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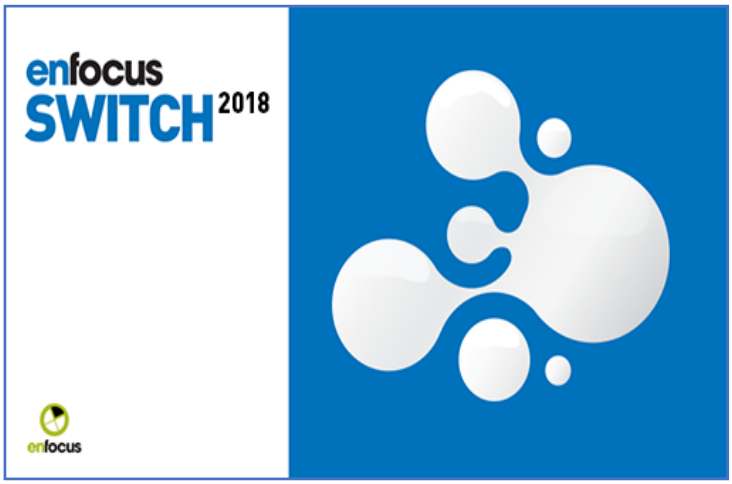
Switch 2018



"What's New" in Switch 2018.

This document lists all the new features, fixes, and improvements available in Switch 2018.

New features

Switch 2018 comes with features for everyone. A common theme for Switch 2018 and the planned update releases is production transparency: we focus on features that help you better monitor your production. In this release we added **a Job finder tool** for anyone who needs to quickly find (the status of) a job.

Another important new feature is the support that we added for new technologies to connect to external services: flow designers, script writers and integrators can now use **webhooks** in their flows and scripts.

Fixes and improvements

One thing we do often when building a flow is checking variables and metadata of sample jobs. This is now possible with a single click.

Adding and updating Private Data, a feature previously only available through scripting, is now possible on almost any folder in a Switch flow – without needing to script anything.

Based on the requests of our Job Client users we added a one-click action to **open jobs in their native application** for quick edits, an option to select and process multiple jobs at once and we made it easier to find jobs in Checkpoints.

Toon Van Rossum
Product Manager

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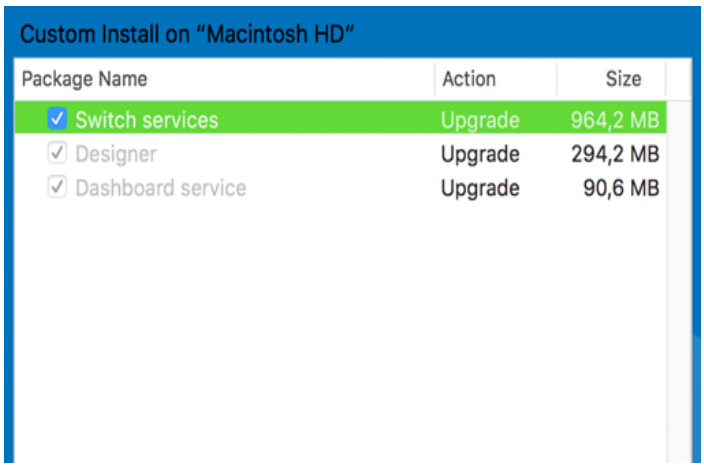


Improved Installation process

Switch custom installation

An extra step has been added to the Switch 2018 install wizard, providing you with the option to choose which Switch component(s) to install. For example, if a system will only be used to run a Remote Designer, it's no longer needed to install all Switch components; the Designer is enough.

Switch Services

This installs the actual processing part of Switch, aka the Switch Server. When installing the Switch Server on a system it is required to also install the Designer and the Dashboard Service. Only installing the Switch Services is currently not supported.

When do I need to install the Switch Services component?

This is the main installation of Switch. Install the Switch Services on the server on which Switch will be running. As this installation requires the two other components they will be automatically selected.

Switch Designer

If you need to connect to a remote Switch Server from your local system, it is enough to only install the Designer on your system. This makes it much more straightforward to use the Remote Designer.

When and where do I need to install the Designer component?

Install the Designer on all systems from which you want to connect remotely to your Switch Server.

Dashboard service

Switch 2018 comes with a Job finder tool that requires Switch to temporarily store extra data. We do support running the service on a separate system, but only if advised by our Support Team.

When do I need to install the Dashboard Service component?

Only install this service on a separate system when advised so by our Support Team.

New features

Job finder

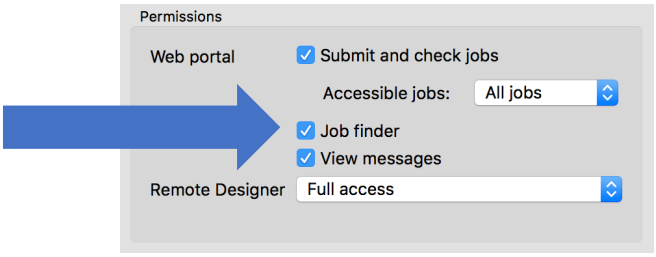
Job finder boards are customizable views to quickly get a general overview of your jobs, and to easily locate specific jobs in your Switch flows.

Building your first Job finder board

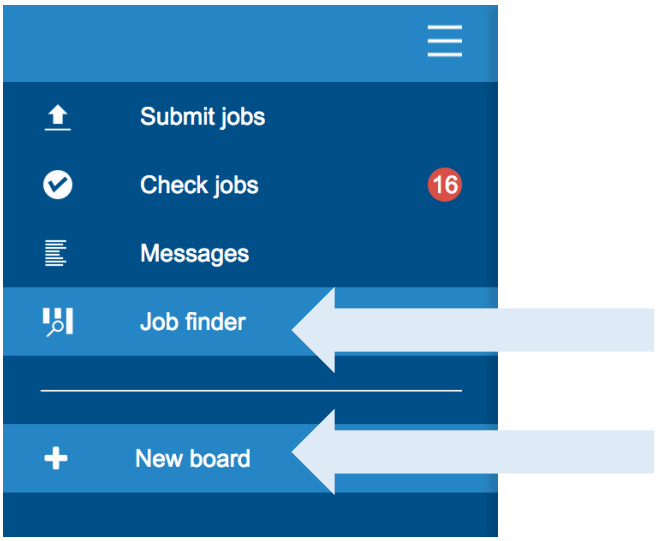
A useful example would be to build a board that lists the problem jobs of all your flows.

