HP Site Flow App

Description

This app will allow you to use the HP Site Flow API from within Enfocus Switch without having to write custom software. With a token/secret that you receive from your HP Site Flow representative you can securely authenticate and make API calls to any of the API endpoints described in the HP Site Flow <u>documentation</u>. Use the app to submit orders into HP Site Flow, query statuses of orders or batches, complete production steps based on external information and more.

For more information on the HP Site Flow application and how it can help you automate your print production visit the <u>HP Site Flow</u> website.

Compatibility

This app was developed on Enfocus Switch 2022 Spring edition. It may work on older versions but has not been tested.

Compatibility third-party applications

Requires an active subscription HP Site Flow Pro, or HP Site Flow Light

Application discovery details

HP Site Flow is a cloud-based application, you will need an API token/secret from your HP Site Flow representative in order to access these APIs, but no local software other than this App is required on the Enfocus Switch server.

Connections

If you are setting up the application to query information, then no input connection is required. If you are pushing data to HP Site Flow (i.e. submitting an order) then this application requires a single input connector

The output connector is a traffic light connection with data success and error outputs.

Success – Will carry the response of the successful API call. JSON metadata will be attached to the job as well so response can be used without the need of a metadata pickup element. Any input files coming into the app will also be sent to the success folder.

Error – If the API call returns an error then this connector will contain the response of the failed call (when available). Certain errors will not return a response body (i.e. error code 523 Origin is unreachable). In this case an error will be logged but no output will be generated.

Properties detailed info

Explain the properties of the flow elements, tips or guidelines for users how to fill out these properties to get the app up and running smoothly.

Flow elements properties

• Name

- The name of this application element in the Switch flow.
- **Description** A description of this flow element
- **Dataset Name (Required):** The name that the attached JSON metadata will be given when an API call returns a successful response. 'responseJSON' by default.

• Execution method

This app can be setup in two main ways:

- 1. **Incoming Job**: This will trigger the app whenever a file is received in the input connector. This method is primarily used to submit orders to HP Site Flow where the input file would be the JSON payload of the order to be submitted. See the Submitting Orders section below for more details. This method can also be used when querying or updating a specific order, shipment or batch where the ID of that order is coming from upstream in the flow.
- 2. **Timer Fired**: This method will trigger the app at a given timer interval. This method is used for querying things like status of jobs or batches over time. Note that using the Triggers within Site Flow (i.e. Shipment Shipped) to push status updates to Enfocus Switch may be a more efficient method of getting updates.
- **Token (Required):** this is the API token that you will need to authenticate to the HP Site Flow APIs. You can request a token/secret from your HP Site Flow representative. If you are sending information to another company's Site Flow account, they will need to provide you with a set of API credentials. Note that token/secrets have roles associated with them. Certain API capabilities may not be available based on the role associated with the token/secret.
- Secret (Required): this is the API secret that you will need to authenticate to the HP Site Flow APIs.
- **Method (Required):** This is the method of the API endpoint you are trying to call. This will be POST, GET or PUT depending on what you are trying to do. For example, if you want to get a list of all orders based on the <u>API documentation</u>:

GET	/order List Orders

You would select "GET" from the Method drop-down list.

- Endpoint (Required): This is the endpoint of the API you are trying to call. These endpoints will all start with /api . In the same example API call from above you would enter /api/order in this property.
- Query String: If you wish to filter the API call to only respond with certain data you can enter a query string to add to the end of the URL. Support for query strings varies depending on the API endpoint being called, and not all are documented. Query strings begin with the '?' character and contain information on the filter to be applied. For example if you wanted to only query orders that were in a Complete state you could add the query string **?orderData.status=complete**
- **POST / PUT body source**: If you are making an API call which has data to be uploaded this property will determine where that data will come from.
 - o Incoming Job: This will take the input file (with a .json extension) and use it

as the body of the API call. This is most common when creating the JSON data of an order upstream using Make JSON or some other JSON generation tool.

- Multi-Line Text: Use a multi-line text field (with variables) to enter the JSON data. This is more appropriate for calls with simple JSON payloads like updating a shipment with tracking number/URL. Note that certain JSON data does not work with multi-line text editors in Switch. If you are having issues, try using an incoming file with the data instead.
- Define simple order data: This is only for submitting orders into Site Flow. This will enable a series of properties which are needed to create a very simple Site Flow order. This order data is limited to a single item with 1 or 2 components and a single shipment. Any order data more complex than this will need to be created upstream and added as an input file. Read <u>here</u> for more details on the JSON structure for HP Site Flow orders. The properties below only apply to order submission.
 - Destination Name: This is the PrintOS organization name that you are sending the order to.
 - Source Order ID: A unique identifier for this order which can be used to track it through production. Note that this value must be unique or the order will be rejected. The "App Generated" default option will generate a unique name based on the current date/time in Switch.
 - **Customer Name:** The name of the customer this order is coming from.
 - Item SKU: The SKU name in Site Flow of this item. This must exactly match a pre-defined SKU name in Site Flow for this to be a valid order.

SKUs



- Item Quantity: Quantity of this item to be produced for this order.
- **Component 1 Code:** The product component code for the first component in this order. This must exactly match the component code value in Site Flow for this to be a valid order.

