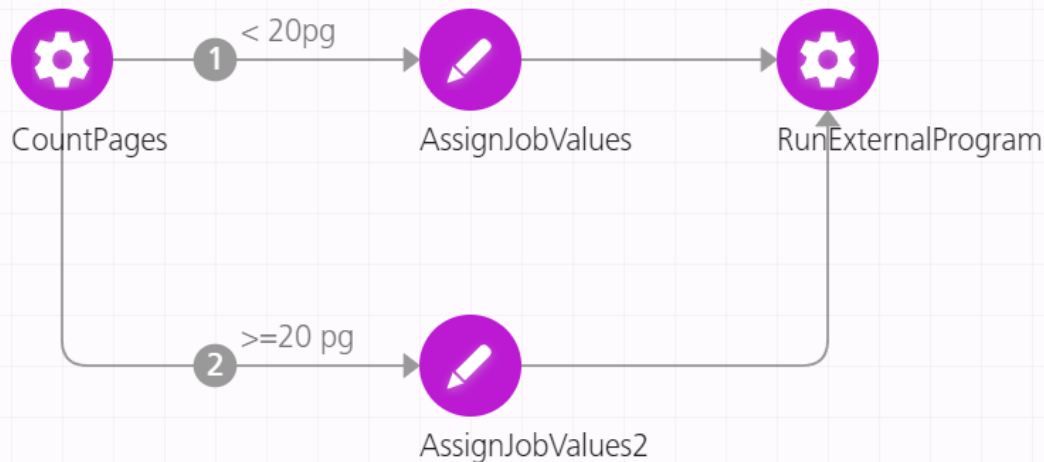
**ReceivePDFJob**



The **Prepare** phase consists of the **PrepareForPrint** step chain, which includes the following steps to prepare the PDF sample for print: **CountPages**, **AssignValues**, **AssignValues2**, and **RunExternalProgram**. This step chain also provides an example of how to create rules by using specifying conditions. During the **CountPages** step, RICOH ProcessDirector calculates the total number of sheets in the job. Depending on this value, the job is sent to different branches, using either **AssignJobValues** or **AssignJobValues2** step.

## ⋮ ⓘ PrepareForPrint

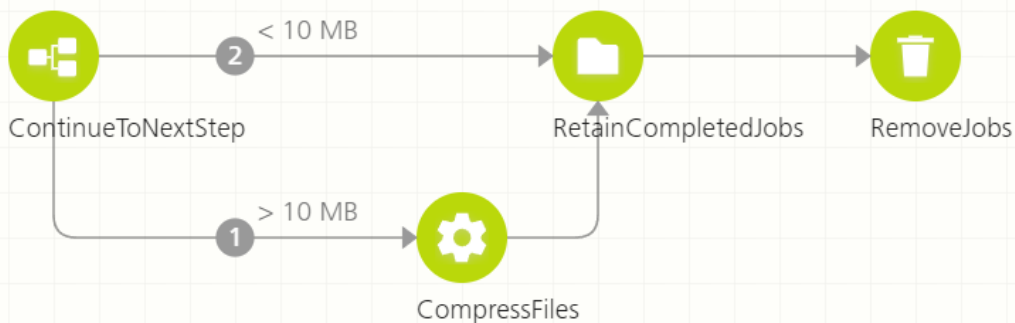
### Prepare



After jobs have completed all other processing, they arrive in the **Complete** phase. In this phase, the **CompressAndRetain** step chain is executed, which includes the following steps: **ContinueToNextStep**, **RetainCompletedJobs**, **CompressFiles**, and **RemoveJobs**. During the execution of these steps, PDF data files that are larger than 10 MB get compressed, and the job is retained for three days before being removed.

## ⋮ ⓘ CompressAndRetain

### Complete



To run the sample workflow:

1. Log in to RICOH ProcessDirector.
2. Click the **Main** tab.
3. In the Printers portlet, select the **Sample** printer and click **Enable**.
4. In the Input Devices portlet, select the **HotFolderStepChain** hot folder input device and click **Enable and Connect**.
5. Navigate to `/aiw/aiw1/testfiles` and copy `Demo.pdf` into `/aiw/aiw1/System/hf/stepchain`. The job shows up in the **Jobs** table. The sample workflow uses a sample printer that does not print any data.
6. In the **Jobs** table, find the job. To view the job in the workflow, on the **Jobs** portlet, right-click the job and select **View job in workflow**. You can double-click the step chains to view the job's path through the conditions. For example, if you click the **PrepareForPrint** step chain icon, you can see that the job followed the second path ( **AssignJobValues 2** ). This occurred because the `Demo.pdf` file has more than 20 pages.

#### ⓘ Note:

- If you want to run the example again, you must copy the sample file to the hot folder again.
- You can copy a larger file to the hot folder to simulate printing large files that go through the **CompressFiles** step of the **CompressAndRetain** step chain.

Parent topic: [Step templates, steps, and step chains](#)