

# Enfocus Switch - HP PrintOS Composer app

for HP Indigo Digital Presses

How-to Guide



January 2021

© Copyright 2020-2021 HP Indigo Ltd.

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

HP, HP Indigo Press, HP Indigo Press RIP, HP ElectroInk, and HP Indigo ElectroInk are trademarks or registered trademarks of HP.

Adobe PostScript is a trademark of Adobe Systems Incorporated.

MS Windows and Windows are U.S. registered trademarks of Microsoft Corp.

All other products or name brands are trademarks of their respective holders.

The HP Indigo press' counter feature records the number of impressions you make using your press. The counter does not reflect any previous use of the press or its age.

The HP Indigo Digital Press is a Class 1 laser product. It contains a writing head that is a Class 2 laser product. The complete writing head and the output beam (with a protective cover) are located under the roof of the press engine. During normal press operation and service, the laser beam is completely protected by fixed guards and interlocks, and no person in the vicinity of the press is exposed to any laser radiation. There is no danger to persons or equipment when the system is operated in accordance with the directions provided by HP in this and other publications. Warning labels are attached to protective covers. Do not remove these covers.

The HP Indigo Digital Press contains high voltage power supplies. There is no danger to persons or equipment when the system is operated in accordance with the directions provided by HP in this and other publications. All high voltage power supplies are located behind protective covers. Warning labels are attached to each protective cover. Do not remove covers.

Part Number: CA494-04120

Revision 02: January 2021

## Language disclaimer

In the event of a conflict between the English version and this language version, the English version will prevail.

---

# Table of contents

|  |           |
|--|-----------|
| <b>1 Overview</b>  | <b>1</b>  |
| Who can benefit from reading this document?                              | 1         |
| Introduction   | 1         |
| Composition features   | 2         |
| HPD graphic template   | 2         |
| Data file  | 2         |
| PDF preset   | 3         |
| Imposition template  | 3         |
| Assets library   | 3         |
| Records quota  | 3         |
| Prerequisites  | 4         |
| Workflow   | 4         |
| <b>2 Installation and configuration</b>                                  | <b>7</b>  |
| Acquiring the HP PrintOS Composer key and secret                         | 7         |
| Installing the HP PrintOS Composer and Helper apps into Enfocus Switch   | 9         |
| Configuring the HP PrintOS Composer app                                  | 14        |
| <b>3 Creating a flow for use with PrintOS Composer</b>                   | <b>17</b> |
| Creating output folders  | 17        |
| Creating flow inputs   | 22        |
| Creating flow inputs using the PrintOS Composer Configuration Helper app | 22        |
| Creating flow inputs using the direct folder workflow                    | 26        |
| <b>4 Submitting jobs</b>   | <b>33</b> |
| Submitting jobs using the Helper workflow                                | 33        |
| Input by Single File   | 34        |
| Input by Folder (many dynamic files)                                     | 35        |
| Submitting jobs using the direct folder workflow                         | 36        |
| Input by JSON File   | 37        |
| Input by Folder with HPD and Data  | 40        |
| Input by Single File   | 41        |
| <b>5 Examining or stopping a job</b>                                     | <b>43</b> |
| Examining the results of a job   | 43        |
| Stopping a job   | 46        |

|   |           |
|---|-----------|
| <b>Appendix A Examples</b> .....  | <b>47</b> |
| Examples of Helper workflow .....   | 47        |
| CSV as single file job input, with fixed HPD and IMPP files, and PDF preset ..... | 47        |
| Folder as job input, with fixed HPD .....   | 48        |
| Examples of direct folder workflow .....  | 49        |
| CSV as Single File Job input, with fixed HPD .....                                | 49        |
| TXT as Single File Job input, with fixed HPD and fixed Imposition .....           | 50        |
| Folder as Job input, with fixed HPD .....   | 51        |
| <br>  |           |
| <b>Appendix B Troubleshooting</b> .....   | <b>53</b> |
| <br>  |           |
| <b>Appendix C Records quota in HP PrintOS Composer</b> .....                      | <b>55</b> |
| <br>  |           |
| <b>Appendix D Service and support</b> .....                                       | <b>57</b> |
| Printing instructions .....   | 58        |

# 1 Overview

## Who can benefit from reading this document?

This document provides information on the Enfocus Switch application that automates the workflow of VDP (Variable Data Printing) templates utilizing the HP PrintOS Composer cloud service. No hardware or software other than a computer and the Enfocus Switch application are necessary.

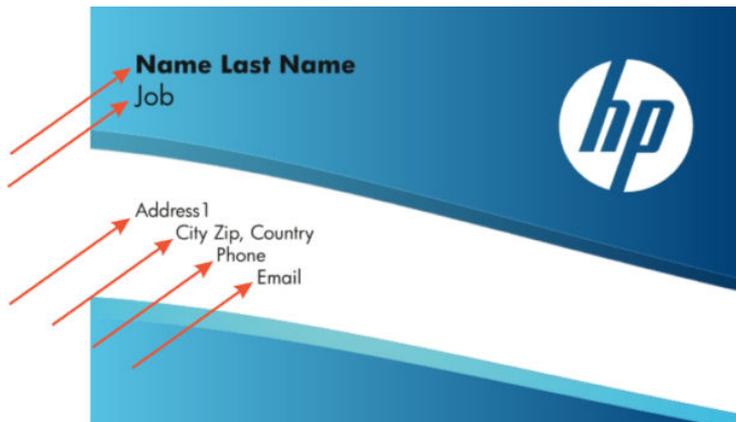
The job is composed in the cloud (by the HP PrintOS Composer service), thereby not requiring a dedicated HP SmartStream Composer server.

This application can help the DFE production manager to more efficiently manage the creation of VDP PDFs for sending to the press for printing.

## Introduction

HP PrintOS Composer generates variable data PDFs by binding data with a graphic template. The graphic template can be generated by Adobe InDesign with HP SmartStream Designer or Adobe Illustrator with HP SmartStream Designer.

For example, the following is a business card template that has 6 VDP channels:



For the above example, there might be the following data file (as a csv file):

```
Title,Name,Last Name,Address1,Address2,City,Zip,Country,Phone,Email
Ms,Marilyn,Jones,Database Administrator,5 Graceland Point,Brody,61727-338,Ukraine,380-(372)188-7182,mj@mjrdata.com
Mrs,Ryan,Pierce,Pharmacist,6 Crescent Oaks Plaza,Toliara,50181-003,Madagascar,261-(492)865-3125,rpi@megapharm.com
Rev,James,Henderson,Structural Analysis Engineer,4495 Graedel Drive,Karafao,40028-512,Indonesia,131(342)618-9274,jhenderson@skywayeng.org
Rev,Benjamin,Parker,Accountant IV,2675 Beilfuss Street,Liujia,64735-020,China,86-(598)904-6153,benparker@beckwayhawthorn.com
Mrs,Earl,Cooper,Assistant Manager,151 Tomscot Lane,Lutoryz,0264-7885,Poland,46-(232)389-6524,ecooper46@andj.com
Mrs,Carlos,Martin,Account Representative II,4617 North Road,Tarbagatay,0378-5525,Russia,7-(780)164-9029,cmartin5@jollytimes.com
```

Composer binds the data to the PDF to produce the following:



You can repeat the process, each time with different data file inputs and get different results, with different data binding each time.

Using the PrintOS Composer Switch app streamlines the process by automating most of the actions necessary.

## Composition features

The composition supports:

- Variable text.
- Variable images based on the image file name within the database.
- Variable barcodes based on text in the data file (Barcode Studio and IDAutomation).
- Variable map images based on the address text (locr maps).
- Variable auto-generated images using HP Mosaic and Collage.
- Image or Text rules to generate variable data.

In addition to VDP, Composer also enables applying imposition with records distribution.

## HPD graphic template

Graphic templates can be created using the HP SmartStream Designer plugin, available for both InDesign and Illustrator.

Using Designer, you can create an HPD file containing a template with the required assets packed inside.

## Data file

The data file containing the variable data is a delimiter-separated values file. The Composer service supports CSV, or TXT with tab-delimiters. The data file can be created by any operating system with any end-of-line characters.

The easiest way to create a data file would be with Microsoft Excel, although any tool generating a delimiter-separated file can be used.

## PDF preset

Composer supports PDF presets file that apply custom settings to the output PDF file such as PDF compatibility and optimization.

A PDF preset file can be attached separately or be selected from a predefined list of preloaded preset.

---

 **NOTE:** The PDF preset should be compatible with the job processing type.

---

## Imposition template

Composer supports IMPP imposition template files. Such templates can be created by HP SmartStream Designer for InDesign.

The imposition template can be packed as part of the VDP template (HPD file) or by attaching it to composition processing separately.

Either way, when imposition is available, the Composer service applies the imposition to the generated PDF result per request.

---

 **NOTE:** Only record-distribution imposition templates are supported. Attempting to use page-distribution results in a system error.

---

## Assets library

As mentioned above, the VDP template can include variable images. In such cases, the data file should include references to the images by their filenames. The image files themselves need to be available when the Composer service creates the PDF.

You can supply the image files using one of following two options:

- Pack the images as part of the template file – HPD file.
- Zip the images and upload the ZIP file separately.

This option might be more convenient since it enables creating the HPD once and then processing it again with different images later.

## Records quota

HP PrintOS Composer allows processing of up to 10,000 records per month for free.

If the above quota is reached, jobs will fail with an error message saying that the quota was reached. The quota is reset once a month.

To check what your current records quota is, or if your records quota was reached and/or you want to increase your quota, see [Records quota in HP PrintOS Composer on page 55](#).

## Prerequisites

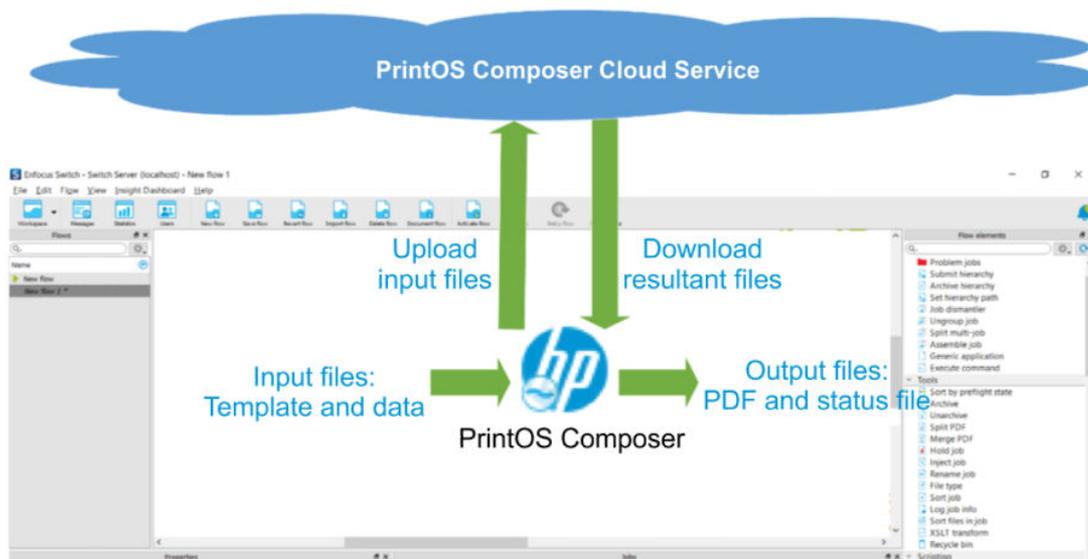
- Good, stable, and high-speed internet connection for fast file transfer to and from the Composer service cloud.
- Enfocus Switch software installed. Knowledge of how to use the software.

Switch documentation can be found at:

- Quick Start Guide: <https://www.enfocus.com/manuals/QuickStartGuide/SW/19.1/home.html#about.html>
- Reference Guide: <https://www.enfocus.com/manuals/UserGuide/SW/19.1/home.html#about.html>
- PC or Mac to run the Enfocus Switch software.
- Active account in HP PrintOS. PrintOS includes the Composer service.
- (optional) Adobe InDesign or Illustrator, with the HP SmartStream Designer plugin.

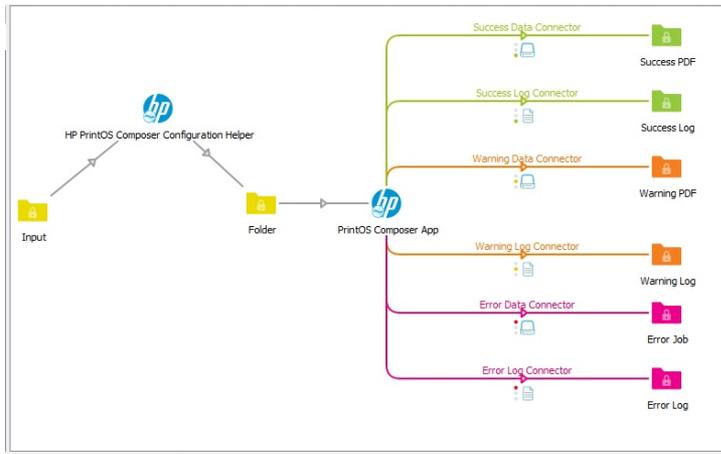
## Workflow

The PrintOS Composer app receives input files, uploads the files to the PrintOS Composer cloud service for processing, and when done, downloads the resultant PDF to its output destination.

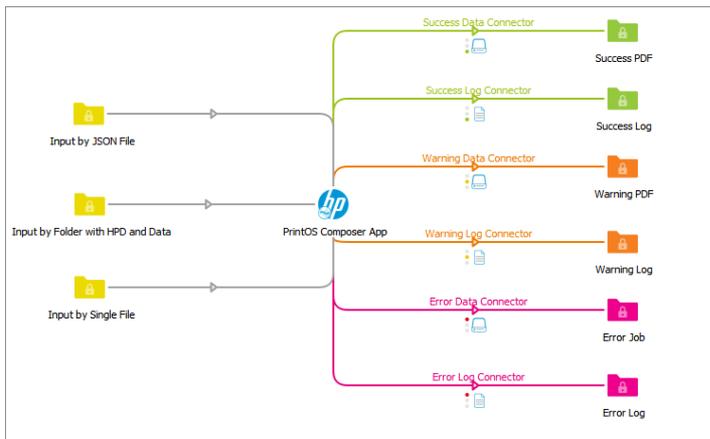


There are two possible workflows. Later chapters explain how to create the relevant folders and how to submit jobs.

- Using the PrintOS Composer Configuration Helper app to configure the input properties in an easy fashion.



- Input to the PrintOS Composer app can be a direct Switch folder with properties set with private data.

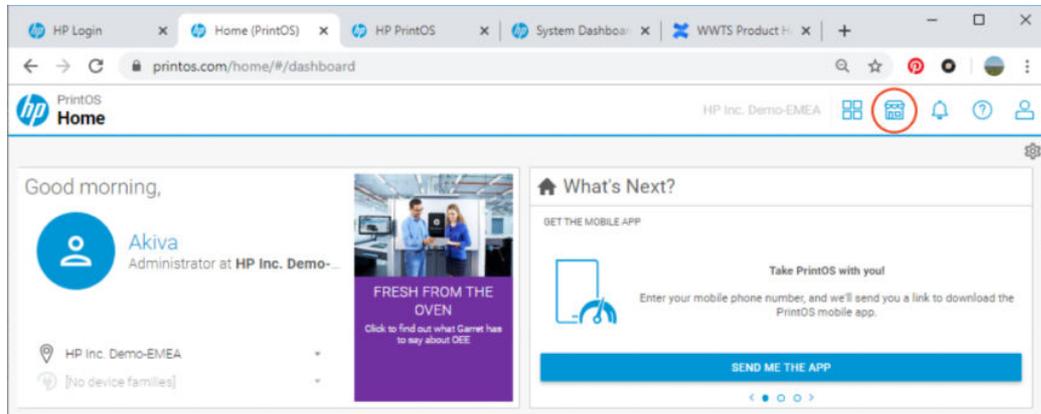




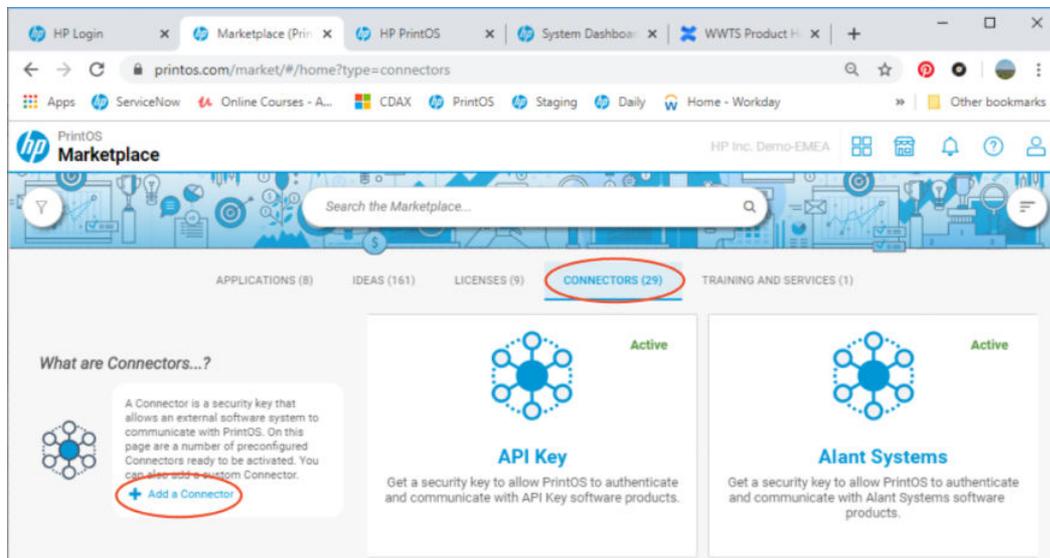
## 2 Installation and configuration

### Acquiring the HP PrintOS Composer key and secret

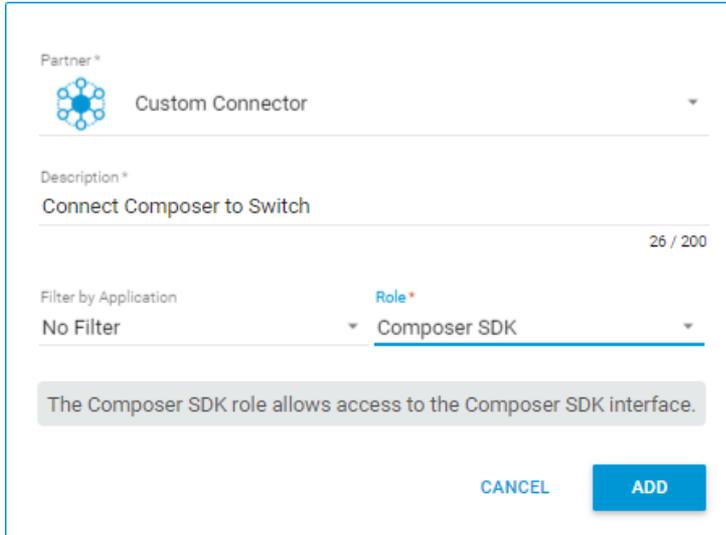
1. Log into your PrintOS account.
2. At the top right icon bar, click the **Marketplace** icon.