Proceed as follows:

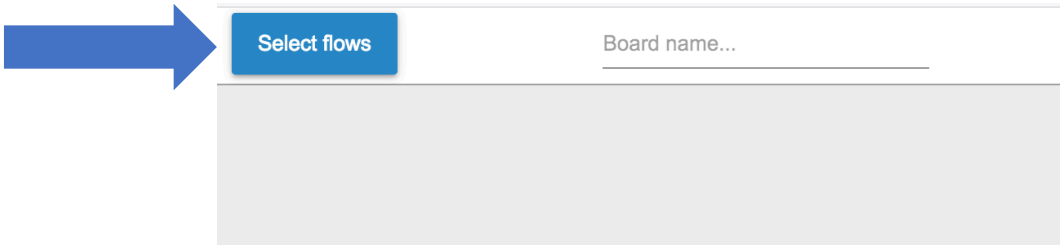
1. Make sure the user has permissions to create Job Boards.
    a. In Switch Designer in the Users Pane, enable the permission “Job Finder”



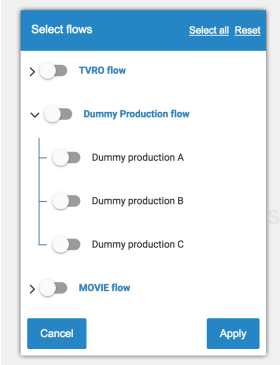
2. Log in to the Switch Web portal.
3. Select the “Job finder” item in the Navigation area in the Web Portal and choose “+ New board”.



4. In the empty board editor that appears, click the “Select flows” button in the top left.

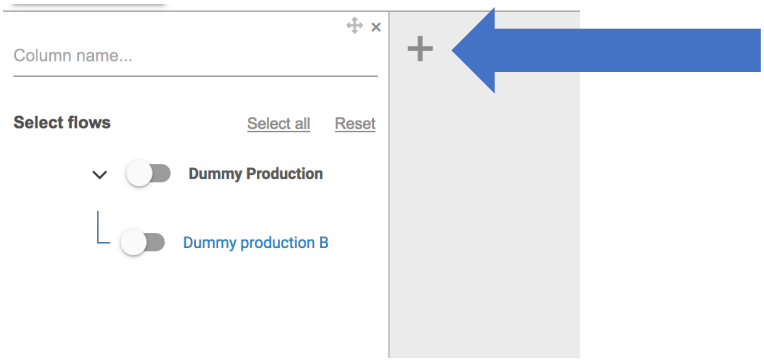


This button will display a dialog to select flows to use as a basis for the board.



5. Now select the flows you want to see on your board.
    a. You can either select all flows, select by group, or select flow-by-flow.
    b. For your first board, you may start with two or three flows, just to see how it works.
    c. Click “Apply” to confirm.

6. Next you should create columns. For each column you add you can make a sub-selection of the previously selected flows. For example, if you selected three flows for your board, you could make three columns, one for each flow.



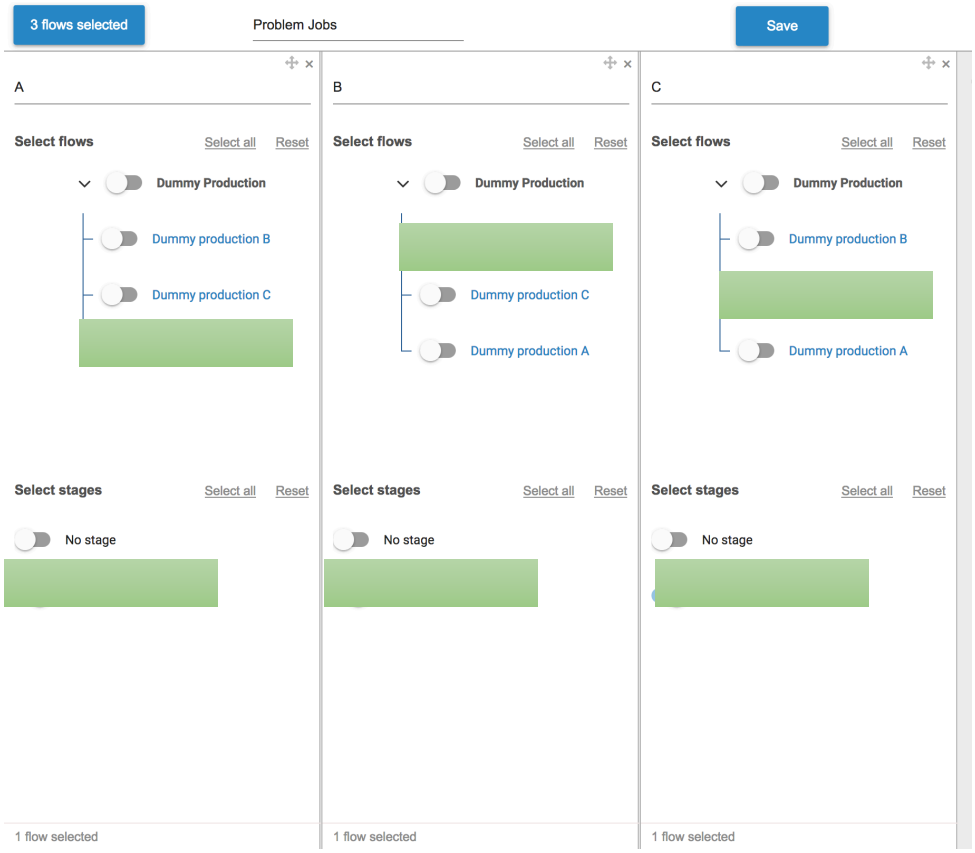
7. Next, you should for each column select the flow stages. In this example, you want to see all problem jobs, so select the predefined 'Problem jobs' stage.