Product Details	Component Content - Details		
Workplan	Component Code*		
Images	Content		
SKU	Pages		
Components	2		
Content	Width		
Details	210		
Attributes	Simplex		
Pre-Press			
Production			

- Component 1 Fetch File: If Site Flow needs to upload the asset for this component from a URL (most common) then select Yes, if using Local files within your environment (less common) select No.
- Component 1 Path: If Site Flow needs to upload this asset from a URL then enter the URL to that file here. Note that the URL must be accessible by the HP Site Flow application. If using Local files within your environment enter the relative path to the file within your environment. This will be combined with the JDF Link field in the Setup -> Press settings in HP Site Flow to create the full URL to the file location.
- Component 1 Attributes: This will set custom attributes for the first component in the Item. Attributes are a customizable input fields that can be defined as different types (Boolean, Number or Text) in Site

Add Attribute					
C Active					
Batchable					
Name*	Type*				
My Attribute Name	Select	Boolean	Lookup	Text	Number

Flow.

Product Details

To set attributes in the app provide one attribute per line in the multiline text editor. The name of the attribute should be first followed by a colon ':' character followed by the value of the attribute as shown in the image below:

 Edit multi-line text: Component 	ent 1 Attributes	×
Enter a description		
Width: 8.5 Height: 11 Substrate: 100 lb gloss text Laminate: true Love: "true"		
	ОК С	Cancel

Defining different attribute types in the app:

- Setting the value to 'true' or 'false' (like Laminate in the image above) will cause the app to convert this value to Boolean in the order JSON
- Values defined as numbers (like Width and Height in the image above) will be converted to a Number in the order JSON
- Numbers or Boolean values that have double quotes around them (like Love in the image above) will be set as a string (text) type in the order JSON
- All other values will be set as strings (text) types in the order JSON
- Component 2 Code: The product component code for the first component in this order. This must exactly match the component code value in Site Flow for this to be a valid order.
- Component 2 Fetch File: If Site Flow needs to upload the asset for this component from a URL (most common) then select Yes, if using Local files within your environment (less common) select No.
- Component 2 Path: If Site Flow needs to upload this asset from a URL then enter the URL to that file here. Note that the URL must be accessible by the HP Site Flow application. If using Local files within your environment enter the relative path to the file within your environment. This will be combined with the JDF Link field in the Setup -> Press settings in HP Site Flow to create the full URL to the file location.
- Component 2 Attributes: This will set custom attributes for the second component in the Item. Attributes are a customizable input fields that can be defined as different types (Boolean, Number or Text) in Site Flow.

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📀 Edit multi-line text: Compon	ent 1 Attributes	×
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- Values defined as numbers (like Width and Height in the image above) will be converted to a Number in the order JSON
- Numbers or Boolean values that have double quotes around them (like Love in the image above) will be set as a string (text) type in the order JSON
- All other values will be set as strings (text) types in the order JSON
- Ship To Name: The name of the person or company this order is to be shipped to.
- Ship To Address: Address of location this order is to be shipped to.
- Ship To Town: Town or City name of shipping location.
- Ship To Postcode: Postal code of shipping location.
- Ship To Country Code: Two letter ISO country code for the shipment (i.e. CN)
- **Carrier Alias**: The alias name of this shipping method as defined in Site Flow.

ANALYTICS	ORDERS	PRODUCTION	SHIPPING	PRODUCTS	SETUP		
Shippin	g Method	S					= Filter
SOURCE AC	COUNT				CODE	SERVICE	ALI <u>AS(</u> ES)
hp.hpinc	siteflow				customer	delivery	delivery

• **Use Proxy:** If you Switch server is behind a company web proxy select **Yes** to configure the app to send API calls through your proxy.

- Proxy Hostname:
- Proxy Port:
- Proxy Username:
- Proxy Password:
- Advanced Settings: API authentication between HP Site Flow and HP PrintOS APIs like Print Beat, Composer and Box are very similar, but have slight differences in the way the authentication headers are generated. By selecting Yes to Advanced Settings you can configure this App to use these PrintOS APIs. NOTE: This functionality has not been thoroughly tested and should be used only at your own risk!
 - **Use PrintOS Authentication:** Select **Yes** to modify the authentication headers and methods to conform to PrintOS API authentication.
 - Base URL: Change this URL to point to the PrintOS API you wish to make API calls to. You can find additional information on PrintOS APIs on the <u>HP</u> <u>Developer's Portal</u>

Outgoing connections properties

Outgoing connections are traffic light connectors with data success and error. Successful API calls will be sent to the success connector and error messages will be sent to the error connector.

The outgoing file generated by the app will be named using the Method used followed by the endpoint (minus the leading '/api/'). For example if you are sending a GET call to '/api/order' endpoint the output file will be named get_order_response.json.

If you have configured the app's Execution method to be 'Timer fired' then a unique string containing the date and time will also be added to the file name to avoid output files being overwritten. For example get_order_response_2023-10-05T1234567890Z.json.

The incoming job will also be sent to the outgoing success connection. The name of the incoming file will not be altered. You can route the response to another path in the flow by setting a connector to include files with a file pattern of '*response*.json', and set another connector to use 'All other jobs'.