3. Select the **CONNECTORS** tab and click **Add a Connector**.



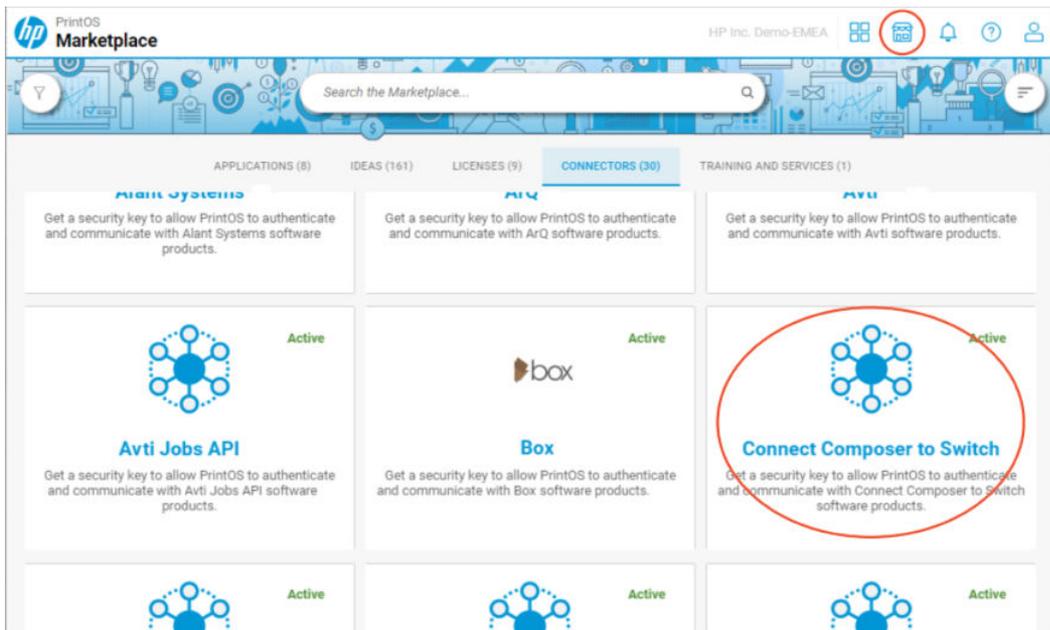
4. In the *Custom Connector* popup window that appears, do the following:



The screenshot shows a configuration window for a custom connector. It has the following fields and options:

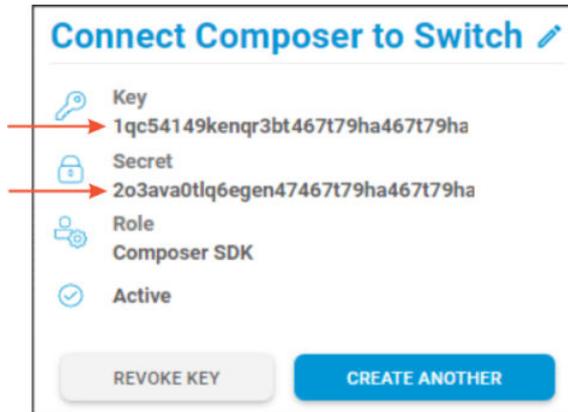
- Partner \***: A dropdown menu with "Custom Connector" selected.
- Description \***: A text input field containing "Connect Composer to Switch" with a character count of "26 / 200".
- Filter by Application**: A dropdown menu with "No Filter" selected.
- Role \***: A dropdown menu with "Composer SDK" selected.
- A grey informational box below the Role dropdown: "The Composer SDK role allows access to the Composer SDK interface."
- At the bottom right, there are two buttons: "CANCEL" and "ADD".

- Leave the *Partner* dropdown as **Custom Connector**.
  - In the *Description* field, enter a description (such as **Connect Composer to Switch**).
  - Leave the *Filter by Application* dropdown as **No Filter**.
  - From the *Role* dropdown list, select **Composer SDK**.
  - Click **ADD**.
5. A new *Connector* tile is created. Click the **Marketplace** icon as you did in step 2 above. You might need to scroll down until the new tile appears. In our example, the tile name is the description (*Connect Composer to Switch*) you gave to the *Description* field in the previous step.



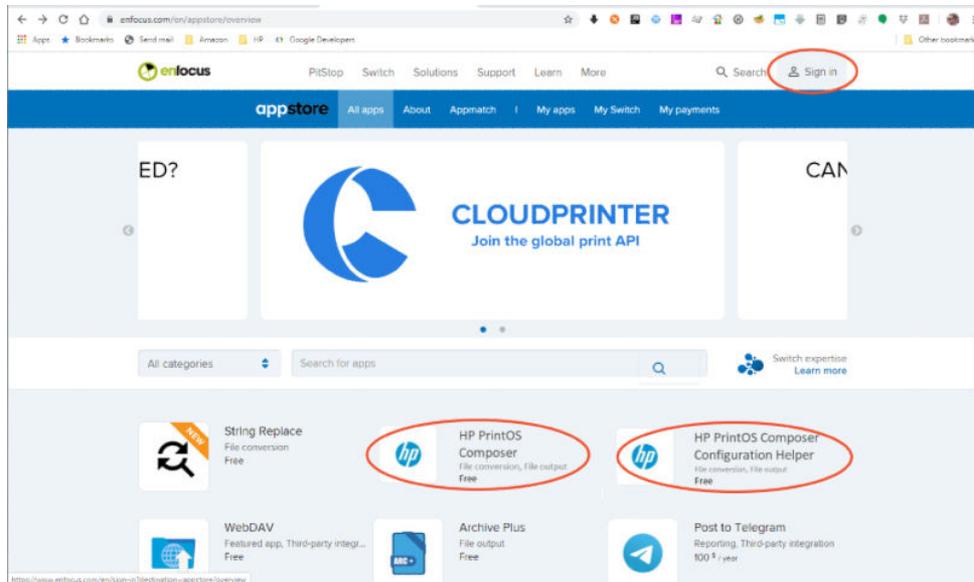
6. Click the tile.

7. In the popup window that appears, select and copy the *Key* and *Secret* strings, and save them to a text file for later use.



## Installing the HP PrintOS Composer and Helper apps into Enfocus Switch

1. In a web browser, go to <https://www.enfocus.com/en/appstore/overview>



2. In the top *enfocus* menu bar, click **Sign in**, enter your credentials in the *Sign in* window that appears, and then click **Sign In**.

**enfocus**

## Sign in

If you want to continue, you need to sign in with your Enfocus ID.  
No Enfocus ID yet? [Get it here!](#)

Want to [learn more about Enfocus ID?](#)

Email address

john.doe@gmail.com

Password [Forgot Password?](#)

.....

**Sign In**

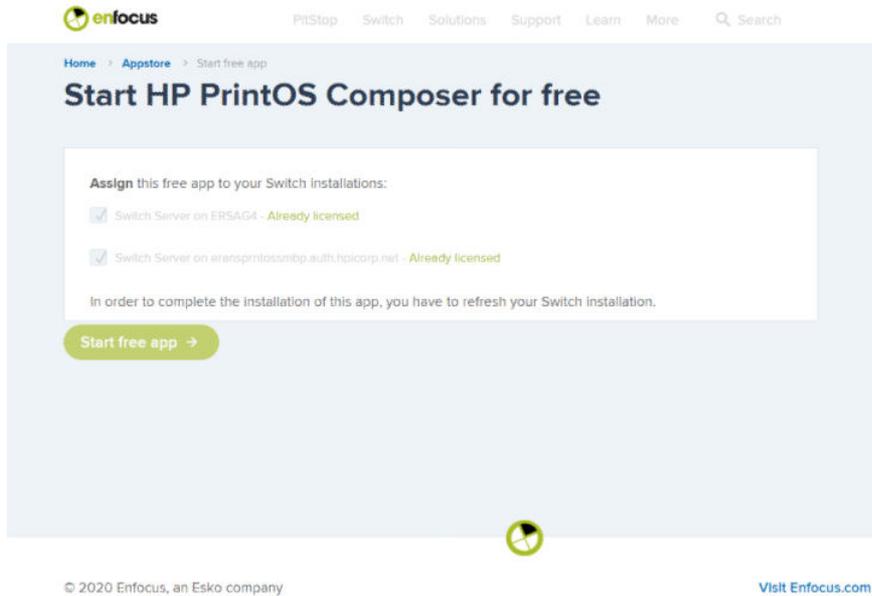
No Enfocus ID yet? [Get an Enfocus ID.](#)

3. The *Enfocus Switch Appstore* screen reappears, with you signed in. Click **HP PrintOS Composer**.

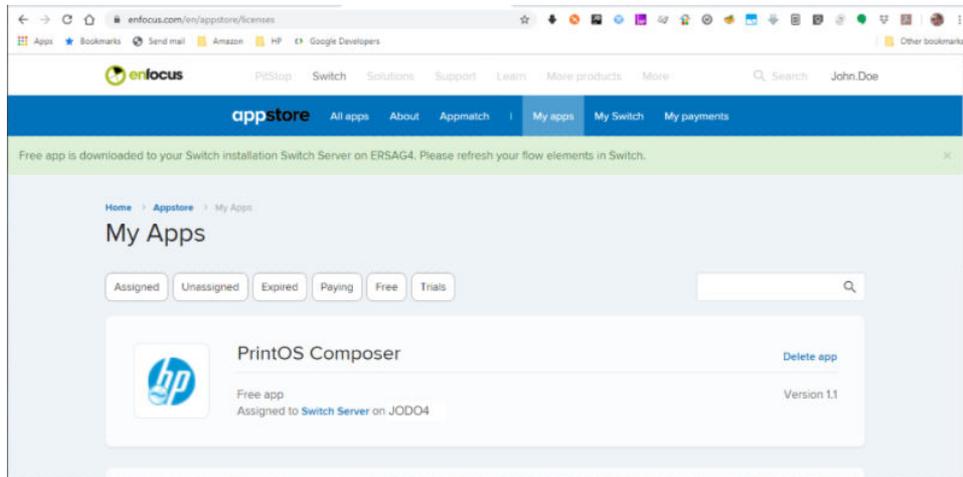
4. In the *HP PrintOS Composer* screen, click **Get It now**.

The screenshot shows the HP PrintOS Composer app page in the Enfocus Appstore. The page features the Enfocus logo and navigation links (PRISep, Switch, Solutions, Support, Learn, More) at the top. Below the navigation is the 'appstore' header with links for 'All apps', 'About', 'Appmatch', 'My apps', 'My Switch', and 'My payments'. The main content area displays the app's name, 'HP PrintOS Composer', with '0 reviews' and an 'Add review' link. A 'Download for free' section includes a prominent green 'Get It now' button. To the left, there is a sidebar with the HP logo, 'File conversion' and 'File output' categories, and an 'App creator' section for 'HP' with 'Support' options like 'Send an email' and 'Online support'. The main text describes the app's function: automating Variable Data Printing (VDP) workflows by converting VDP templates to ready-to-print PDFs. It lists several benefits, such as a completely automated VDP process, up to 50x faster PDF creation, compatibility with various HP VDP templates, and the ability to create millions of records. A note at the bottom states that HP PrintOS credentials are required for use. At the bottom of the page, there are three images: a printer, a flowchart diagram, and a collection of printed beverage labels.

5. Select your server and then click **Start free app**.



The *My Apps* screen appears, displaying *PrintOS Composer* as an app that was downloaded to your Switch software. This screen is for information only and nothing needs to be done in this screen.



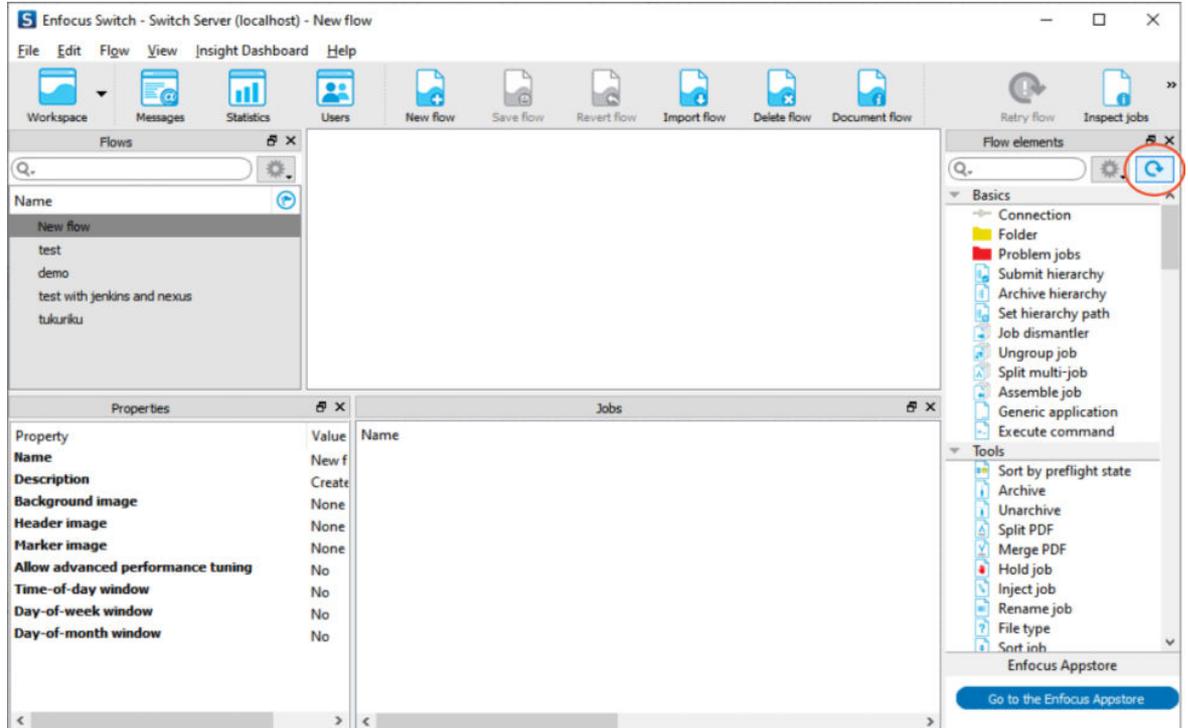
6. In the *enfocus* menu bar, click **Switch** and select **Appstore**.
7. In the *Enfocus Switch Appstore* screen that reappears, click **HP PrintOS Composer Configuration Helper**.
8. In the *HP PrintOS Composer Configuration Helper* screen, click **Get It now**.
9. Select your server and then click **Start free app**.

The *My Apps* screen appears, displaying *PrintOS Composer Configuration Helper* as an app that was downloaded to your Switch software. This screen is for information only and nothing needs to be done in this screen.

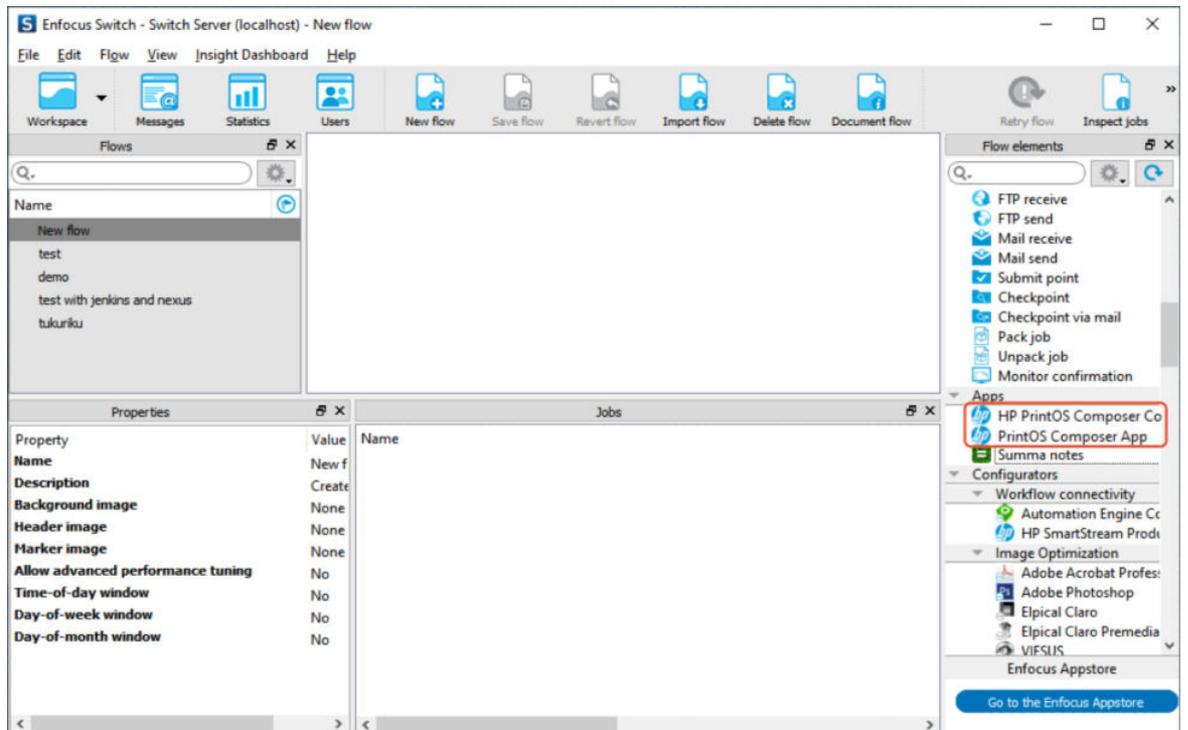
10. Open Switch by double-clicking its icon.



11. Click the **Refresh apps** icon at the top right.

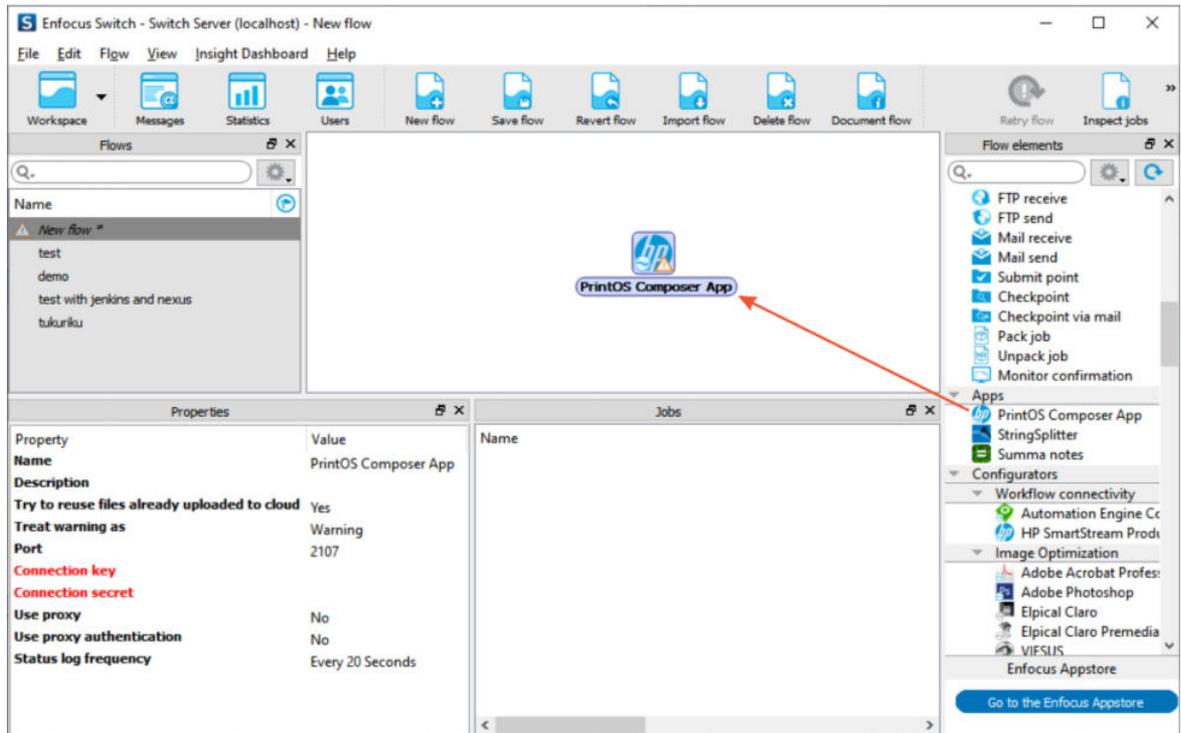


*PrintOS Composer app and HP PrintOS Composer Configuration Helper are added to the Flow elements > Apps pane at the right.*



12. Click and drag the *PrintOS Composer app* from the *Apps* pane to the canvas.

 **NOTE:** The *PrintOS Composer app* that appears in the canvas is selected. If it is not selected, select it in order to be able to set its properties in the *Properties* pane at the bottom left.



## Configuring the HP PrintOS Composer app

In the *Properties* pane that was open in step 12 above, set the values of the properties as described below.

| Property                                     | Value                |
|--|----------------------|
| Name   | PrintOS Composer App |
| Description                                  |                      |
| Try to reuse files already uploaded to cloud | Yes                  |
| Treat warning as                             | Warning              |
| Port   | 2107                 |
| Connection key                               |                      |
| Connection secret                            |                      |
| Use proxy                                    | No                   |
| Use proxy authentication                     | No                   |
| Status log frequency                         | Every 20 Seconds     |

For each property, click its value in the *Value* column and change it if necessary, as follows:

- *Name* – Enter a relevant name, such as **PrintOS Composer**.
- *Description* – Enter a description (optional).

- *Try to reuse files already uploaded to cloud* – Select **Yes** if you want to be able to reuse an input file in many jobs that might use different data files. The input file is already in the cloud and does not need to be uploaded again for each job.

Select **No** if you do not want to activate this option.

- *Treat warning as* –

The Composer app creates output with 3 different statuses:

- *Warning* – A process that ends in this status is sent to the *Warning* folder. The process might have completed the job with (for example) missing fonts, missing assets, or other possible results.
- *Success* – A process that ends in this status is sent to the *Success* folder.
- *Error* – A process that ends in this status is sent to the *Error* folder.

You can override the behavior of a job that ends with a *Warning* status but selecting either **Success** (to have the job sent to the *Success* folder) or to **Error** (to have the job sent to the *Error* folder).