   If you only just installed Switch 2018, only 2 options will be available in the Flow stages list.

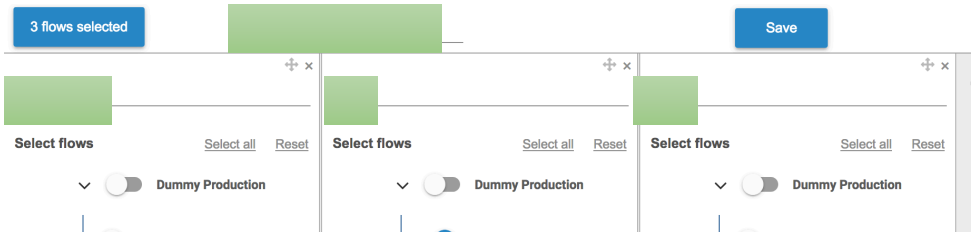
   - No stage
   - Problem jobs

If you have used stages before, you will see all stages that were used in the selected flow. Stages will be explained in detail in the next chapter.

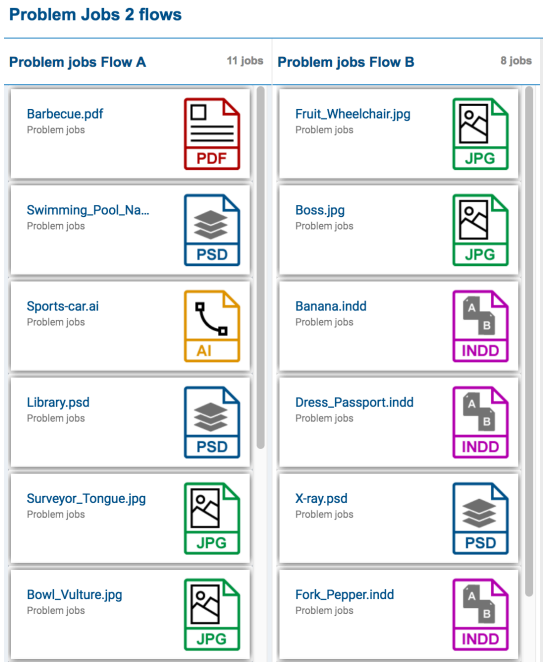
The following screenshot is an example of how your board could look.



8. Give all columns, and the board, a name; otherwise you won't be able to save!



9. Click the "Save" button.
   You will automatically switch to the "view" mode of the board and get an overview of all problem jobs of all three flows.



Flow stages

Although not required, it does make it easier to locate jobs in a Switch flow if you define stages in your Switch flows.

The beginning of each new flow stage is defined on a folder.

Property	Value
Name	stage example foler
Description	
Path	Auto-managed
Color	Yellow
Attach hierarchy info	No
Attach email addresses	
Attach email body text	
Attach job state	
Set job private data	None
Show in statistics	No

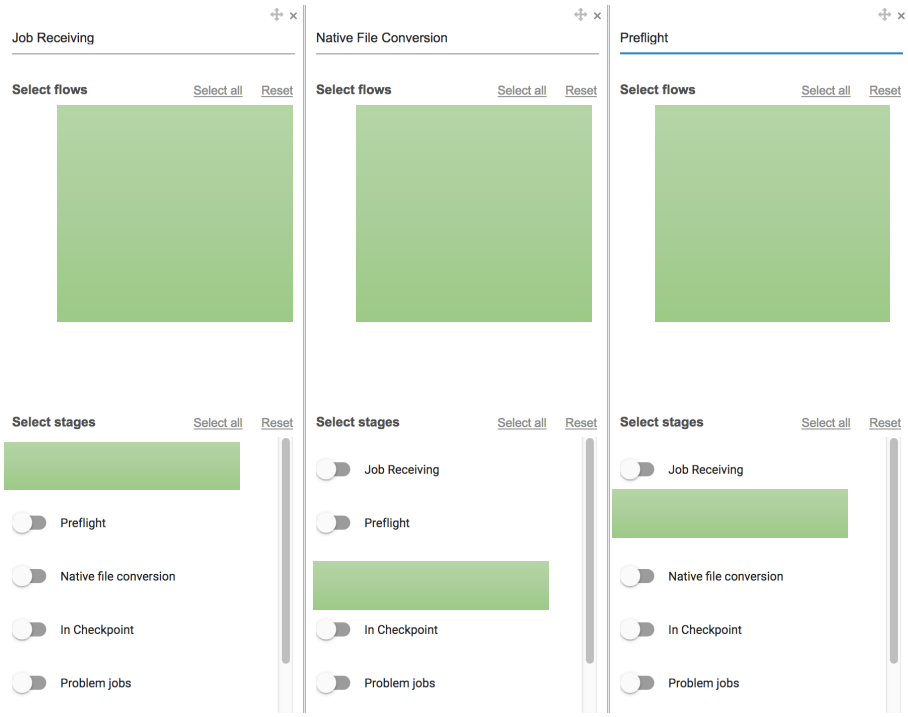
Stages do not have to be unique, not on flow level, not on Switch level. Re-using stages in multiple flows allows you to build boards listing jobs of different flows, but in the same stage.

For the next example I added following stages:

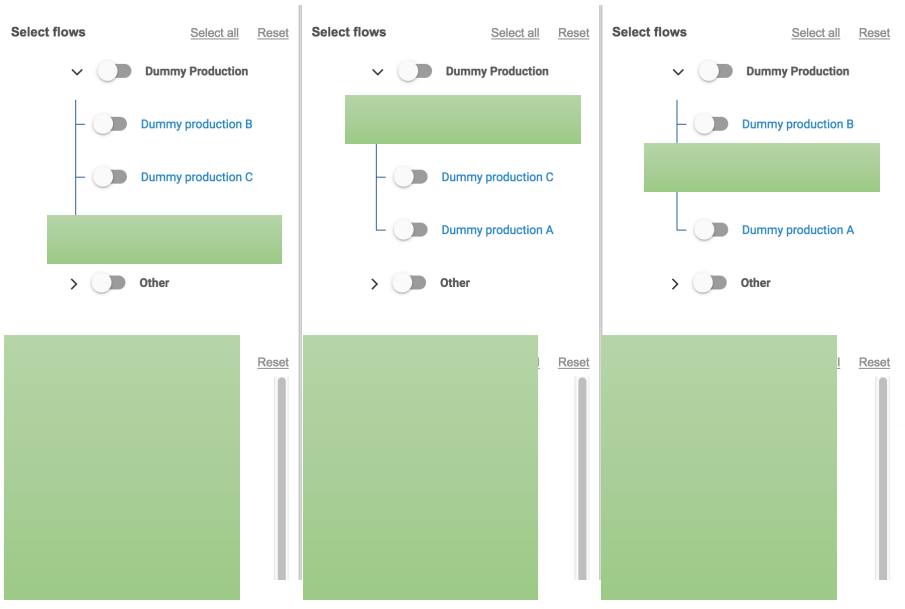
- Job Receiving
- File conversion
- Preflight
- In Checkpoint
- Timeout

This allows configuring the columns as follows:

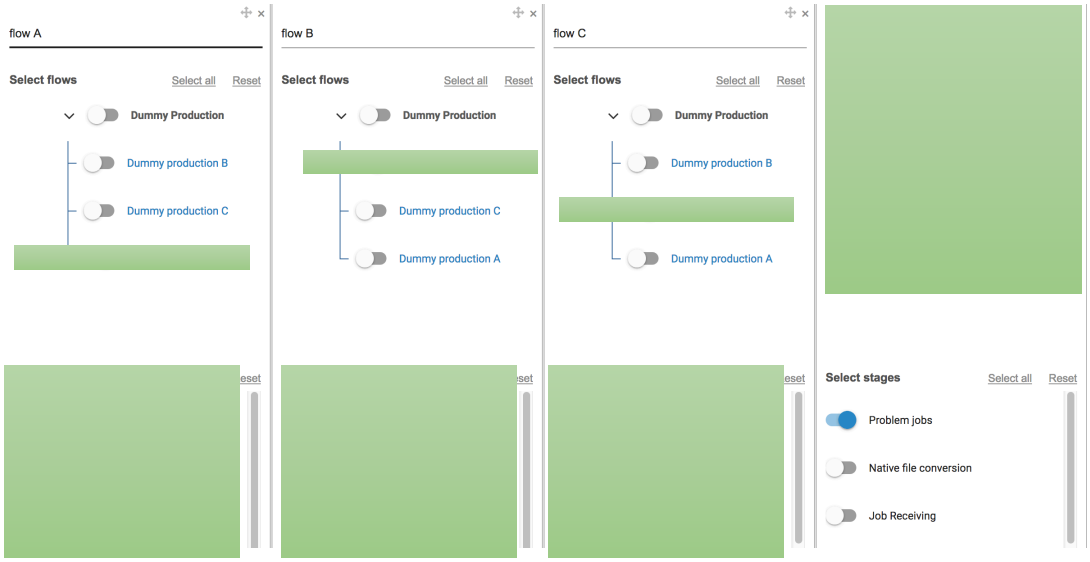
One column for each stage



Or one column per flow

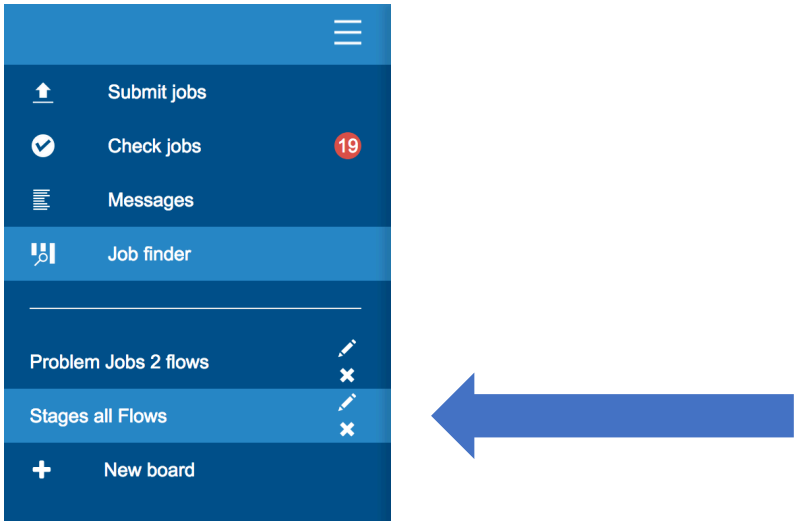


A combination is also possible

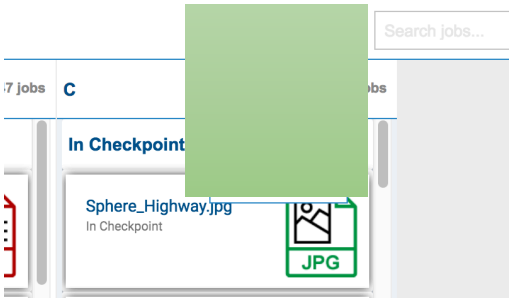


Viewing, editing and finding jobs

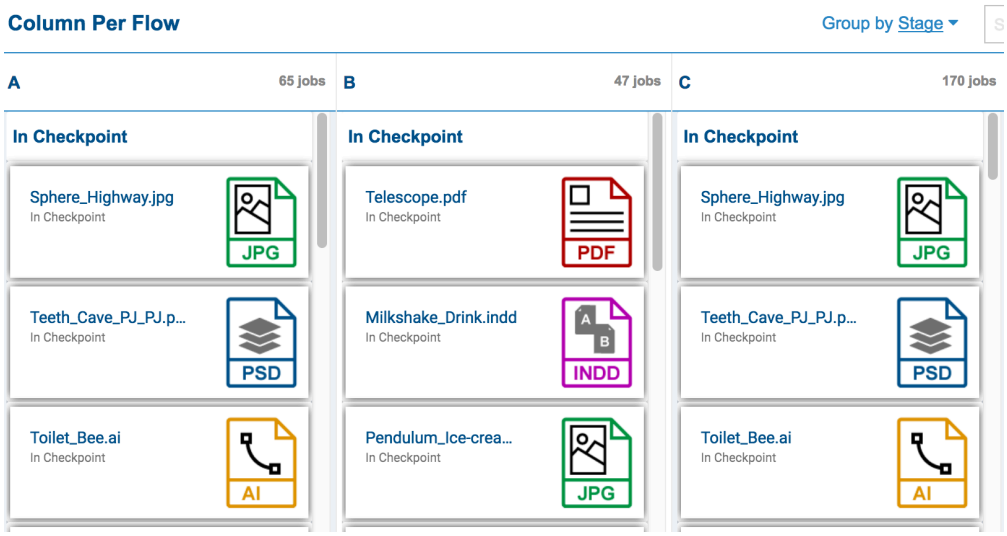
Once a board configuration is saved it will be listed in the Navigation area of the Web Portal.