- *Port* – The PrintOS Composer app uses a local service in the same computer that runs Switch. For this local service to work, it requires a free socket port. The Composer app defines a default port. However, if the default port is not free, you must set this field to an alternative free port.
- *Connection key and Connection secret* – Copy/paste the key and secret that you saved in step [7](#) at the end of [Acquiring the HP PrintOS Composer key and secret on page 7](#).
- *Use proxy and Use proxy authentication* –

Often, an organization’s network is situated behind a proxy server. In this case, proxy details might be necessary, so set *Use proxy* to **Yes**. More fields appear. Get the proxy details from your network administrator and enter them into the relevant *Proxy* fields. See the example below.

|                     |                |
|---------------------|----------------|
| <b>Use proxy</b>    | Yes            |
| <i>Proxy schema</i> | http           |
| <i>Proxy host</i>   | proxy.corp.com |
| <i>Proxy port</i>   | 8080           |

Sometimes, the proxy server might require authentication with a username and password. In this case, set *Use proxy authentication* to **Yes**, and fill in the username and password. See the example below.

|                                 |         |
|---------------------------------|---------|
| <b>Use proxy authentication</b> | Yes     |
| <i>Proxy username</i>           | my.user |
| <i>Proxy password</i>           | *****   |

If none of the above is relevant to your network, set both fields to **No**.

- *Status log frequency* – The PrintOS Composer app sends job progress and status information to the Switch log. With this field, you can define the frequency that the app reports progress and status to the log for each of the jobs.

|                             |   |
|-----------------------------|---|
| <b>Status log frequency</b> | <div style="border: 1px solid black; padding: 2px;"> <div style="background-color: #e0e0e0; padding: 2px;">Every 20 Seconds</div> <div style="background-color: #0070c0; color: white; padding: 2px;">Every 20 Seconds</div> <div style="padding: 2px;">Every 1 Minute</div> <div style="padding: 2px;">Every 15 Minutes</div> <div style="padding: 2px;">Every 30 Minutes</div> <div style="padding: 2px;">Every 1 Hour</div> </div> |
|-----------------------------|---|



---

## 3 Creating a flow for use with PrintOS Composer

A flow consists of input and output folders. The procedures below describe how to create output folders and input folders.

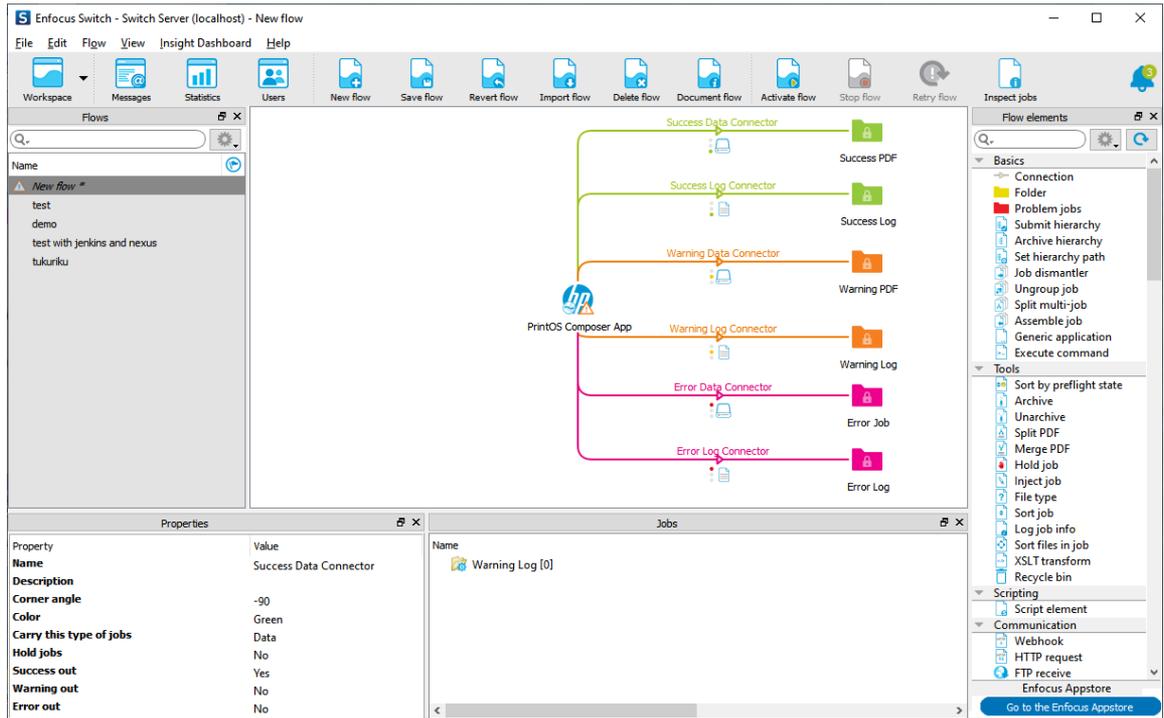
### Creating output folders

PrintOS Composer app requires the following 6 output folders for PDFs that are processed by the Composer cloud service and for their respective log files.

- **Success PDF** – For successfully processed PDFs.
- **Success Log** – Log file in JSON format (see [Examining the results of a job on page 43](#)). It includes results received from the Composer cloud service. The original job (such as JSON single file or folder) is also put into this folder.
- **Warning PDF** – For PDFs that were successfully processed but with warnings. If the *Treat warning as* field in [Configuring the HP PrintOS Composer app on page 14](#) was set to *Success* or *Error*, the PDFs are sent to the relevant folder.
- **Warning Log** – Log file in JSON format (see [Examining the results of a job on page 43](#)). It includes results received from the Composer cloud service. The original job (such as JSON single file or folder) is also put into this folder.
- **Error Job** – For jobs with errors that prevented successful processing. The unprocessed job is copied from the input folder to this folder.
- **Error Log** – Log file in JSON format (see [Examining the results of a job on page 43](#)). It includes results received from the Composer cloud service.

Create output folders as follows:

1. Create the following output folders and configure them as described in the next step.



2. Select the connectors one at a time and set the values in their respective *Properties* pane, as shown below.

Figure 3-1 Success Data Connector

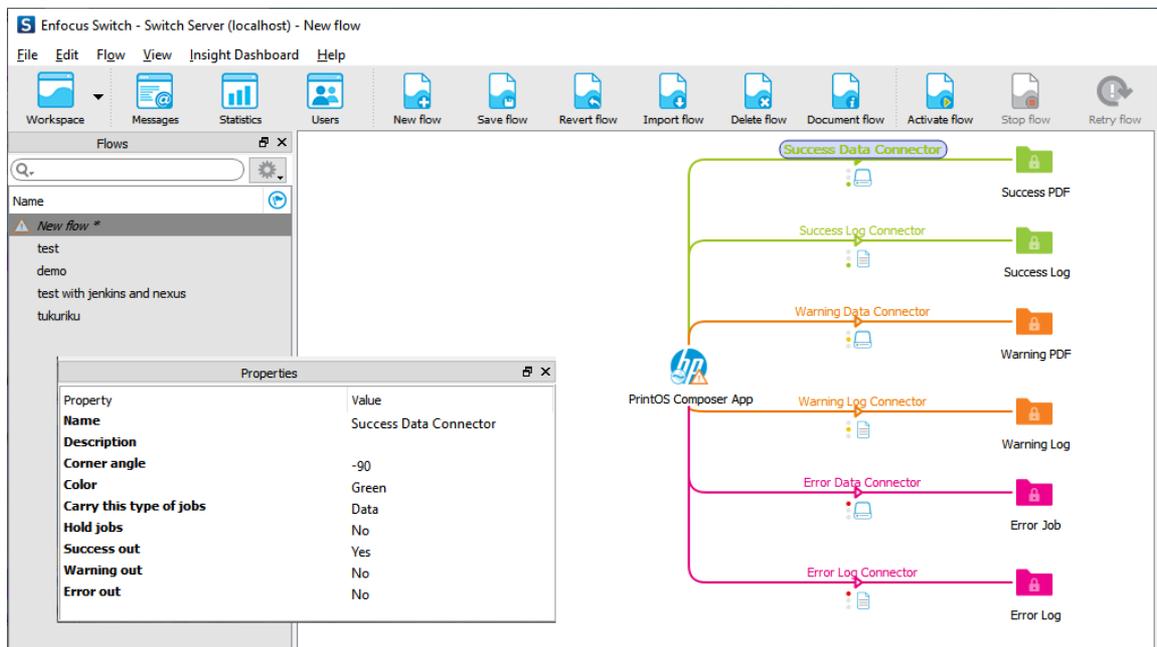


Figure 3-2 Success Log Connector

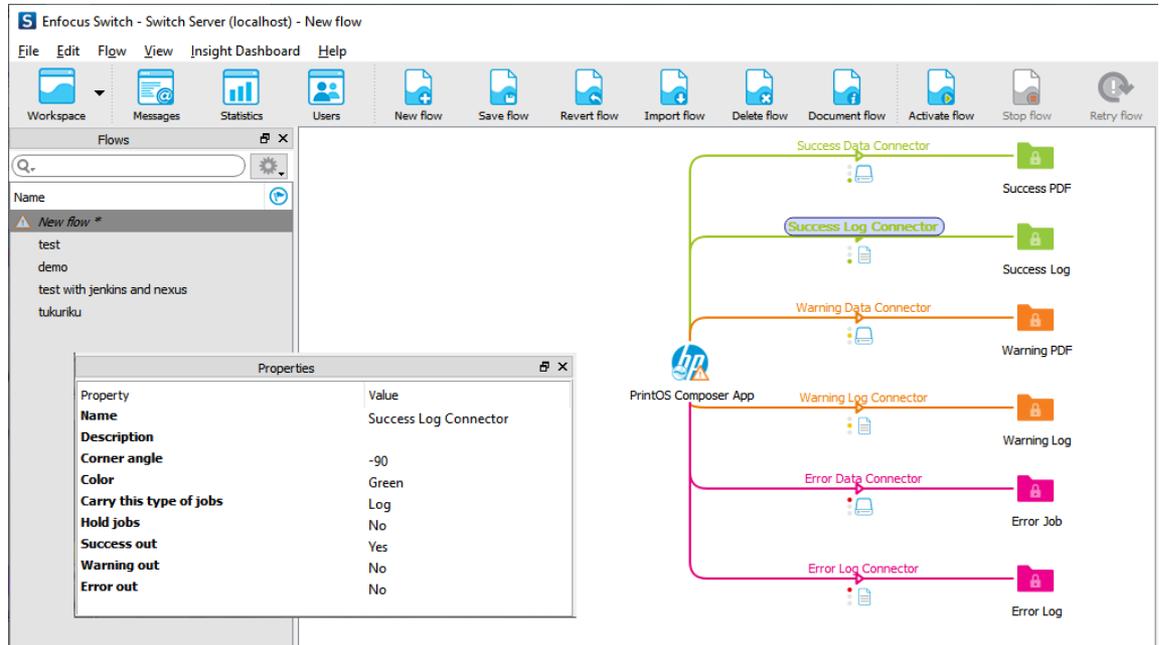


Figure 3-3 Warning Data Connector

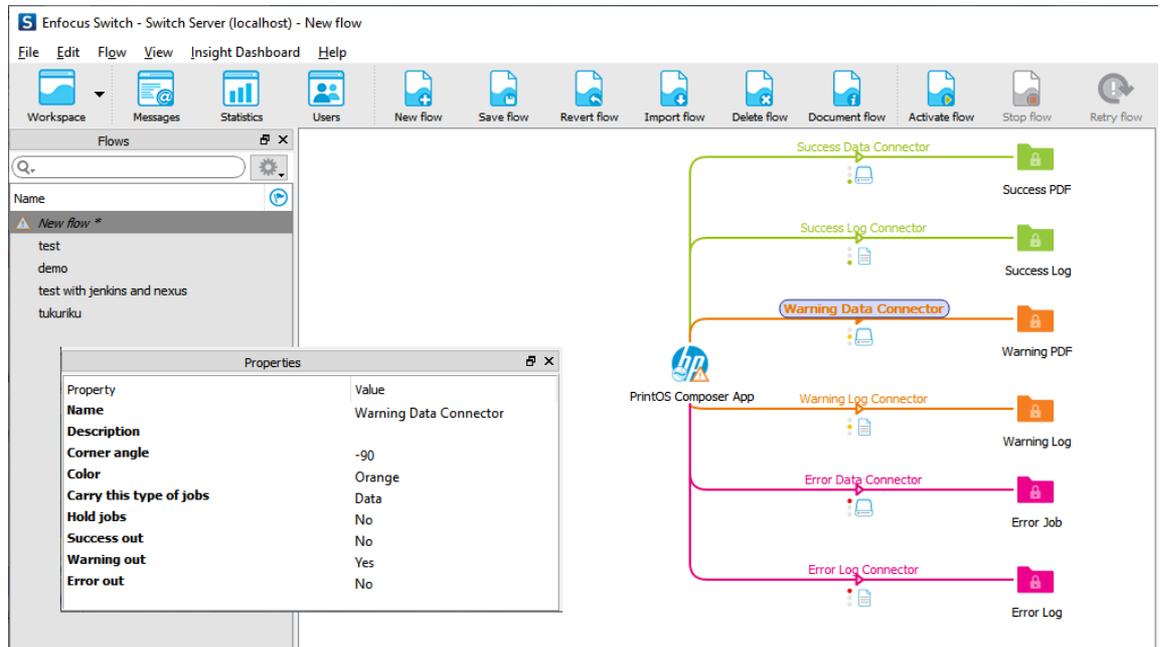


Figure 3-4 Warning Log Connector

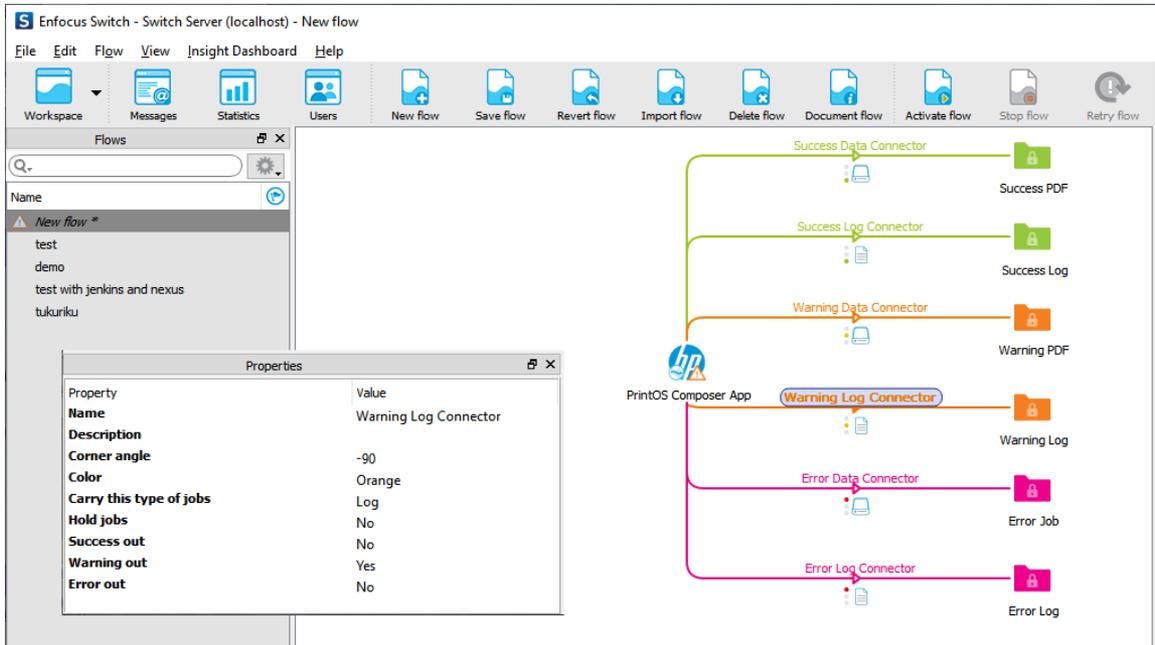


Figure 3-5 Error Data Connector

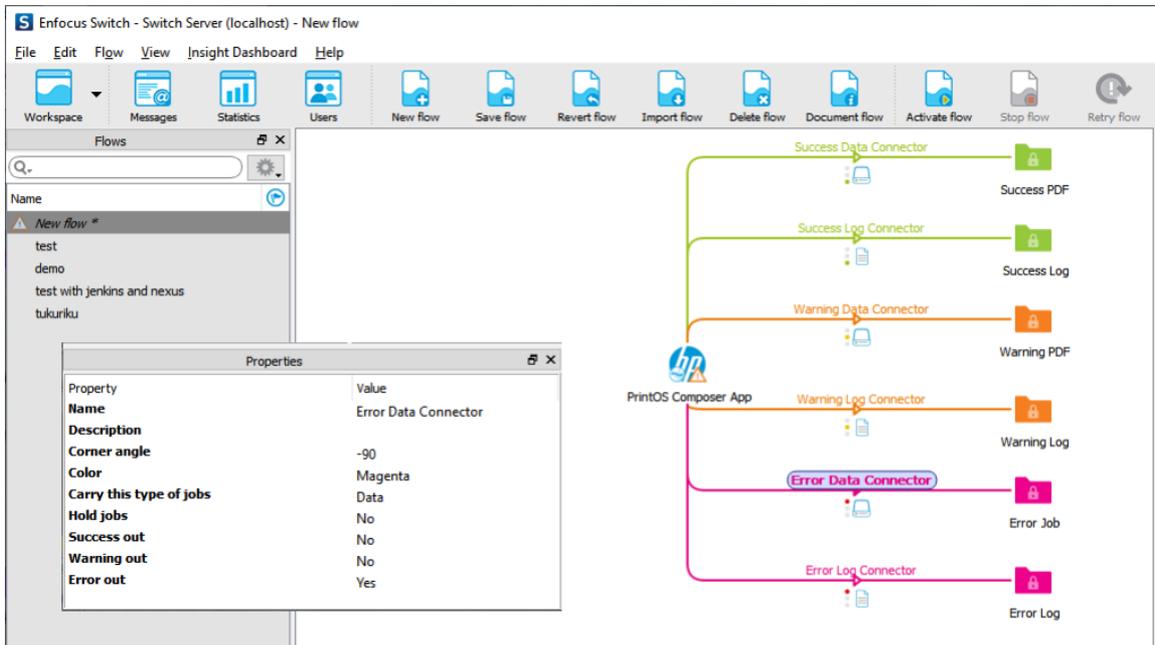


Figure 3-6 Error Log Connector

The screenshot displays the Enfocus Switch software interface. The main workspace shows a workflow for the 'PrintOS Composer App' with several connectors leading to different output folders:

- Success Data Connector** (green) connects to the **Success PDF** folder.
- Success Log Connector** (green) connects to the **Success Log** folder.
- Warning Data Connector** (orange) connects to the **Warning PDF** folder.
- Warning Log Connector** (orange) connects to the **Warning Log** folder.
- Error Data Connector** (magenta) connects to the **Error Job** folder.
- Error Log Connector** (magenta) connects to the **Error Log** folder.