When viewing a board you can change how the jobs are grouped inside the columns by selecting an item from the dropdown list in the Web Portal header.



This will sort the jobs according to what is selected.



The search box in the header allows you to search for jobs and get instant results.

Custom icons

If you often process file types for which Switch provides no icon, or if you don't like the icons provided by Switch, you can add a collection of your own icons.

On the system where Switch is running create a folder called "icons":

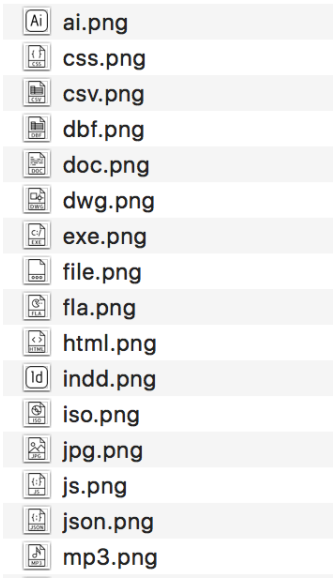
Mac:

/Users/username/Library/Application Support/Enfocus/Enfocus/SwitchSite/icons/

Windows:

AppData\Roaming\Enfocus\SwitchSite\icons

The content of this folder will be loaded when Switch starts.
Currently only PNG files are supported. The file name must refer to the file extension, for example psd.png (icon for Photoshop files), txt.png (icon to be used for text files), …



Note: When you have added custom icons, it is required to restart your Switch Server.

Webhooks

(also called a web *callback* or HTTP push API)

What are webhooks

Simply put, webhooks allow external applications or services to send notifications to Switch. This notification could (for example) contain the status of a job, or the location of a new job. Switch can then immediately react to this notification, for example by downloading a specific file.

This opens up a whole new world of possibilities for script writers and flow designers to integrate, expand, and simplify their solutions.

The main advantage of webhooks is that Switch does not need to make periodic calls to APIs while it's waiting for changes. Instead, APIs will call Switch informing that something interesting has happened.

Why should you care?

Webhooks are reshaping the Internet and the way *things* connect. As Switch is all about connecting *things* it only makes sense to add webhooks support to Switch and be part of the revolution.

Some features have a clear value for all our users. Some features are only clear for our more technical users. But even if you don't have the ambition to write scripts or configure complex connections, it's good to know that other people have access to the technology.

One of the strengths of Switch is the ecosystem, **Scripts** – written by integrators and customers, **Configurators** – written by our solution partners, **Apps** – written by everyone, and all **other Elements** – written by Enfocus. Giving all creators access to new powerful technologies translates into more and better elements for all Switch users.

Adding support for modern technologies is one way we protect your Switch investment.

How to use webhooks

The feature is available both as an element and in scripting (Javascript). More information can be found in the manual of switch or the scripting guide.

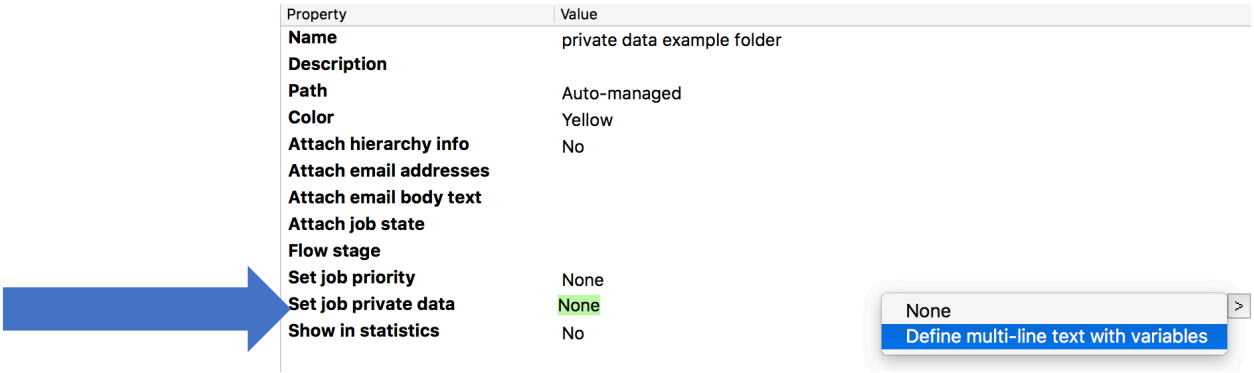
Private data

Private data already existed in Switch, but previously its usage was only available to script writers. Now everyone can add and update private data to jobs without the need of a scripting module.

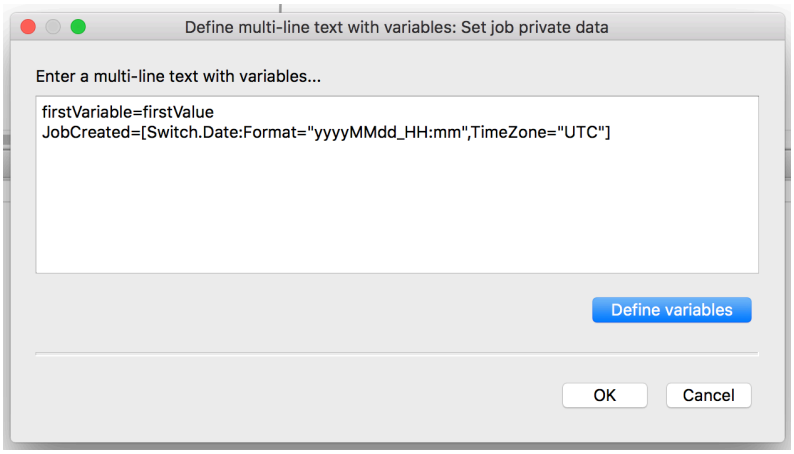
What is private data

Private data is a collection of variables linked to a job. Adding private data to jobs in one part of your flow allows you to make decisions based on these values later.

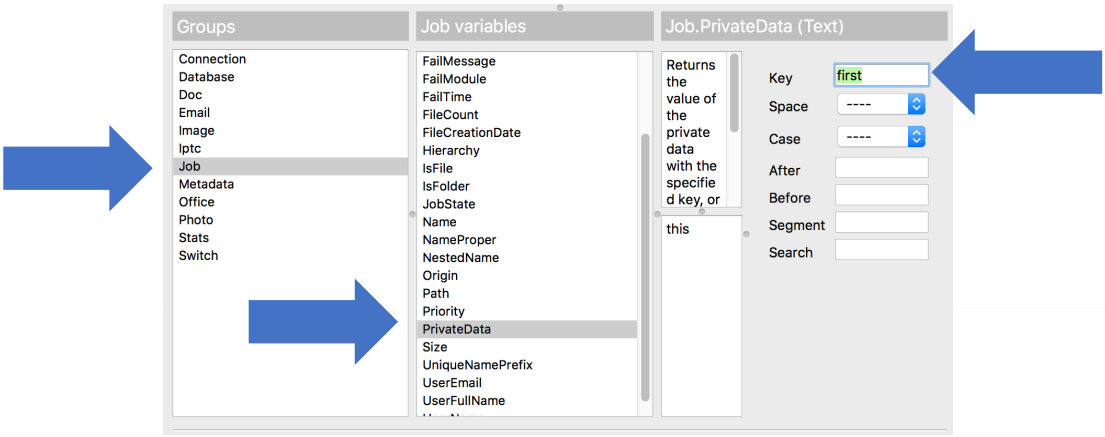
All folders, except for outgoing folders, can now add or update private data.



To add or update private data, strings and variables can be used to define both the name and the value.



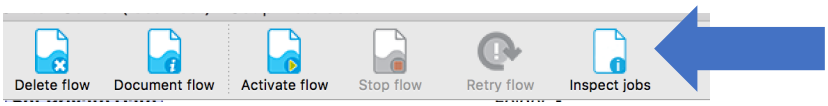
The value can now easily be used later in a flow.



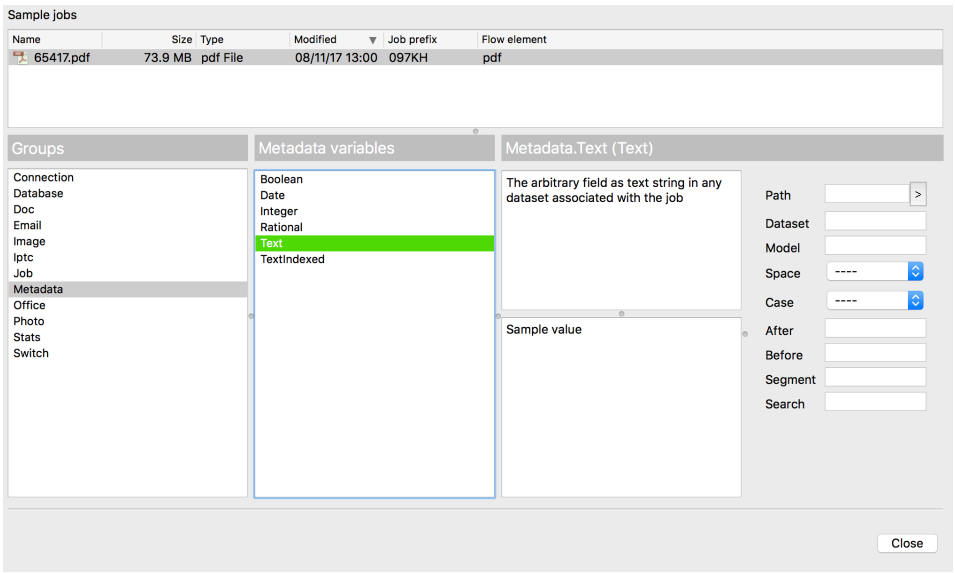
Improvements

One-click access to job variables and metadata

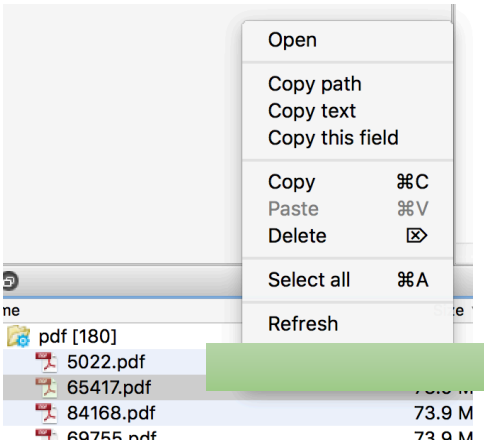
The header menu of the Switch Designer now includes an “Inspect job” button.



This button opens a dialog similar to the “inline text with variables” dialog (but read-only) with access to all jobs currently in the flow (to be used as sample jobs).



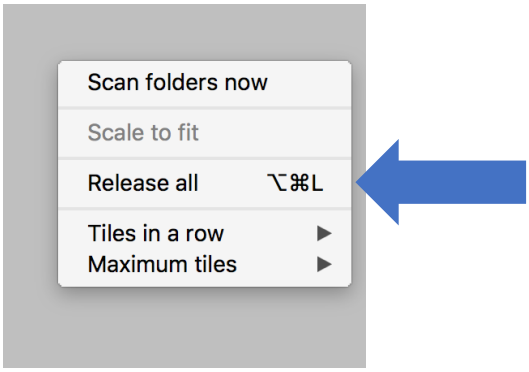
The same dialog is accessible through the Jobs pane, by right-clicking on a job or folder.