A 'Properties' window is open for the 'Error Log Connector', showing the following details:

| Property                       | Value               |
|--------------------------------|---------------------|
| <b>Name</b>                    | Error Log Connector |
| <b>Description</b>             |                     |
| <b>Corner angle</b>            | -90                 |
| <b>Color</b>                   | Magenta             |
| <b>Carry this type of jobs</b> | Log                 |
| <b>Hold jobs</b>               | No                  |
| <b>Success out</b>             | No                  |
| <b>Warning out</b>             | No                  |
| <b>Error out</b>               | Yes                 |

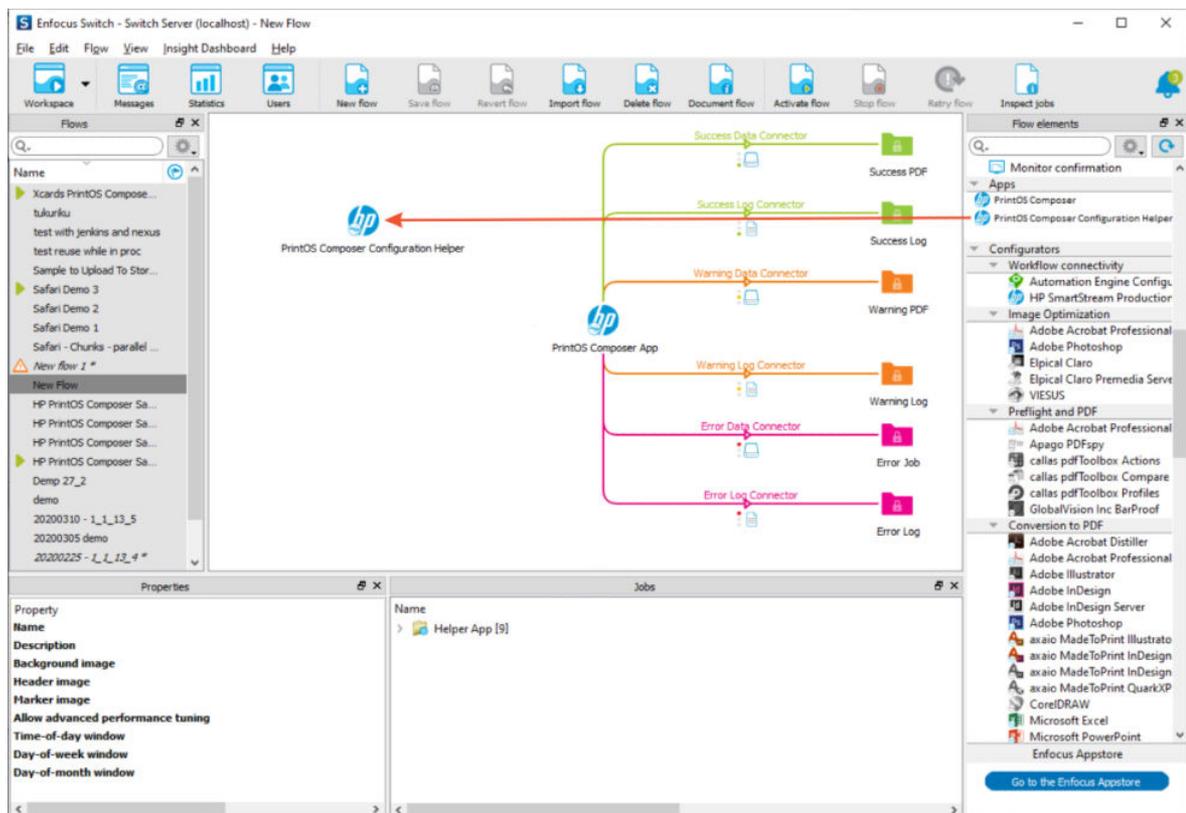
## Creating flow inputs

- To create inputs using the Helper workflow, see below ([Creating flow inputs using the PrintOS Composer Configuration Helper app on page 22](#)).
- To create inputs using the direct folder workflow, proceed to [Creating flow inputs using the direct folder workflow on page 26](#).

## Creating flow inputs using the PrintOS Composer Configuration Helper app

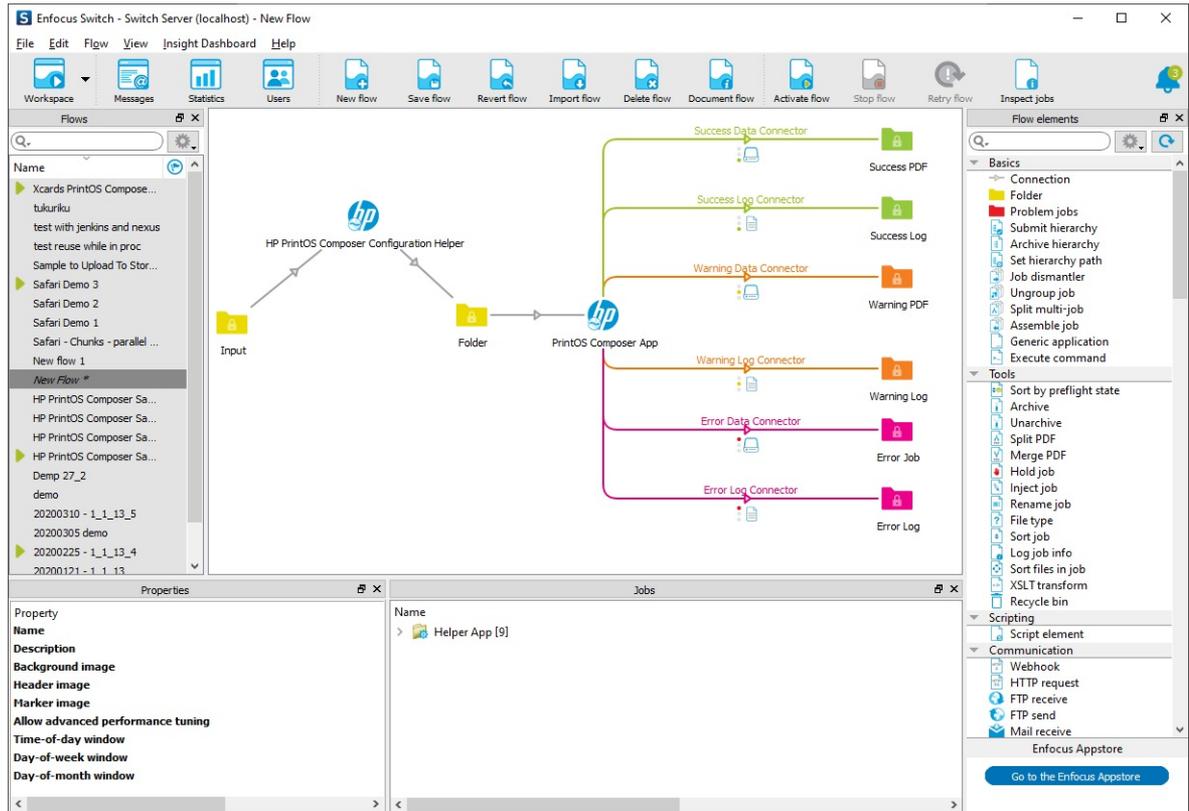
### Inserting the Helper app into the canvas

Click and drag the *PrintOS Composer Configuration Helper app* from the *Apps* pane to the canvas.



## Creating input folders

Create the following input folders and configure them as described below.



## Configuring the Helper properties

In the canvas, select the *PrintOS Composer Configuration Helper app*.

The *Properties* pane at the bottom left contains the following fields:

| Property   | Value                                    |
|--|--|
| <b>Name</b>  | HP PrintOS Composer Configuration Helper |
| <b>Description</b>                                       |  |
| <b>Fixed VDP template file (optional - hpd file)</b>     |  |
| <b>Fixed records data file (optional - csv/txt file)</b> |  |
| <b>Data file delimiter</b>                               | Comma                                    |
| <b>Engine mode (optional)</b>                            | Prefer fast                              |
| <b>Choose fast PDF preset (optional)</b>                 | Default settings                         |
| <b>Choose rich PDF preset (optional)</b>                 | Custom                                   |
| <i>Select fixed rich PDF preset</i>                      |  |
| <b>Fixed assets library file (optional)</b>              |  |
| <b>Apply imposition</b>                                  | Yes                                      |
| <i>Fixed imposition template</i>                         | None                                     |
| <b>Skip records</b>                                      | 1  |
| <b>Process jobs in chunks</b>                            | No                                       |
| <b>Constant output file name</b>                         |  |

- *Fixed VDP template file (optional - hpd file)* – This is the HPD file that is the VDP template file that is used.
- *Fixed records data file (optional - csv/txt file)* – This is the data file, which can be a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters.
- *Data file delimiter* – **comma, semicolon, or tab.**

This indicates the delimiter used in the data file, which can be a TXT or CSV file.

- *Engine mode (optional)* – **Template default**, **Prefer fast**, or **Prefer rich**.
- *Choose fast PDF preset (optional)* – **Default settings**, **Smallest file size**, or **Custom**. If you select *Custom*, the **Select fixed fast PDF preset file** field appears, where you can select the relevant *fpp* file.
- *Choose rich PDF preset (optional)* – **High quality print**, **PDFX1a 2001**, **PDFX3 2002**, **PDFX4 2008**, **Press quality**, **Smallest file size**, or **Custom**. If you select *Custom*, the **Select fixed rich PDF preset file** field appears, where you can select the relevant *joboptions* file.
- *Fixed assets library file (optional - ZIP file)* – This is the assets library file packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file.
- *Apply imposition* – **Yes** or **No**.

If this is set to *Yes* and the imposition template file is available, then the resultant PDF will be imposed.

The following are the 3 ways the imposition file can be available:

- As a dynamic input file.
- As a fixed file by setting the *Fixed imposition template file* to a specific file.
- As an embedded file packed inside the HPD (if the HPD template was created by Designer for InDesign).
- *Fixed imposition template file (optional - impp file)* – If *Apply imposition* is set to *Yes*, this file can be used for the fixed imposition template.
- *Skip records* – A number (*yy*) greater than or equal to 0. The process skips the first *yy* records of the data file. For example, if the first record of the data file contains field names (that is, header fields) that should be skipped (ignored), the number should be 1.
- *Process jobs in chunks* – **Yes** or **No**.

If extensive processing is expected or the data file is large, processing in chunks can be considered. Processing in chunks splits the processing into smaller pieces and processes them in parallel. Parallel chunk processing enables faster PDF results for big jobs. Additionally, processing in chunks can be beneficial in cases where big jobs reach the system threshold (such as memory or disk) by processing smaller chunks of the data file, thereby consuming fewer computing resources.

To enable processing in chunks, set *Process jobs in chunks* to **Yes**. Two additional properties are then displayed:

- *Number of chunks* – From **1** to **100**
- *Output format* –
  - *Merge chunks to single PDF file* – When all the chunks are done with their processing, merge them all into a single PDF.
  - *Output ZIP file containing PDF chunks* – Leave each chunk as an individual PDF, with all the PDFs being packed into one ZIP file.
- *Constant output file name (without extension - optional)* – This is the name of the PDF (or ZIP) that is sent to the output folder. If this parameter is not set, the app creates a name for the PDF (or ZIP) that is the name of the HPD and the data file.

There are two type of inputs that can be used: Input files can be fixed by setting the properties to fixed paths or they can be set and used as dynamic input files.

Each of the 6 *Fixed* properties (*Fixed VDP template*, *Fixed records data file*, *Fixed assets library file*, *Fixed imposition template file*, *Fixed fast pdf preset file*, *Fixed rich pdf preset file*) can be set as a fixed input by setting it to a specific file or as a dynamic input by setting it to *None*. At least one of them should be left as *None*.

- The fixed inputs reference the same files for all the jobs being processed.
- The dynamic input files are those that are dropped into the input folder and vary per job.

In the following example, the VDP template file is fixed, pointing to the same file for all jobs, that is, *c:\jobs\myVdpTemplate.hpd*. The other files can be received dynamically as input jobs.

The screenshot displays the Enfocus Switch interface for configuring a workflow. The main workspace shows a flow starting from an 'Input' folder, passing through a 'Folder' to the 'PrintOS Composer App'. From there, the flow branches into six parallel paths, each ending with a connector and a corresponding output file:

- Success Data Connector → Success PDF
- Success Log Connector → Success Log
- Warning Data Connector → Warning PDF
- Warning Log Connector → Warning Log
- Error Data Connector → Error Job
- Error Log Connector → Error Log

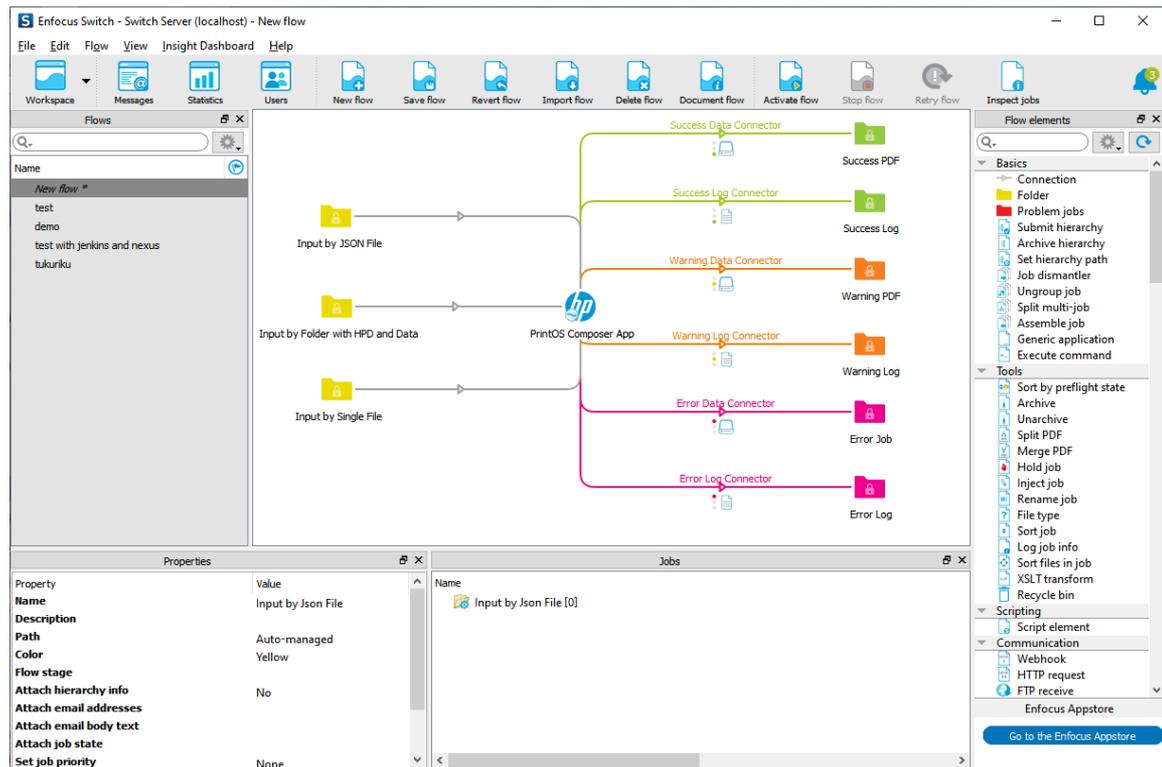
The Properties panel at the bottom left lists the following configuration details:

| Property                               | Value  |
|--|--|
| <b>Name</b>                            | HP PrintOS Composer Configuration Helper                                     |
| <b>Description</b>                     |  |
| <b>Script package</b>                  | C:/Git/printos-composer-switch/HP PrintOS Composer Configuration App.sscript |
| <b>Fixed VDP template file (o...</b>   |  |
| <b>Fixed records data file (op...</b>  |  |
| <b>Data file delimiter</b>             | Comma  |
| <b>Engine mode (optional)</b>          | Prefer fast  |
| <b>Choose fast PDF preset (o...</b>    | Default settings   |
| <b>Choose rich PDF preset (o...</b>    | Custom   |
| <b>Select fixed rich PDF pr...</b>     |  |
| <b>Fixed assets library file (o...</b> |  |
| <b>Apply imposition</b>                | Yes  |
| <b>Fixed imposition templ...</b>       | None   |
| <b>Skip records</b>                    | 1  |
| <b>Process jobs in chunks</b>          | No   |
| <b>Constant output file name ...</b>   |  |

After you have created and configured the input folders, proceed to [Submitting jobs using the Helper workflow on page 33](#).

## Creating flow inputs using the direct folder workflow

Create the following input folders and configure them as described in the sections that follow.



Configure the input folders by selecting them one at a time and setting the values in their respective *Properties* pane, as described below.

### Input by JSON File

Besides changing the name of the folder, there are no changes to the default *Properties*.

Proceed to [Submitting jobs using the direct folder workflow on page 36](#).

## Input by Folder with HPD and Data

In the *Properties* pane, do the following:

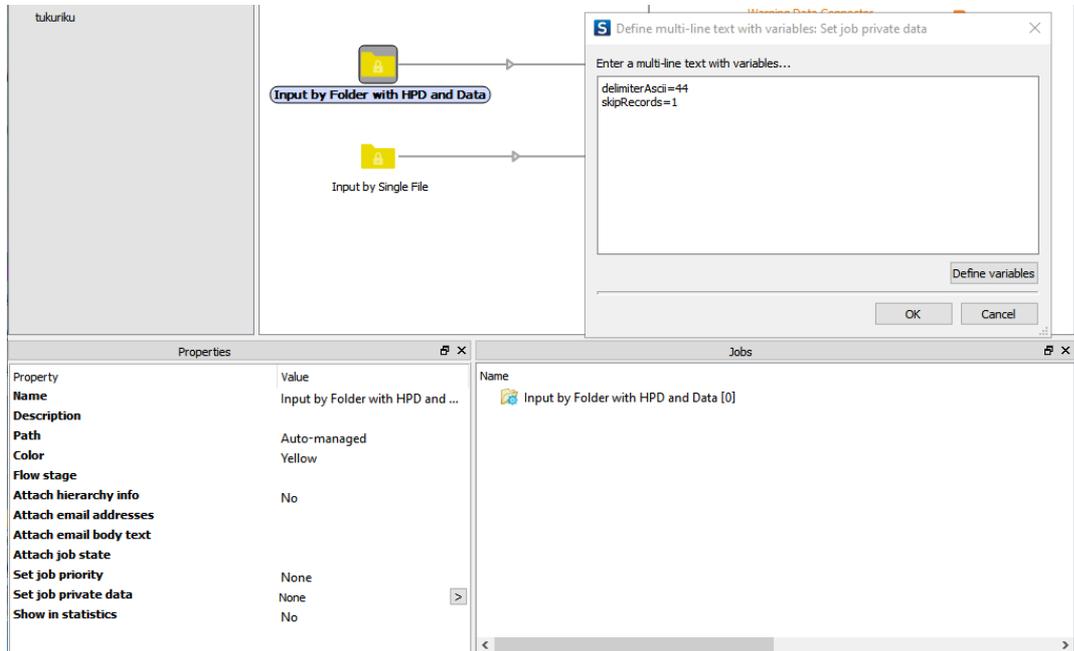
1. Change the *Value* of the *Name* property.
2. For the *Set job private data* property, click the right arrow button that appeared and select **Define multi-text with variables**.

The screenshot shows a flow configuration interface. At the top, a flow diagram features a yellow folder icon labeled 'Input by Folder with HPD and Data' and a yellow folder icon labeled 'Input by Single File'. Both point to a central 'PrintOS Composer App' icon. From this app, three connectors lead to output folders: 'Warning Log Connector' (orange) to 'Warning PDF', 'Error Data Connector' (pink) to 'Error Job', and 'Error Log Connector' (pink) to 'Error Log'. Below the diagram are two panes: 'Properties' and 'Jobs'. The 'Properties' pane lists various settings, with 'Set job private data' set to a dropdown menu showing 'None' and 'Define multi-line text with variables'. The 'Jobs' pane shows the 'Name' property set to 'Input by Folder with HPD and Data [0]'.

3. Click the right arrow button that appeared and select **Define multi- text with variables**.

This screenshot is identical to the one above, showing the same flow diagram and configuration panes. The 'Set job private data' dropdown menu in the 'Properties' pane is highlighted, indicating the selection of 'Define multi-line text with variables'.

4. The *Define multi-line text...* popup appears.



In the popup, type the following:

**vdpTemplateFile=c:/jobs/myVdpTemplate.hpd** This is the path of the HPD file, which is the VDP template file that is used. This property can be used if an HPD file is not in the job folder.

**dataFile=c:/jobs/myData.csv** This is the path of the data file. The data file can be a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters. This property can be used if a data file is not in the job folder.

**impositionTemplateFile=c:/jobs/impo.impp** (Optional) This is the path of the imposition template file. This property can be used if an HPD file is not in the job folder. This property can be used if an imposition template file is not in the job folder.

**assetsLibraryFile=c:/jobs/myAssets.zip** (Optional) This is the path of assets library file packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file. This property can be used if an HPD file is not in the job folder. This property can be used if an assets library file is not in the job folder.

**delimiterAscii=xx** where xx is the ASCII code for the separator that is used in the CSV or TXT data file. The commonly used separators and their ASCII code are comma (44) and semicolon (59) for CSV files, and tab (9) for TXT files.

**skipRecords=yy** (Optional) yy is a number greater than or equal to 1. The process skips the first yy records of the data file. For example, if the first record of the data file contains field names (that is, header fields) that should be skipped (ignored), type skipRecords=1

**outputFileName=myPdfName** (Optional) This is the name of the PDF (or ZIP) that is sent to the output folder. If this parameter is not set (that is, this line is deleted), the app creates a name for the PDF (or ZIP) that is the name of the HPD and the data file.

**applyImposition=true** or **false** (Optional) This variable can be *true* or *false*, indicating whether to apply imposition or not. If the parameter is not given or given as *true*, the system applies imposition if imposition exists (either embedded in the template or referenced by the *impositionTemplateFile* parameter). If the parameter is given as *false*, the system does not apply imposition.

**engineMode=Templatedefault** or **Preferfast** or **Prefer rich**. This is the preferred mode for the composition task.

**fastPdfPreset=xx** (Optional) where xx is the predefined fast PDF preset name (*Default settings, Smallest file size, or Custom*).

**fastPdfPresetFile=c:/jobs/myPreset.fpp** This is the path to the fast PDF preset file. This property can be used if a fast PDF preset file is not in the job folder and it is valid only if the value of *fastPdfPreset* is *Custom*.