Note: Opening the Inject job dialog this way **only gives** access to the selected jobs.

One-click to release all connections

Right-clicking anywhere in a flow, running or not, gives you access to the "release all" action, releasing all connections currently on hold in this flow.



Note : This action can only be undone if the flow is not running.

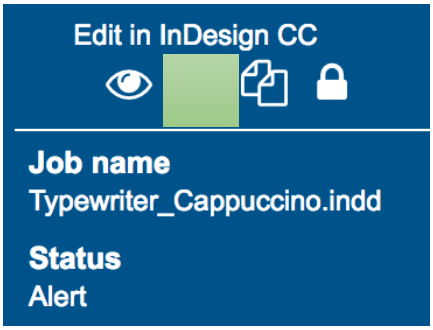
Job Client

One-click editing in native application

In previous versions, replacing a job in a Checkpoint was not straightforward: a user needed to download the file locally, open it, make the required edits, save the file and finally upload the edited job to the Web Portal. In Switch 2018, this is a lot easier: jobs can be opened in their native application with one-click, without having to leave the Web Portal.

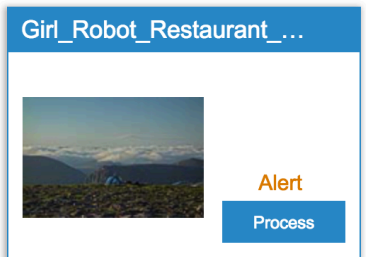
To make this possible, a small helper application needs to be installed on the system of the user: the Switch helper. This is a small lightweight service that is needed to detect and open the correct applications.

The Switch helper (Switch_helper.exe" for Windows and "Switch_helper.app" for Mac) can be downloaded from the Enfocus website.



One click search

The Check jobs view has a new search box with instant results in the top right corner of the Web Portal.

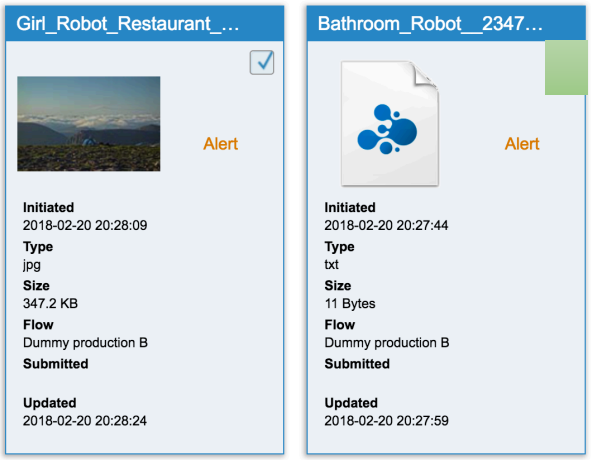


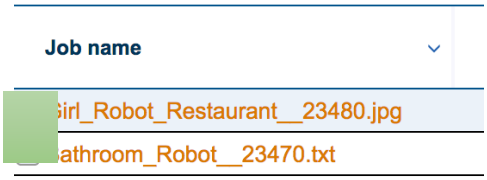
Multi-select and process jobs

Jobs in the same Checkpoint can now be selected and processed in one go.

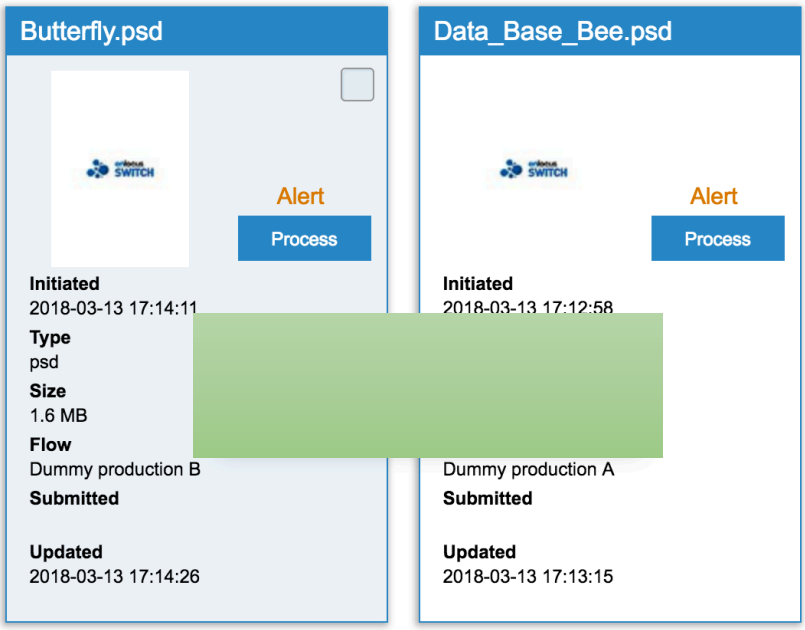
First you have to select the jobs that belong together:

- Either by using the checkbox:





- Or via the contextual menu when right-clicking a job:



Next, you should click “Process multiple” in the small dialog that appears in the bottom right corner of the Portal.

Status of deprecated and legacy technologies

From time to time it is needed to replace or update certain technologies in software. And as Switch is built on many different technologies, it sometimes comes to a point where we can no longer support certain technologies. When this happens we do provide a better solution and plenty of time to help our users to plan moving away from these technologies.

The following list gives you an overview of technologies that were deprecated in previous releases, including their status.