**richPdfPreset=xx** (Optional) where xx is the predefined rich PDF preset name (*High quality print, PDFX1a 2001, PDFX3 2002, PDFX4 2008, Press quality, Smallest file size, or Custom*).

**richPdfPresetFile=c:/jobs/myPreset.joboptions** This is the path to the rich PDF preset file. This property can be used if a rich PDF preset file is not in the job folder and it is valid only if the value of *richPdfPreset* is *Custom*.

The following two optional properties can be added to the popup:

**numberOfChunkedProcessing** (Optional) This is the number of chunks that HP PrintOS processes in parallel, for faster processing. This property can be used if the input data file is large.

**chunkedProcessingMergeFormat** (Optional) This is the type of output that is produced when chunking: Either PDF (default if this property is not specified) whereby the chunked PDFs are concatenated into one PDF, or ZIP whereby all the chunked PDFs are zipped into one ZIP file.

5. Click **OK**.

After you have created and configured the input folders, proceed to [Submitting jobs using the direct folder workflow on page 36](#).

## Input by Single File

In the *Properties* pane, do the following:

1. Change the *Value* of the *Name* property.
2. For the *Set job private data* property, select its value **None**. The right arrow button appears.

The screenshot shows the PrintOS Composer App interface. The top part is a flow diagram with a yellow folder icon labeled 'Input by Folder with HPD and Data' and a yellow file icon labeled 'Input by Single File'. Both point to the 'PrintOS Composer App' (HP logo). From the app, three connectors lead to output components: 'Warning Log Connector' (orange) to 'Warning PDF', 'Warning Log', and 'Error Job'; 'Error Data Connector' (pink) to 'Error Job'; and 'Error Log Connector' (pink) to 'Error Log'. Below the flow diagram are two panes: 'Properties' and 'Jobs'. The 'Properties' pane shows the following table:

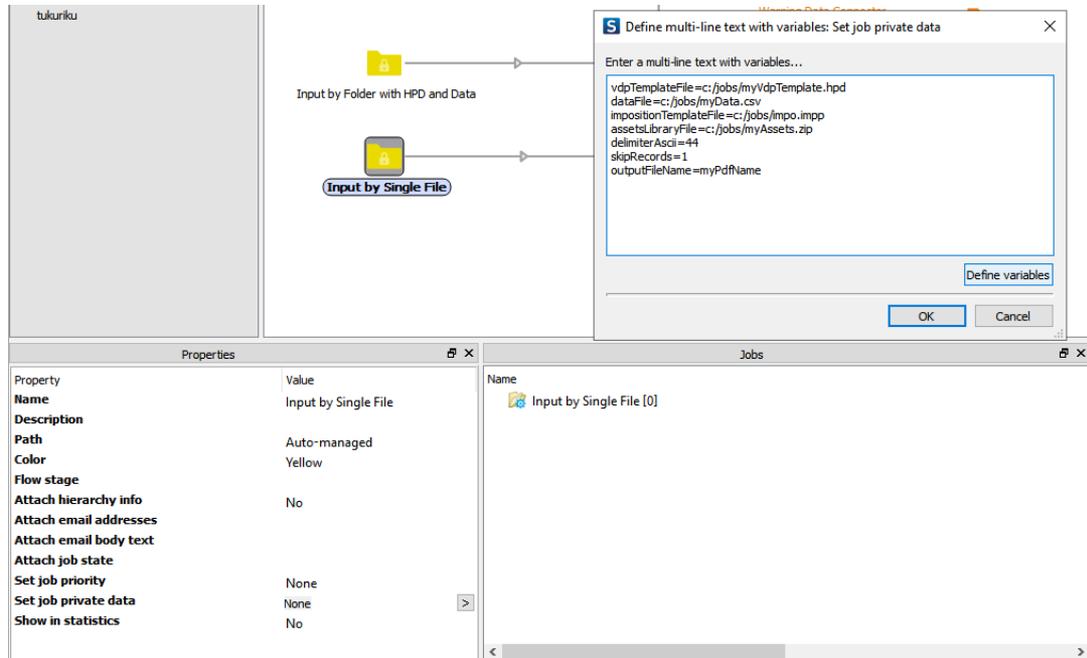
| Property               | Value                |
|------------------------|----------------------|
| Name                   | Input by Single File |
| Description            | Input by Single File |
| Path                   | Auto-managed         |
| Color                  | Yellow               |
| Flow stage             | Yellow               |
| Attach hierarchy info  | No                   |
| Attach email addresses | No                   |
| Attach email body text | No                   |
| Attach job state       | No                   |
| Set job priority       | None                 |
| Set job private data   | None                 |
| Show in statistics     | No                   |

The 'Jobs' pane shows the 'Name' property with the value 'Input by Single File [0]'.

3. Click the right arrow button that appeared and select **Define multi- text with variables**.

This screenshot is identical to the previous one, but the 'Set job private data' property in the 'Properties' pane has a dropdown menu open. The menu shows 'None' and 'Define multi-line text with variables', with the latter option highlighted in blue.

4. The *Define multi-line text...* popup appears.



In the popup, type the following:

**vdpTemplateFile=c:/jobs/myVdpTemplate.hpd** This is the path of the HPD file, which is the VDP template file that is used.

**dataFile=c:/jobs/myData.csv** This is the path of the data file. The data file can be a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters.

**impositionTemplateFile=c:/jobs/impo.impp** (Optional) This is the path of the imposition template file.

**assetsLibraryFile=c:/jobs/myAssets.zip** (Optional) This is the path of assets library file packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file.

**delimiterAscii=xx** where **xx** is the ASCII code for the separator that is used in the CSV or TXT data file. The commonly used separators and their ASCII code are comma (44) and semicolon (59) for CSV files, and tab (9) for TXT files.

**skipRecords=yy** (Optional) **yy** is a number greater than or equal to 1. The process skips the first **yy** records of the data file. For example, if the first record of the data file contains field names (that is, header fields) that should be skipped (ignored), type **skipRecords=1**

**outputFileName=myPdfName** (optional) This is the name of the PDF (or ZIP) that is sent to the output folder. If this parameter is not set (that is, this line is deleted), the app creates a name for the PDF (or ZIP) that is the name of the HPD and the data file.

**applyImposition=true** or **false** (Optional) This variable can be *true* or *false*, indicating whether to apply imposition or not. If the parameter is not given or given as *true*, the system applies imposition if imposition exists (either embedded in the template or referenced by the *impositionTemplateFile* parameter). If the parameter is given as *false*, the system does not apply imposition.

**engineMode=Templatedefault** or **Preferfast** or **Prefer rich**. This is the preferred mode for the composition task.

**fastPdfPreset=xx** (Optional) where xx is the predefined fast PDF preset name (*Default settings, Smallest file size, or Custom*).

**fastPdfPresetFile=c:/jobs/myPreset.fpp** This is the path to the fast PDF preset file. This property can be used if a fast PDF preset file is not in the job folder and it is valid only if the value of *fastPdfPreset* is *Custom*.

**richPdfPreset=xx** (Optional) where xx is the predefined rich PDF preset name (*High quality print, PDFX1a 2001, PDFX3 2002, PDFX4 2008, Press quality, Smallest file size, or Custom*).

**richPdfPresetFile=c:/jobs/myPreset.joboptions** This is the path to the rich PDF preset file. This property can be used if a rich PDF preset file is not in the job folder and it is valid only if the value of *richPdfPreset* is *Custom*.

Two of the 6 files (HPD, CSV or TXT, IMPP, ZIP, FPP, JOBOPTIONS) that can be listed in the popup are optional (that is, IMPP and ZIP are optional), meaning that if you choose not to set them, you do not type the entire line.

One of the files that are listed in the popup is a variable file, meaning that when you run the job, you drag the variable file from elsewhere onto the *Input by Single File* folder. The job retrieves the other files from the locations that are listed in the popup. The line in the popup for the variable file should be deleted.

The following two optional properties can be added to the popup:

**numberOfChunkedProcessing** (Optional) This is the number of chunks that HP PrintOS processes in parallel, for faster processing. This property can be used if the input data file is large.

**chunkedProcessingMergeFormat** (Optional) This is the type of output that is produced when chunking: Either PDF (default if this property is not specified) whereby the chunked PDFs are concatenated into one PDF, or ZIP whereby all the chunked PDFs are zipped into one ZIP file.

5. Click OK.

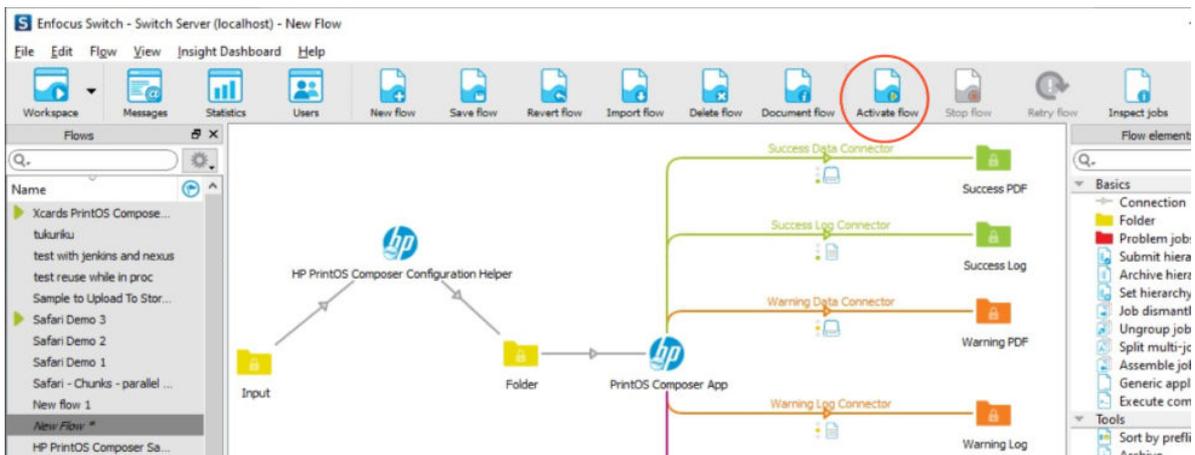
After you have created and configured the input folders, proceed to [Submitting jobs using the direct folder workflow on page 36](#).

## 4 Submitting jobs

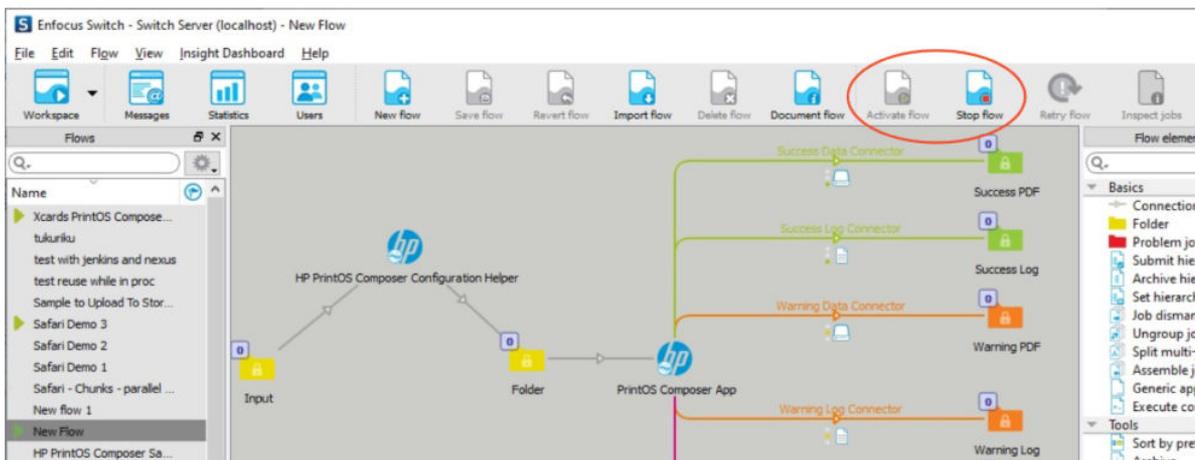
- To submit jobs for the Helper workflow, see below ([Submitting jobs using the Helper workflow on page 33](#)).
- To submit jobs for the direct folder workflow, proceed to [Submitting jobs using the direct folder workflow on page 36](#).

### Submitting jobs using the Helper workflow

Before submitting a job, start Switch and in the menu bar, click **Activate flow**.



The *Activate flow* button becomes inactive and the *Stop flow* button becomes active (for future use).



There are two methods for submitting jobs, as described in the following sections:

- [Input by Single File on page 34](#)
- [Input by Folder \(many dynamic files\) on page 35](#)

Many different files/folders can be submitted (that is, dragged onto an input folder) at one time. The jobs are processed a few at a time until all of them are processed.

## Input by Single File

### Preparing the file

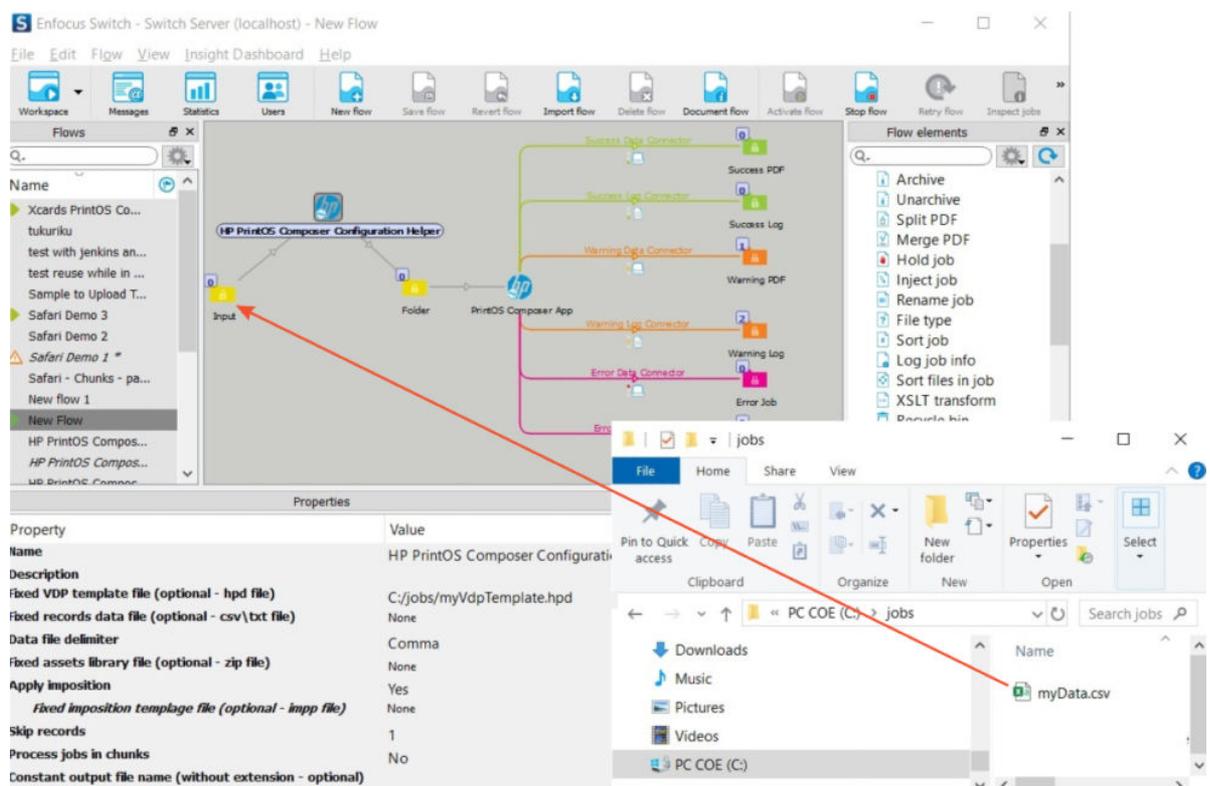
Paths to some but not all of the following files were set in the Properties of the Helper app in [Configuring the Helper properties on page 23](#):

- An HPD file (*Fixed VDP template*), which is the VDP template file that is used.
- A data file as a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters (*Fixed records data file*). The type of delimiter is set in the *Input by Folder with HPD and Data* input folder Properties, as described in [Input by Single File on page 30](#). To change the delimiter, select the relevant delimiter from the *Data file delimiter* dropdown list in the *Helper Properties* pane (see [Configuring the Helper properties on page 23](#)).
- An IMPP file (*Fixed imposition template file*), which is the imposition template file.
- An assets library file (*Fixed assets library file*) packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file.
- A fixed PDF preset file.

Since one of the above files will be dragged and dropped onto the *Input* folder, that file's property should be **None**. An HPD file and a data file must be either set in the properties of the Helper app or be the file that is dragged onto the input folder.

### Submitting the file job

1. Click and drag the file onto the **Input by Single File** input folder.



2. During processing of the job, progress entries are added to the Switch log.

Proceed to [Examining the results of a job on page 43](#).

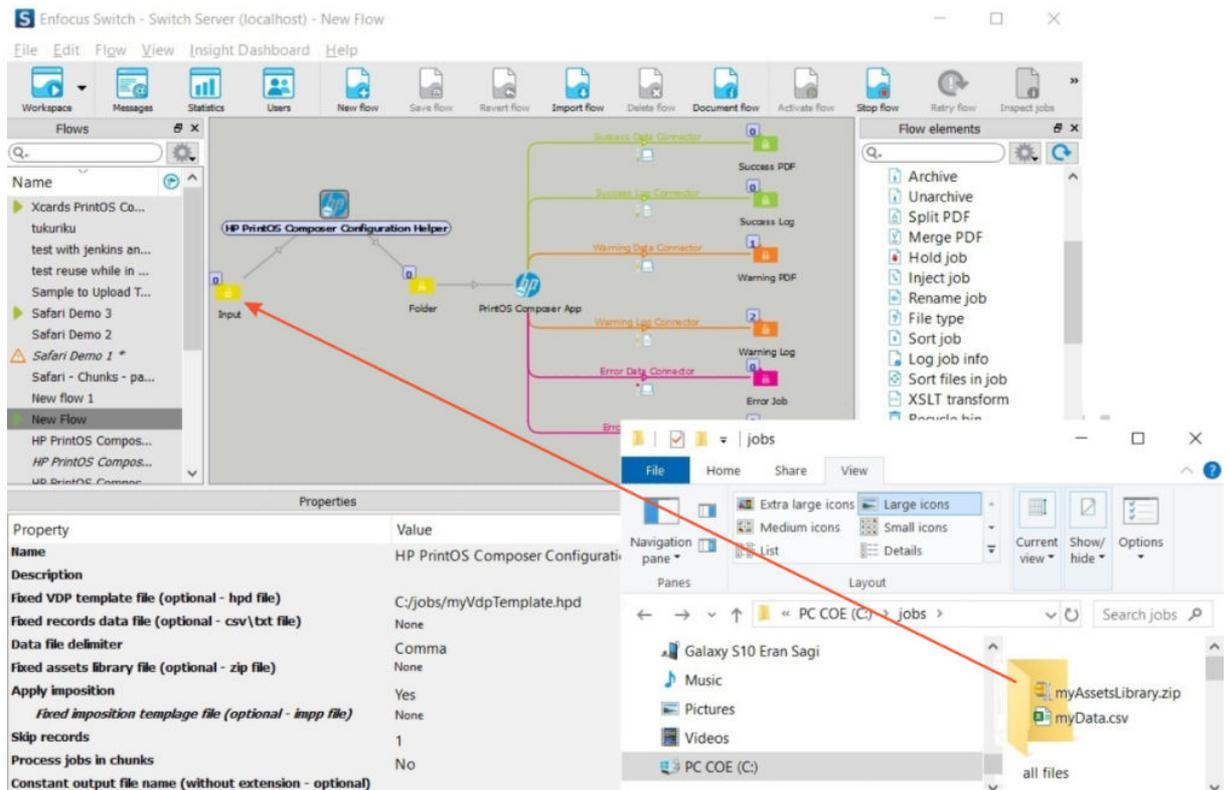
## Input by Folder (many dynamic files)

There are situations where the desired dynamic input that varies between jobs is more than one file. This means that these input files were set as *None* in the Helper properties and therefore the Helper expects to get them as dynamic input.

For example, jobs can have a fixed template (that is, the same template for all jobs), while data and images change per job. In such a case, the template is set as fixed in the Helper app, while the data file and asset library are set as *None*. The job input would be a folder containing the dynamic files, the data, and the asset library ZIP file.

The input would be a folder containing both the data file (TXT or CSV) and the assets library ZIP file.

1. Click and drag the folder onto the *Input* folder.

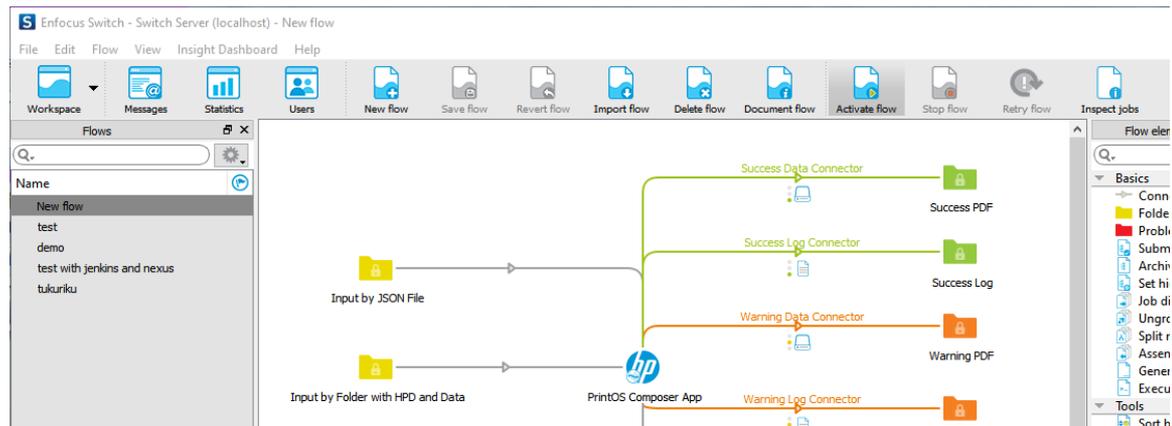


2. During processing of the job, progress entries are added to the Switch log.

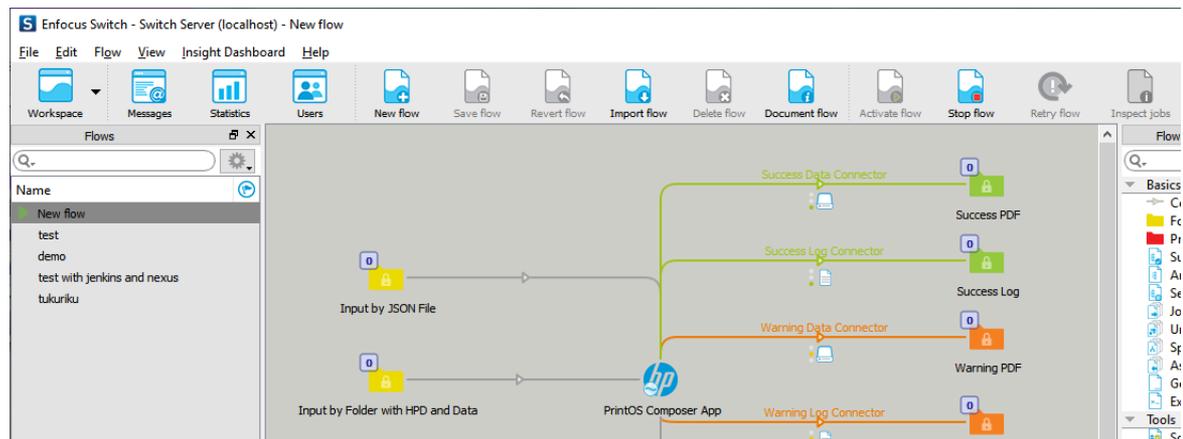
Proceed to [Examining the results of a job on page 43](#).

## Submitting jobs using the direct folder workflow

Before submitting a job, start Switch and in the menu bar, click **Activate flow**.



The *Activate flow* button becomes inactive and the *Stop flow* button becomes active (for future use).



There are 3 methods for submitting jobs, as described in the following sections:

- [Input by JSON File on page 37](#)
- [Input by Folder with HPD and Data on page 40](#)
- [Input by Single File on page 41](#)

Many different files/folders can be submitted (that is, dragged onto an input folder) at one time. The jobs are processed a few at a time until all of them are processed.

## Input by JSON File

### Preparing a JSON file

Use a text editor (such as Notepad) to create a JSON file. The suffix of the file should be JSON and not TXT.

**Figure 4-1** Example of a JSON file

```
{
  "vdpTemplateFile": "C:/switch-files/myVdpTemplate.hpd",
  "dataFile": "C:/switch-files/myData.csv",
  "impositionTemplateFile": "C:/switch-files/myimpp.impp",
  "assetsLibraryFile": "C:/switch-files/myAssets.zip",
  "delimiterAscii": 44,
  "skipRecords": 1,
  "engineMode": "Fast",
  "fastPdfPreset": "Custom",
  "fastPdfPresetFile": "C:/switch-files/myFastPdfPreset.fpp",
  "outputFileName": "myPdfName"
}
```

In the above example, the lines are as follows:



**NOTE:** Each line ends with a comma (,) except the last line, which has no ending punctuation mark.

**"vdpTemplateFile": "c:/switch-files/myVdpTemplate.hpd"** This is the path of the HPD file, which is the VDP template file that is used.

**"dataFile": "c:/switch-files/myData.csv"** This is the path of the data file. The data file can be a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters.

**"impositionTemplateFile": "c:/switch-files/myimpp.impp"** (Optional) This is the path of the imposition template file.

**"assetsLibraryFile": "c:/switch-files/myAssets.zip"** (Optional) This is the path of assets library file packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file.

**"delimiterAscii": xx** where xx is the ASCII code for the separator that is used in the CSV or TXT data file. The commonly used separators and their ASCII code are comma (44) and semicolon (59) for CSV files, and tab (9) for TXT files.

**"skipRecords": yy** (Optional) yy is a number greater than or equal to 1. The process skips the first yy records of the data file. For example, if the first record of the data file contains field names (that is, header fields) that should be skipped (ignored), type skipRecords=1

**"outputFileName": "myPdfName"** (Optional) This is the name of the PDF (or ZIP) that is sent to the output folder. If this parameter is not set (that is, this line is deleted), the app creates a name for the PDF (or ZIP) that is the name of the HPD and the data file.

**"applyImposition": true or false** (Optional) This variable can be *true* or *false*, indicating whether to apply imposition or not. If the parameter is not given or given as *true*, the system applies imposition if imposition exists (either embedded in the template or referenced by the *impositionTemplateFile* parameter). If the parameter is given as *false*, the system does not apply imposition.

**"engineMode": Template default or Prefer fast or Prefer rich.** This is the preferred mode for the composition task.

**"fastPdfPreset": xx** (Optional) where xx is the predefined fast PDF preset name (*Default settings*, *Smallest file size*, or *Custom*).

**"fastPdfPresetFile": c:/jobs/myPreset.fpp** This is the path to the fast PDF preset file. This property can be used if a fast PDF preset file is not in the job folder and it is valid only if the value of *fastPdfPreset* is *Custom*.

**"richPdfPreset": xx** (Optional) where *xx* is the predefined rich PDF preset name (*High quality print, PDFX1a 2001, PDFX3 2002, PDFX4 2008, Press quality, Smallest file size, or Custom*).

**"richPdfPresetFile": c:/jobs/myPreset.joboptions** This is the path to the rich PDF preset file. This property can be used if a rich PDF preset file is not in the job folder and it is valid only if the value of *richPdfPreset* is *Custom*.

4 of the 6 files (HPD, CSV or TXT, IMPP, ZIP, FPP, JOBOPTIONS) are optional (that is, IMPP, ZIP, FPP, and JOBOPTIONS are optional), meaning that if you choose not to set them, you do not type the entire line. In the example below, the IMPP line is removed since it is not needed by the job.

**Figure 4-2** Example of JSON file without IMPP line

```
{
  "vdpTemplateFile": "C:/switch-files/myVdpTemplate.hpd",
  "dataFile": "C:/switch-files/myData.csv",
  "assetsLibraryFile": "C:/switch-files/myAssets.zip",
  "delimiterAscii": 44,
  "skipRecords": 1,
  "engineMode": "Fast",
  "fastPdfPreset": "Custom",
  "fastPdfPresetFile": "C:/switch-files/myFastPdfPreset.fpp",
  "outputFileName": "myPdfName"
}
```

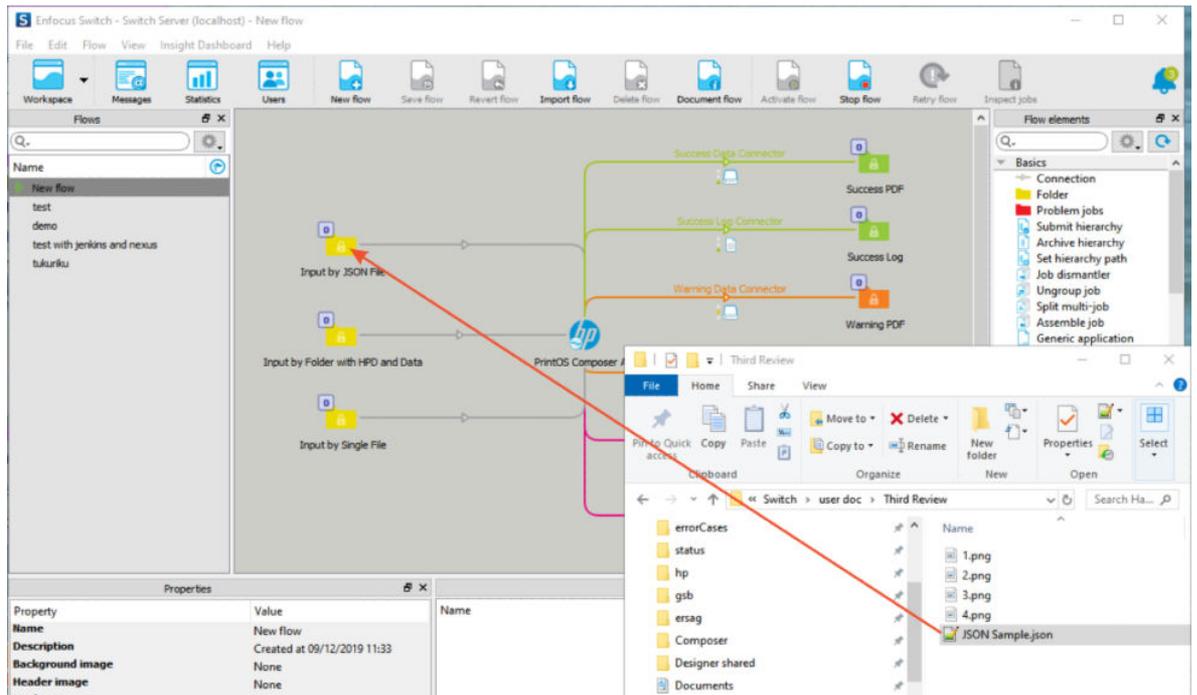
The following are two additional optional properties that can be added to the JSON file:

**"numberOfChunkedProcessing": x** (Optional) *x* is the number of chunks that HP PrintOS processes in parallel, for faster processing. This property can be used if the input data file is large.

**"chunkedProcessingMergeFormat": "ZIP"** (Optional) This is the type of output that is produced when chunking: Either *PDF* (this is the default if this property is not specified) whereby the chunked PDFs are concatenated into one PDF, or *ZIP* whereby all the chunked PDFs are zipped into one ZIP file.

## Submitting a JSON job

1. Click and drag the JSON file onto the **Input by JSON File** input folder.



2. During processing of the job, progress entries are added to the Switch log.  
Proceed to [Examining the results of a job on page 43](#).

## Input by Folder with HPD and Data

### Preparing the job folder

Create a job folder with the following files:

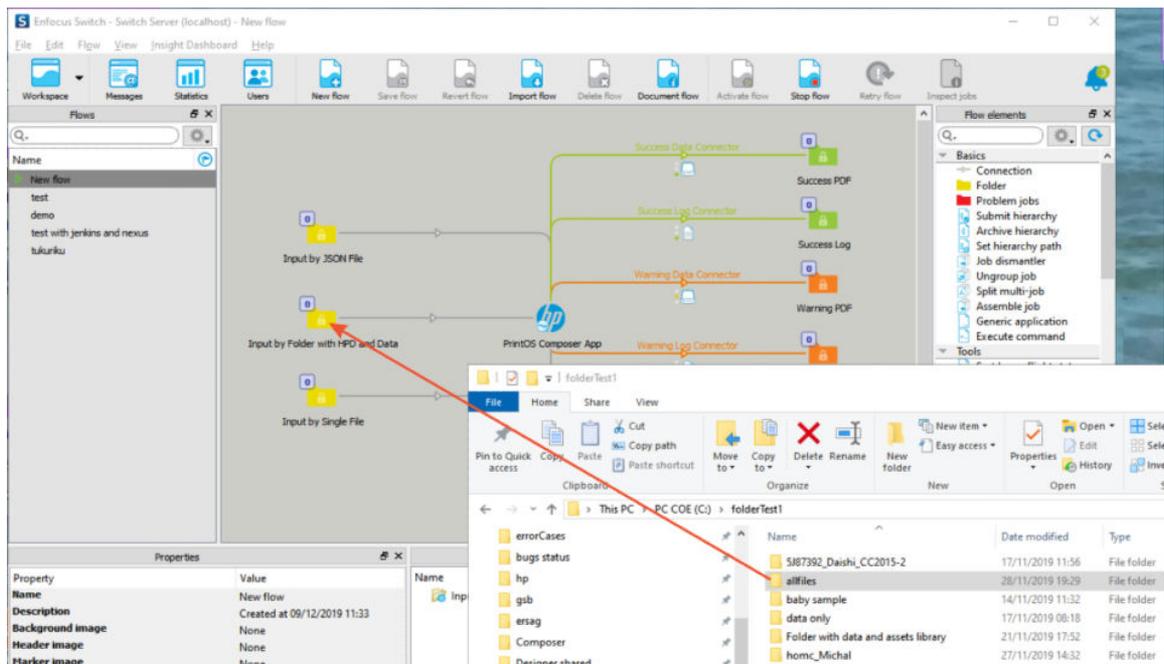
- An HPD file, which is the VDP template file that is used.
- A data file as a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters. The type of delimiter is set in the *Input by Folder with HPD and Data* input folder Properties, as described in [Input by Folder with HPD and Data on page 27](#). To change the delimiter, click the **Stop flow** button in the menu bar and then change **delimiterAscii=xx** in the *Set job private data* property as described there in step 4. After it is set, click the **Activate flow** button in the menu bar
- (Optional) An IMPP file, which is the imposition template file.
- (Optional) An assets library file packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file.
- (Optional) A PDF preset file: *fpp* for fast or *joboptions* for rich.

The number of records to skip in the data file (such as header records) is set in the *Input by Folder with HPD and Data* input folder Properties, as described in [Input by Folder with HPD and Data on page 27](#). To change the number of records to skip, change **skipRecords=xx** in the *Set job private data* property as described there in step 4.

If you want to give a name to the output PDF file, set it in the *Input by Folder with HPD and Data* input folder Properties, as described in [Input by Folder with HPD and Data on page 27](#). To change the name of the PDF, change **outputFileName=XXX.pdf** in the *Set job private data* property as described there in step 4.

### Submitting the job folder

1. Click and drag the folder onto the **Input by Folder with HPD and Data** input folder.



2. During processing of the job, progress entries are added to the Switch log.  
Proceed to [Examining the results of a job on page 43](#).

## Input by Single File

### Preparing the file

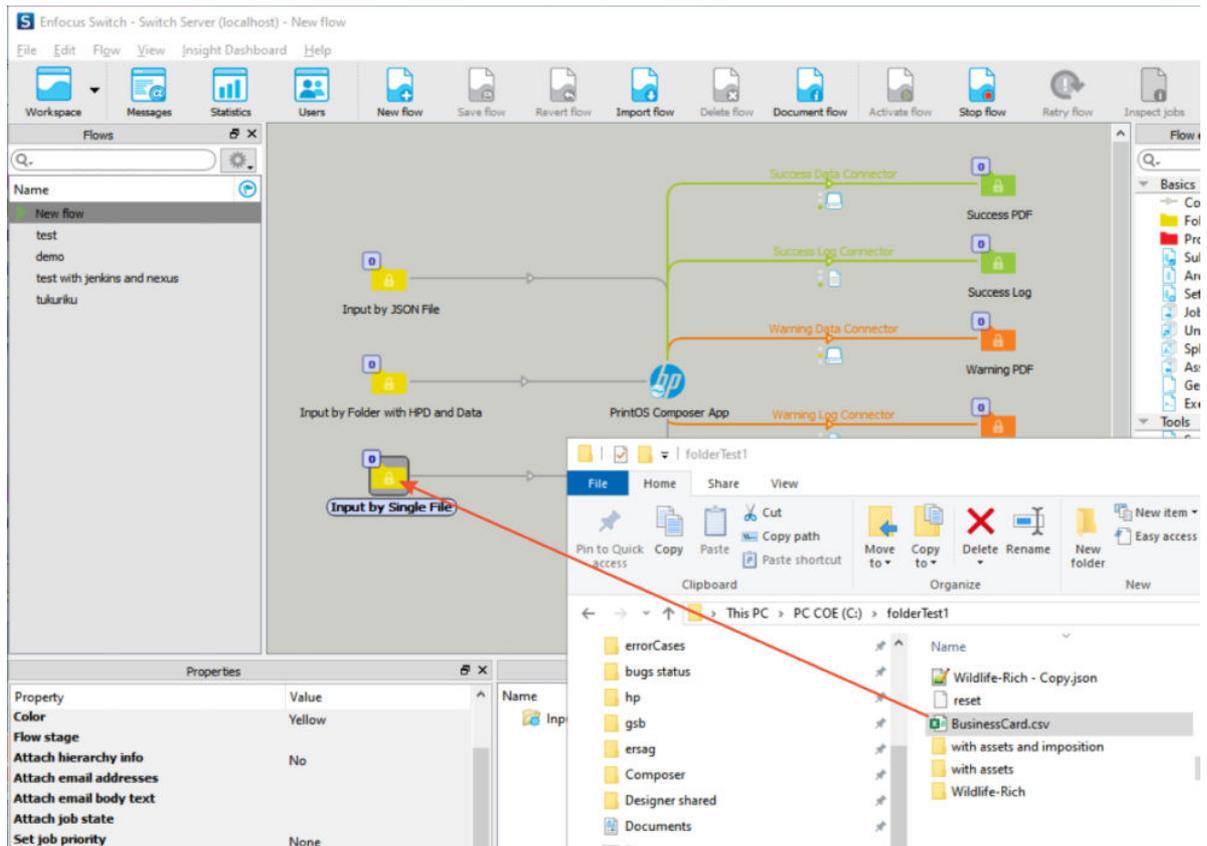
Paths to the following files were set in the Properties of the *Input by Single File* input folder in [Input by Single File on page 30](#), step 4:

- An HPD file, which is the VDP template file that is used.
- A data file as a TXT file with tab delimiters, or a CSV file with comma or semicolon delimiters. The type of delimiter is set in the *Input by Folder with HPD and Data* input folder Properties, as described in [Input by Single File on page 30](#). To change the delimiter, click the **Stop flow** button in the menu bar and then change **delimiterAscii=xx** in the *Set job private data* property as described there in step 4. After it is set, click the **Activate flow** button in the menu bar.
- (Optional) An IMPP file, which is the imposition template file.
- (Optional) An assets library file packed as a ZIP file. For example, JPG files packed in a ZIP file to be referenced by the data file.
- (Optional) A PDF preset file: *fpp* file for fast processing or *joboptions* file for rich processing.

Since one of the above files will be dragged and dropped onto the *Input by Single File* folder, that file will not be in the properties of the input folder. An HPD file and a data file must be either set in the properties of the input folder or be the file that is dragged onto the input folder.

## Submitting the file job

1. Click and drag the file onto the **Input by Single File** input folder.

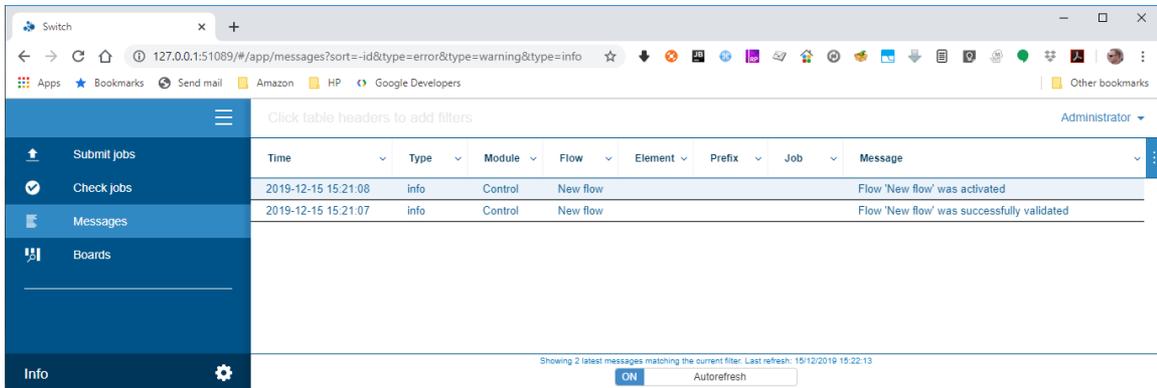


2. During processing of the job, progress entries are added to the Switch log.  
Proceed to [Examining the results of a job on page 43](#).

# 5 Examining or stopping a job

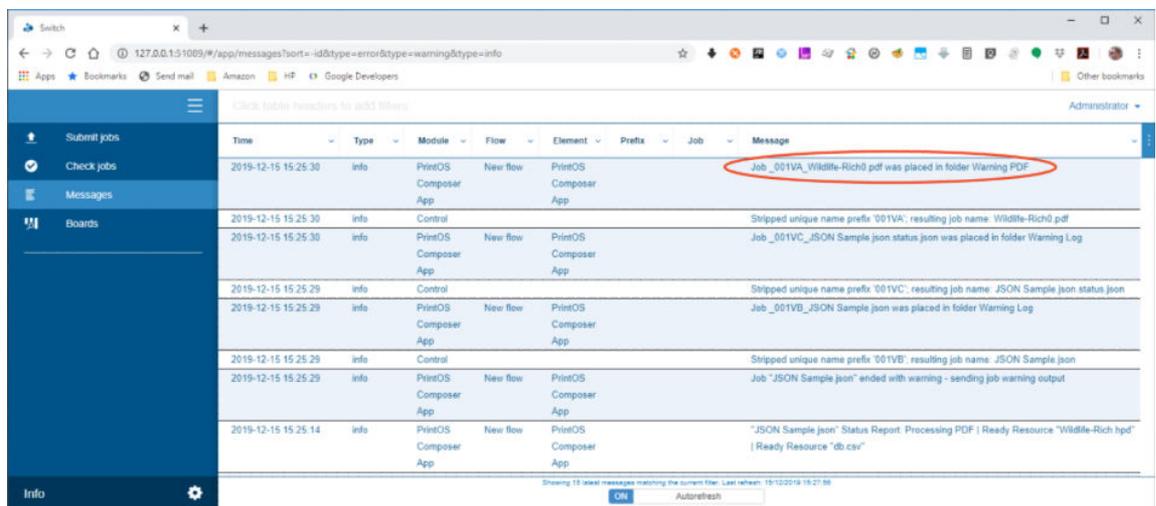
## Examining the results of a job

Open the Switch log in a web browser by going to: **http://127.0.0.1:51089/** and selecting the **Messages** tab.



You can know when the job has completed in either of the following ways:

- The Switch log displays an entry that notifies you that a PDF was placed in an output folder.



- One of the output folders shows an increase in the number of items in the folder.



For a descriptions of the Success, Warning, and Error output folders, see [Creating output folders on page 17](#).

The *Jobs* pane contains the files that are in a particular output folder. Double-click an output file to view it.

Figure 5-1 Example of *Warning PDF* output folder contents

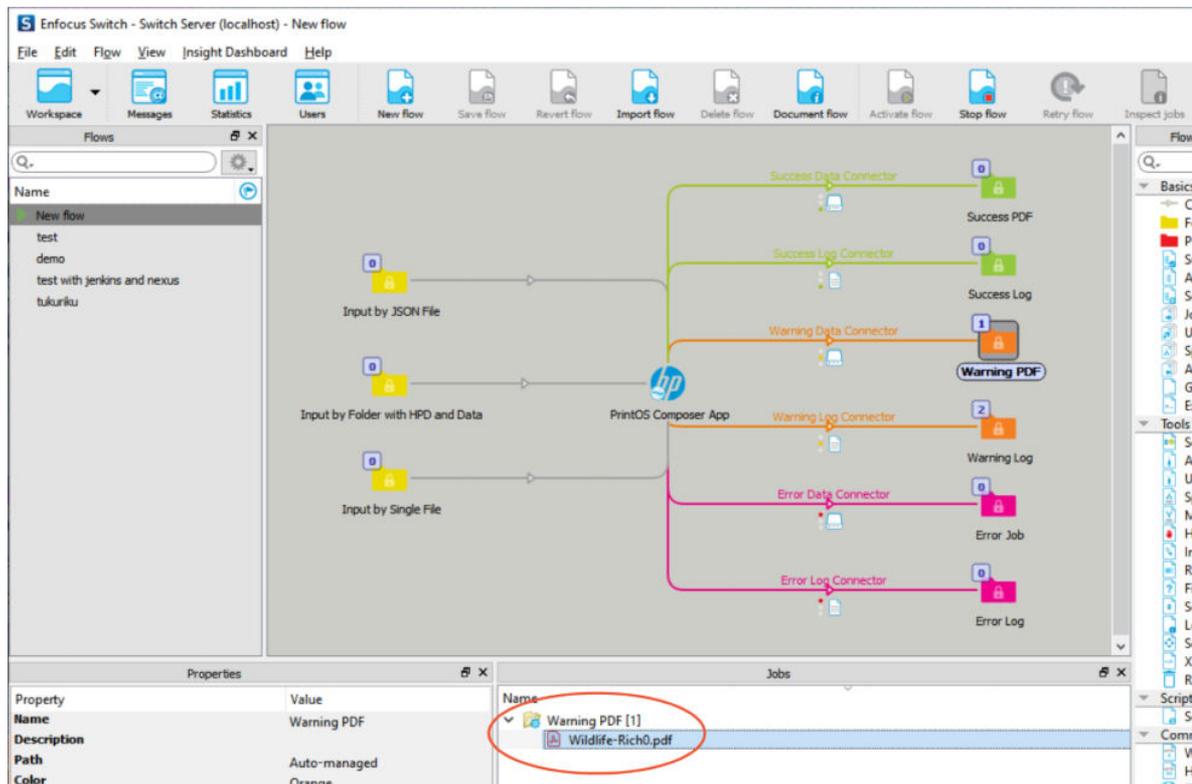
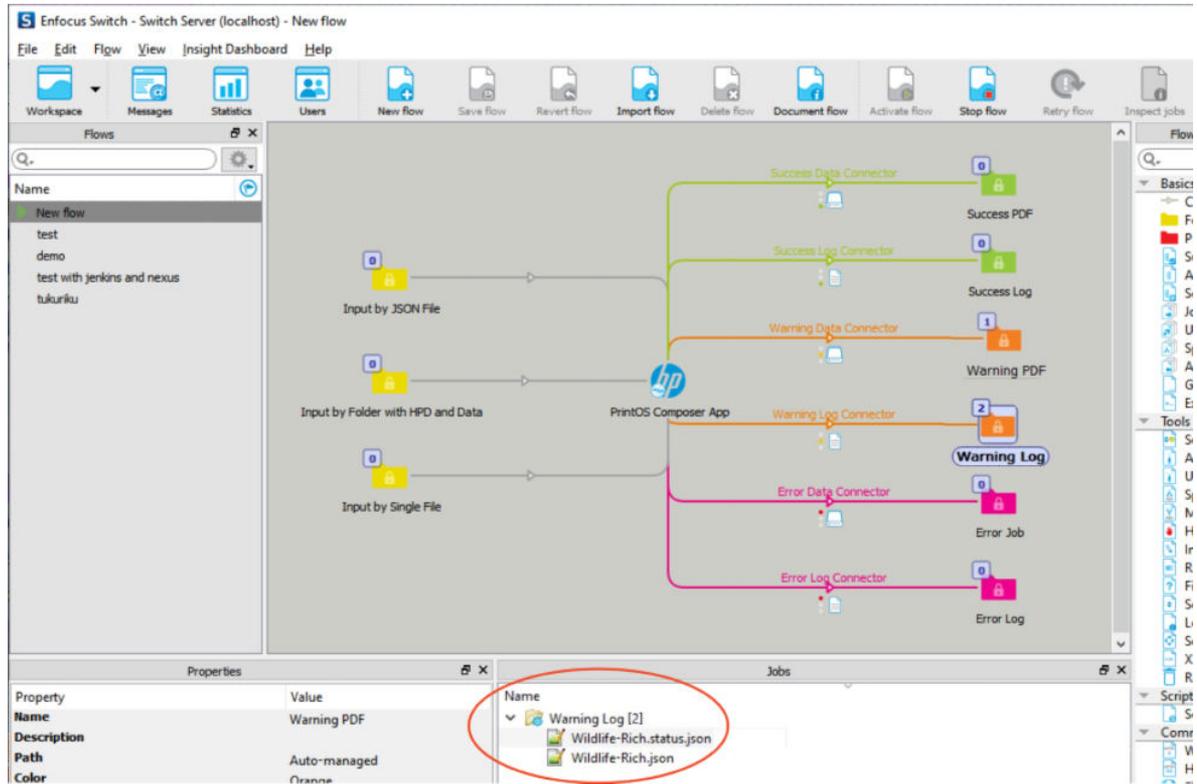
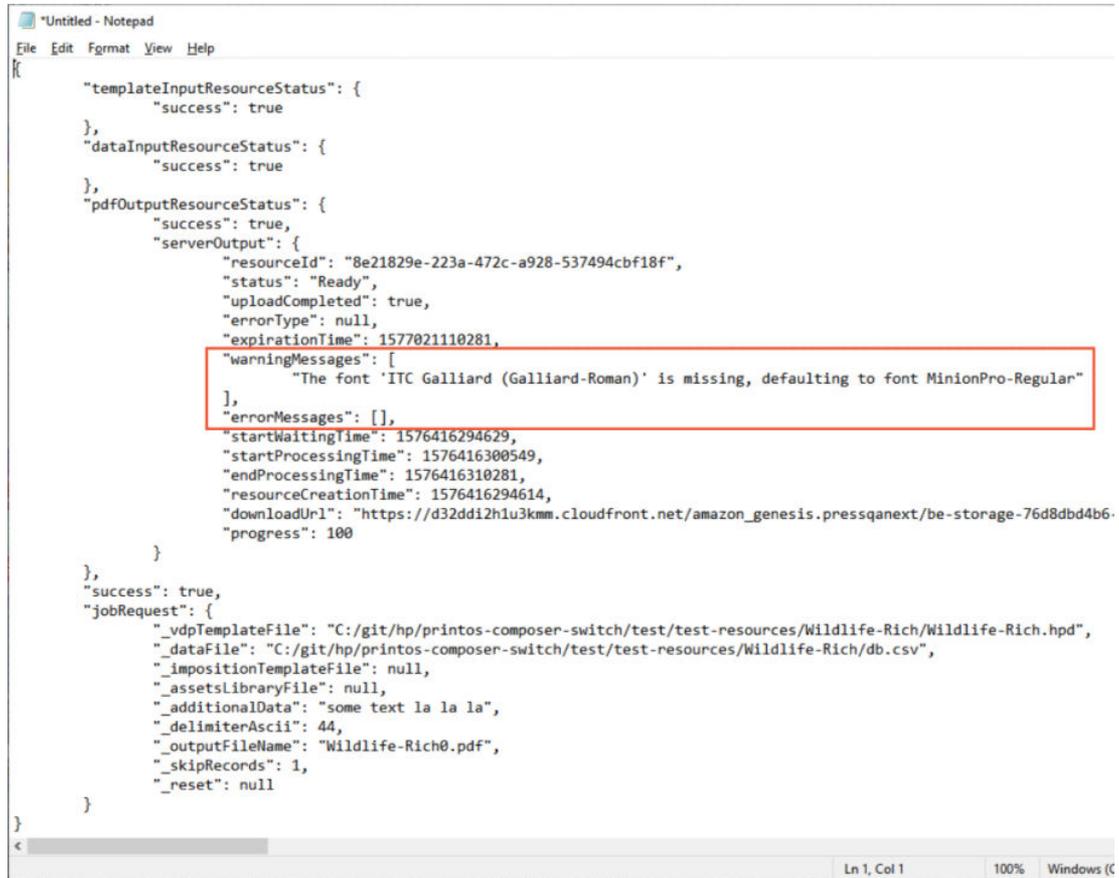


Figure 5-2 Example of *Warning Log* output folder contents



The Log folder contains the original JSON file and a status file (as shown below). The status file in the *Warning Log* and *Error Log* output folders shows the relevant warning or error message.

Figure 5-3 Example of status file showing warning message



```

{
  "templateInputResourceStatus": {
    "success": true
  },
  "dataInputResourceStatus": {
    "success": true
  },
  "pdfOutputResourceStatus": {
    "success": true,
    "serverOutput": {
      "resourceId": "8e21829e-223a-472c-a928-537494cbf18f",
      "status": "Ready",
      "uploadCompleted": true,
      "errorType": null,
      "expirationTime": 1577021110281,
      "warningMessages": [
        "The font 'ITC Galliard (Galliard-Roman)' is missing, defaulting to font MinionPro-Regular"
      ],
      "errorMessages": [],
      "startWaitingTime": 1576416294629,
      "startProcessingTime": 1576416300549,
      "endProcessingTime": 1576416310281,
      "resourceCreationTime": 1576416294614,
      "downloadUrl": "https://d32ddi2hlu3kmm.cloudfront.net/amazon_genesis.pressqanext/be-storage-76d8dbd4b6",
      "progress": 100
    }
  },
  "success": true,
  "jobRequest": {
    "_vdpTemplateFile": "C:/git/hp/printos-composer-switch/test/test-resources/Wildlife-Rich/Wildlife-Rich.hpd",
    "_dataFile": "C:/git/hp/printos-composer-switch/test/test-resources/Wildlife-Rich/db.csv",
    "_impositionTemplateFile": null,
    "_assetsLibraryFile": null,
    "_additionalData": "some text la la la",
    "_delimiterAscii": 44,
    "_outputFileName": "Wildlife-Rich0.pdf",
    "_skipRecords": 1,
    "_reset": null
  }
}

```

Correct the warnings or errors in the input job file/folder and resubmit it.

## Stopping a job

To stop a job or jobs while it/they is/are running, click the **Stop flow** button in the menu bar.

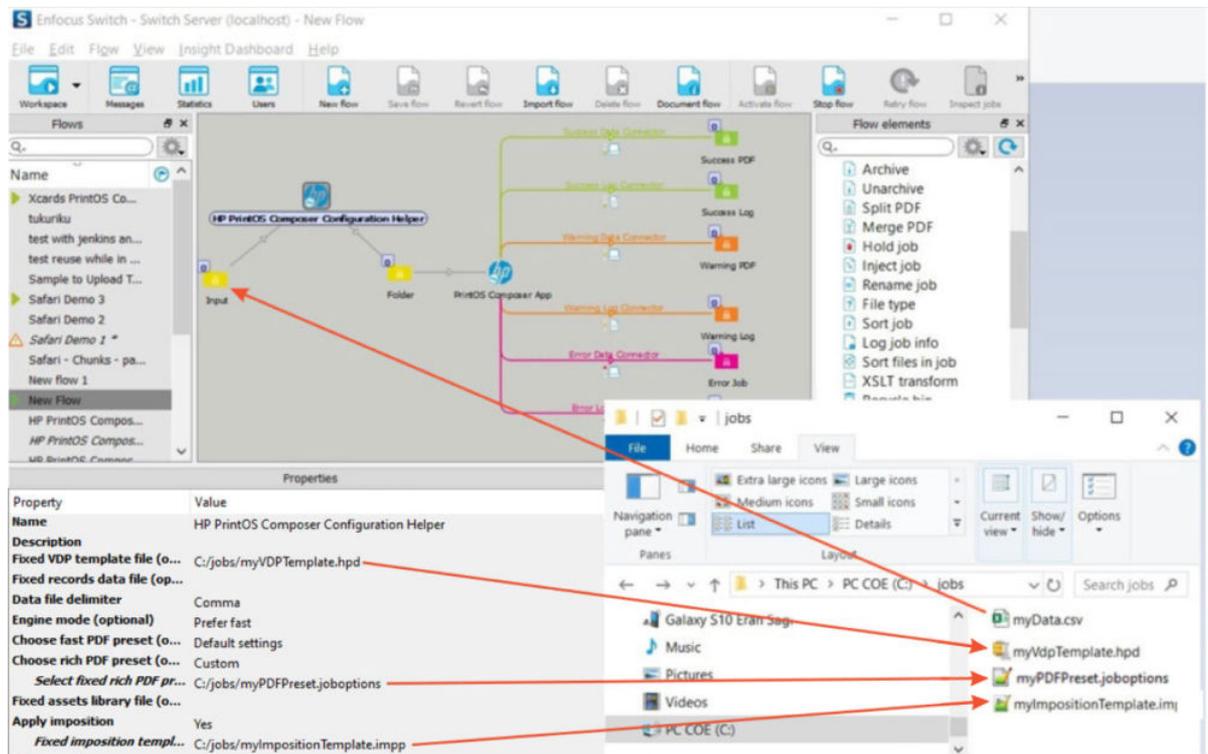
To restart the job(s), click the **Activate flow** button in the menu bar. The jobs that were previously stopped will continue from where they left off.

# A Examples

## Examples of Helper workflow

### CSV as single file job input, with fixed HPD and IMPP files, and PDF preset

In this example, the flow gets a single data file as a job, while the VDP Template and Imposition Template are defined as fixed files.



## Folder as job input, with fixed HPD

In this example, the VDP Template HPD file is fixed and includes variable images. The images are packed in the Assets Library ZIP file, while the data file includes the names of the image files required per record.

Each time, a new data file with new images is used to make PDFs. The data file and the ZIP file are put together into one folder and the folder is used as job input.

The screenshot displays the Enfocus Switch interface for a 'New Flow' configuration. The main workspace shows a flow diagram starting with an 'Input' connector pointing to a 'Folder' connector, which then feeds into a 'PrintOS Composer App' connector. From there, the flow branches into four paths: 'Success Data Connector' leading to 'Success PDF', 'Success Log Connector' leading to 'Success Log', 'Warning Data Connector' leading to 'Warning PDF', and 'Error Data Connector' leading to 'Error Job'. A 'Properties' pane at the bottom left lists the following configuration details:

| Property   | Value                             |
|--|-----------------------------------|
| Name   | HP PrintOS Composer Configuration |
| Description  | HP PrintOS Composer Configuration |
| Fixed VDP template file (optional - hpd file)            | C:/jobs/myVdpTemplate.hpd         |
| Fixed records data file (optional - csv\text file)       | None                              |
| Data file delimiter                                      | Comma                             |
| Fixed assets library file (optional - zip file)          | None                              |
| Apply imposition   | No                                |
| Skip records   | 1                                 |
| Process jobs in chunks                                   | No                                |
| Constant output file name (without extension - optional) |                                   |

Overlaid on the bottom right is a Windows File Explorer window showing the 'C:/jobs' directory. It contains a folder named 'myAssetsLibrary.zip', a file named 'myData.csv', and a folder named 'data and images'. A file named 'myVdpTemplate.hpd' is also visible in the directory. Red arrows indicate the mapping between the software's configuration and the file system: one arrow points from the 'Input' connector in the flow diagram to the 'data and images' folder, and another points from the 'Fixed VDP template file' property to the 'myVdpTemplate.hpd' file.

# Examples of direct folder workflow

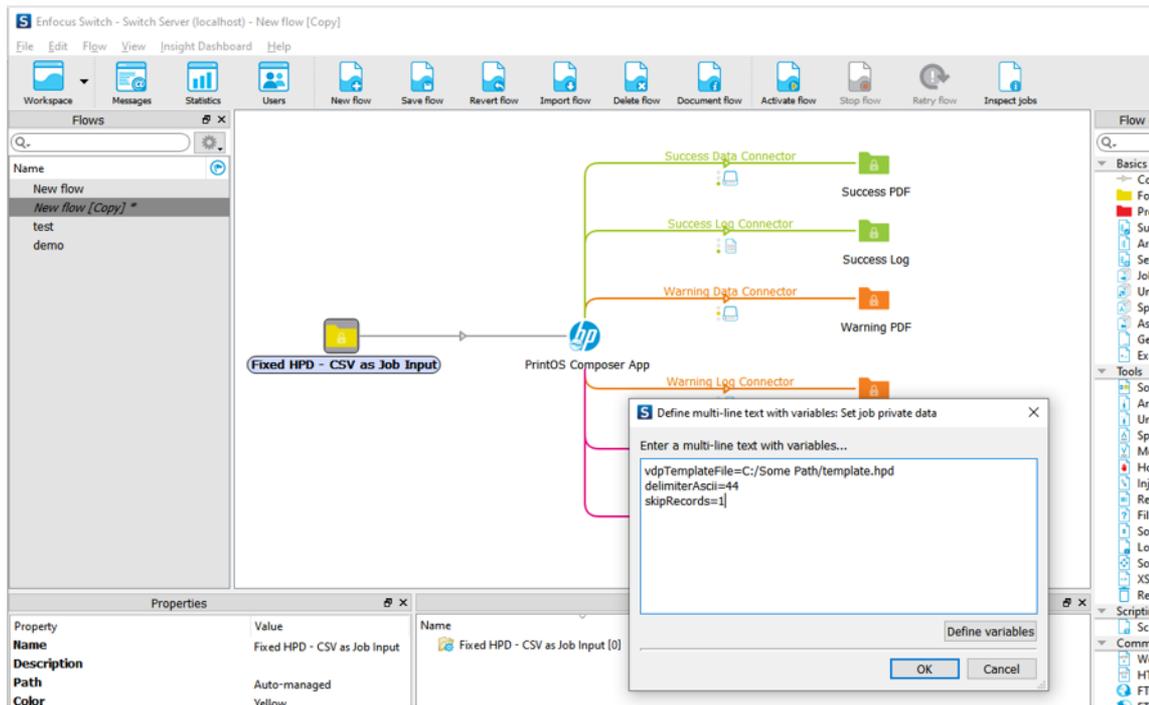
## CSV as Single File Job input, with fixed HPD

Create a flow with a fixed HPD template file and data changing for each job, that is, a different CSV (comma delimiter = 44) file, with different records, for each job. The template is fixed while the data changes each time.

For such a flow, define the following private data for the Input folder:

- vdpTemplateFile=C:/SomePath/template.hpd
- delimiterAscii=44
- skipRecords=1

Drag and drop different CSV files onto the Input folder.



## TXT as Single File Job input, with fixed HPD and fixed Imposition

Imposition can be included in an HPD if the template was created by Adobe InDesign with HP SmartStream Designer. If imposition is included, the PDF processing automatically uses it.

However, the HPD template might not include imposition and you want to add one to the PDF processing. Alternatively, imposition might be in the HPD and you want to override it with another imposition template to match a different paper size.

For those scenarios, you can add an IMPP imposition template file reference to be used as the imposition definition.

In this example, create a flow with a fixed HPD template file and a specific fixed imposition file. A different TXT file (tab delimiter = 9), with different records, is used each time. The template is fixed while the data changes each time.

For such a flow, define the following private data for the Input folder:

- vdpTemplateFile=C:/SomePath/template.hpd
- impositionTemplateFile=C:/SomePath/imposition.impp
- delimiterAscii=9
- skipRecords=1

Drag and drop different TXT files onto the Input folder.

The screenshot displays the Enfocus Switch software interface. The main workspace shows a flow configuration for a 'PrintOS Composer App' connector. A dialog box titled 'Define multi-line text with variables: Set job private data' is open, allowing the user to enter variables. The variables entered are:

```
vdpTemplateFile=C:/Some Path/template.hpd
impositionTemplateFile=C:/Some Path/imposition.impp
delimiterAscii=9
skipRecords=1
```

The interface includes a menu bar (File, Edit, Flow, View, Insight Dashboard, Help), a toolbar with various actions (New flow, Save flow, Revert flow, Import flow, Delete flow, Document flow, Activate flow, Stop flow, Retry flow, Inspect jobs), and a 'Flows' panel on the left. The 'Properties' panel at the bottom shows the name and description of the flow.

## Folder as Job input, with fixed HPD

Create a flow with fixed HPD template file. The HPD template expects to receive a data file that includes references to image files. Occasionally, there are different data files with references to different images. In this case, pack the images into a single assets library ZIP file.

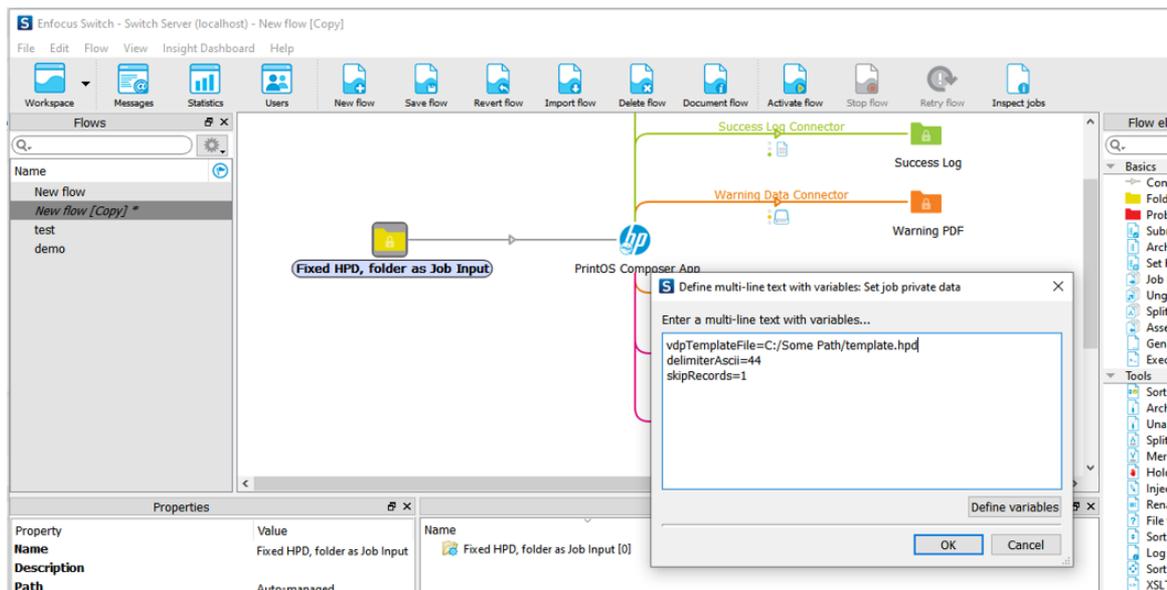
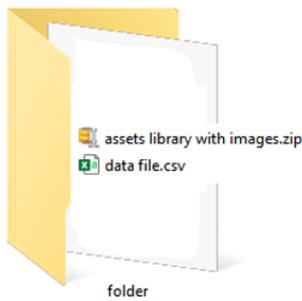
To the input folder you might want to get different assets library ZIP files and their matching data files.

In this case, use Folder as Job Input, where the folder contains both the assets library and the data file.

For such a flow, define the following private data for the Input folder:

- vdpTemplateFile=C:/SomePath/template.hpd
- delimiterAscii=44
- skipRecords=1

For such a flow, drag and drop different folders (each one with a CSV file and a ZIP file) onto the Jobs input folder.

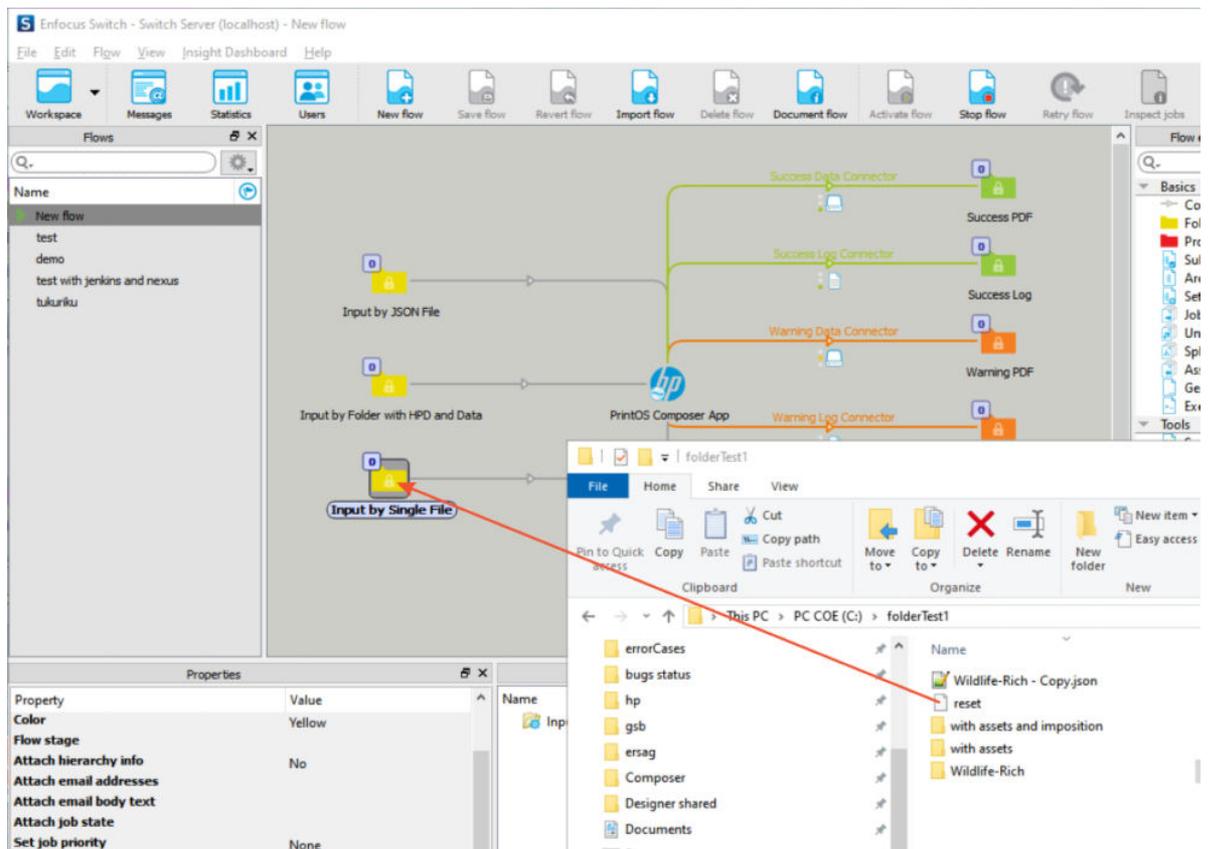




## B Troubleshooting

The HP PrintOS Composer app uses a service running on the local computer for communications with the cloud service. If there are persistent malfunctions, do the following to reset the local service:

1. Create an empty file and name it **reset** (without a suffix).
2. Click the **Activate flow** button in the menu bar.
3. Click and drag the reset file onto any of the input folders. The server will reset.



This reset does not clean cloud resources.

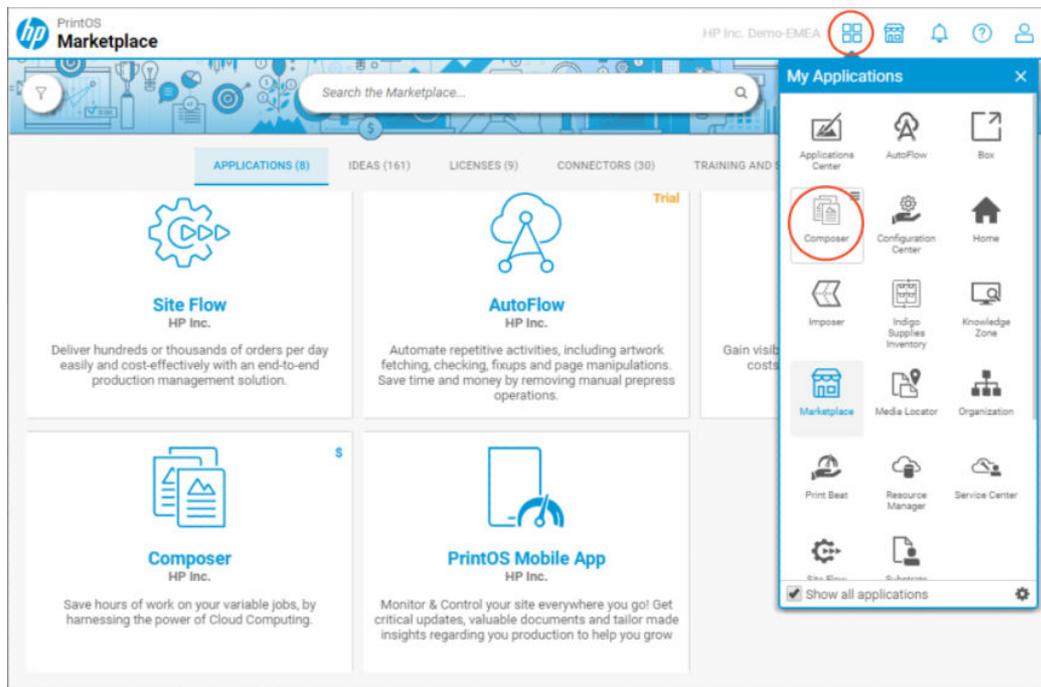


# C Records quota in HP PrintOS Composer

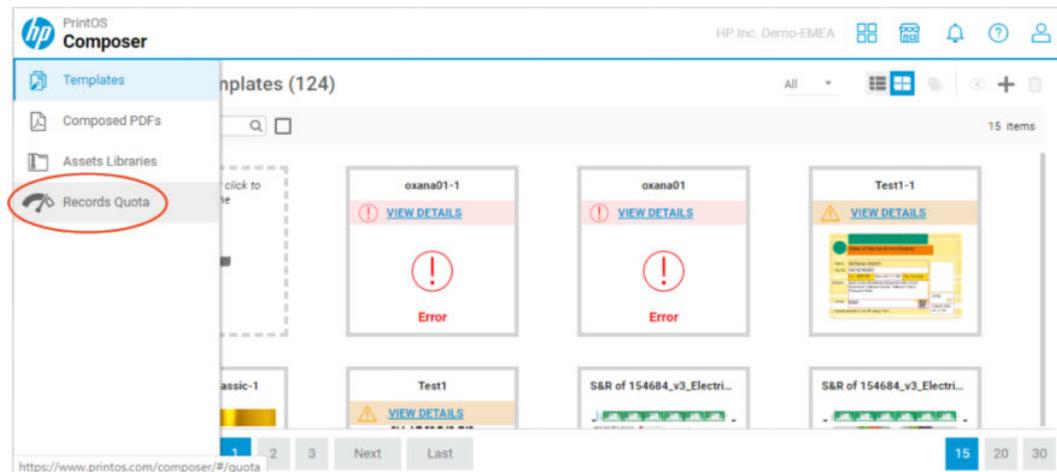
HP PrintOS Composer allows processing of up to 10,000 records per month for free.

To check what your current records quota is, do the following:

1. At the top right icon bar, click the **My Applications** icon and from the dropdown window, select **Composer**.



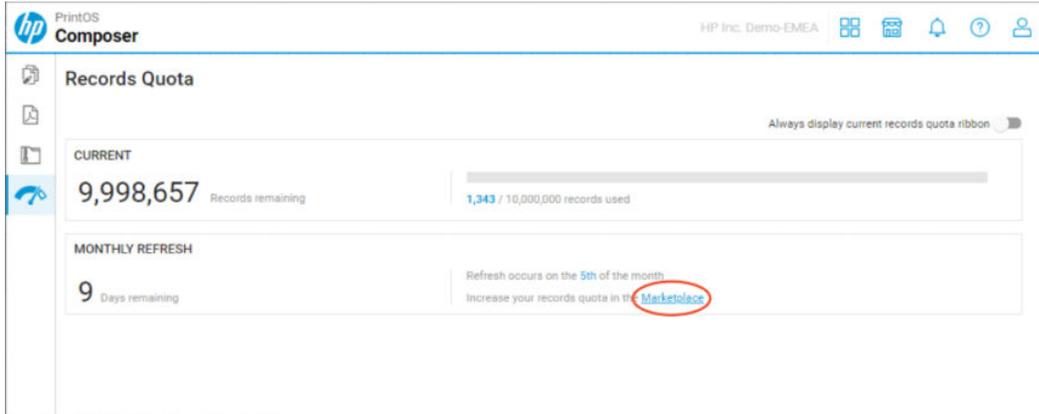
2. At the left icon bar, click the **Records Quota** icon.



The *Records Quota* window appears, displaying the following information:

- How many records were used since the beginning of the current quota month.
- How many records remain until the end of the current quota month.

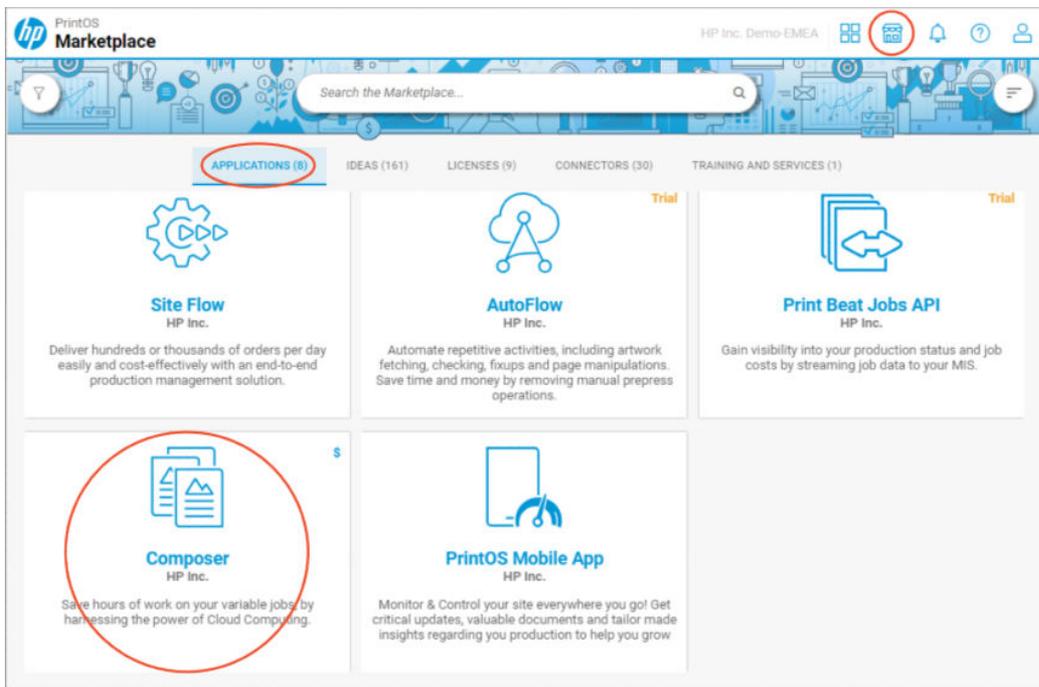
- How many days remain in the current quota month.
- On which day of the month the quota is refreshed.



If your records quota was reached and/or you want to increase your quota, do the following:

1. If the *Records Quota* window is open (see above), click **Marketplace**.

Alternatively, click the **Marketplace** icon and select the **APPLICATIONS** tab.



2. Click **Composer**. The various licensing and purchasing options are displayed.

## D Service and support

To obtain service, please contact the customer care center within your country/region:

|                                    |                        |
|------------------------------------|------------------------|
| <b>Europe:</b>                     |                        |
| Belgium:                           | +32 (0)2 626 4803      |
| France:                            | +33 (0)1 57 32 41 07   |
| Germany:                           | +49 (0)69 38 07 89 193 |
| Ireland:                           | +353 (0)1 656 9760     |
| Italy:                             | +39 02 69430637        |
| Luxembourg:                        | +352 (0)24 87 13 98    |
| Netherlands:                       | +31 (0)20 547 6870     |
| Spain:                             | +34 9 12757781         |
| UK:                                | +44 (0) 207 295 00 38  |
| <b>APJ:</b>                        |                        |
| Japan:                             | +81 (0)1 2085 5536     |
| Singapore:                         | +65 9891 1753          |
| <b>Distribution Channels (DC):</b> | +31 (0)20 654 5543     |
| <b>North America:</b>              | 1-800-204-6344         |
| <b>Israel:</b>                     | +972 (0)8 938 1818     |

### North America and Latin America

HP  
Indigo Division  
5555 Windward Parkway  
Alpharetta, GA 30004  
USA

### International

HP  
Indigo Division  
Startbaan 16  
1187XR Amstelveen  
The Netherlands

### Israel

HP  
Indigo Division  
Kiryat Weizmann  
P.O. Box 150  
Rehovot 76101  
Israel

### APJ

HP  
Asia Pacific Pte Ltd  
No.3 Tuas Link 4 #02-01  
Singapore 637016

# Printing instructions



**NOTE:** To ensure a high quality print, use the CA494-04120\_PRINT.pdf version of this document.

| <b>COVER</b>        |  |
|---------------------|--|
| Paper weight        | 250 g  |
| Page size           | 8.27 x 11.00 in (21 x 27.94 cm)              |
| Printing            | HP Indigo digital press                      |
| Simplex/duplex      | Front cover - duplex<br>Rear cover - simplex |
| Color               | Full color - high resolution                 |
| Coating             | Lamination - shiny front and rear covers     |
| <b>INSIDE PAGES</b> |  |
| Paper weight        | 80 g   |
| Page size           | 8.27 x 11.00 in (21 x 27.94 cm)              |
| Printing            | HP Indigo digital press                      |
| Simplex/duplex      | Duplex                                       |
| Color               | Full color - high resolution                 |
| Coating             | None   |
| <b>FINISHING</b>    |  |
| Stitch              | 2 saddle stitch on left side                 |



© Copyright 2020-2021 HP Indigo Ltd.

This is an HP Indigo digital print.

[www.hp.com/go/indigo](http://www.hp.com/go/indigo)