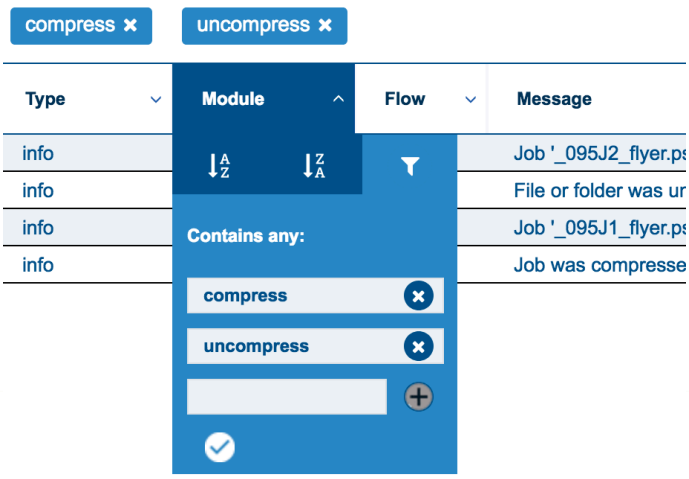
Please take the time to verify if this will influence your installation.

Compress and Uncompress tools (since Switch 13)

Although still available in Switch, we no longer do bug fixes or offer support for these elements.

How do I know if the Compress or Uncompress tools are used in my Switch flows?

Search for “compress” and “uncompressed” in the Module column of the Switch server messages.



If one of the elements is used in a flow, a message is logged each time a job is processed. The Flow column will tell you exactly in which flow the element is used.

Why and when will both elements be removed?

Both elements are based on outdated technologies and could not be updated with modern features. Instead, new elements were added (Archive and Unarchive) using more modern technologies.

Although unlikely, there is a chance with each operating system update that the elements will stop working. We advise everyone to use the Archive and Unarchive tools instead. We do verify the functionality with all Operating System releases, and will only remove the elements from Switch when the quality can no longer be ensured.

What to do in case one of the elements is used in my Switch flows

Start planning to gradually replace the use of these.

Applescript: (since Switch 2017)

(Only relevant if Switch is running on Mac OS).

The release of Switch 2017 made the use of Applescript deprecated. This means that Switch will still run, and execute, the scripts but the option to write new Applescripts is no longer available.

With the release of Switch 2018, Switch will still run, and execute, Applescripts but you should be aware that a future Mac OS release can break this functionality.

Note: External Applescipts, executed by the Mac Os Automator tool are not influenced by this.

Why and when will Applescript Support be removed

In the previous releases we updated large parts of the Switch architecture, one reason was to make better use of modern hardware. You might have noticed that since Switch 2017, Switch runs as a 64bit application.

The only processes still running in 32bit modus are the ones executing Applescript. The decision not to move these processes to the new 64bit architecture was made as the future of Switch will be built on the more powerful Javascript environment. Not maintaining both environments gives us a better and stronger focus on the future of our Javascript environment.

Switch will continue to run Applescript – however some of it depends on your Mac OS version.

Apple makes it clear that the next release, expected before the end of 2018, will no longer support 32bit processes.

How do I know if Applescripts are used in my Switch flows?

If you are running Switch on Mac only: Each time Switch executes an Applescript, it logs 2 messages:

Warning:
Warning when loading script package 'script.sscript': AppleScript is deprecated as of Switch 2017. Please use JavaScript instead.

Info:
Instructions on how to convert Switch scripts from AppleScript into JavaScript can be found in the corresponding article on the Enfocus website:

Search for one of these messages in the messages view to see if your installation makes use of Applescript.

What to do in case Applescript is used in your Switch flows

Start planning on updating, or replacing the scripts. Good to know is that a complete rewrite of the script is not needed.

If you did not write the scripts yourself, contact the vendor and ask them about their planned update of the script or, if needed, contact Enfocus Support for assistance.

If you wrote the script yourself, start by reading the support article “How to rewrite Switch scripts from AppleScript to JavaScript” on our website:

https://www.enfocus.com/en/support/known-issues-and-solutions#!/SupportPortalSolution?id=50157000000jwMnAAI

SwitchClient Desktop application (legacy application since Switch 2017)

With Switch 2017 we started adding Job Client features to the Switch Web Portal. The SwitchClient desktop application will still be supported until at least Switch 2019.

More information will be made available with every Switch release.

What to do in case the SwitchClient is used in your Switch flows?

First, make sure that the new Switch Web Portal supports all use cases. If you need more information, contact the Switch Product Manager: toonv@enfocus.com.

Persistent execution mode of Scripts (since Switch 2018)

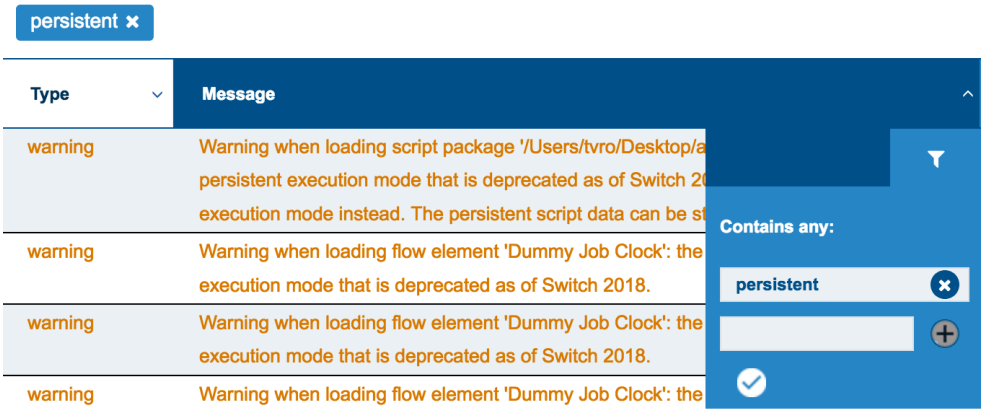
For historical reasons Switch supported 3 ways of executing scripts (Execution modes): Persistent, Serialized, and Concurrent.

There are 2 reasons why we made the decision to drop support for the persistent execution mode:

- Surveys and other usage data showed that less than 0.3% of the scripts use this mode.
- The use cases for persistent execution are also covered by the serialized execution mode.

Although our data shows that it hardly ever gets used there is a small chance that it's used in one of your flows.

To detect if this is the case you can search for the following message in your Switch messages:



What to do in case the persistent execution mode is used in my Switch flows

Converting the script to use the Serialized execution mode is a straightforward process and requires only a small change in the script.

For help and assistance in converting the script, please contact Enfocus Support, or the vendor of the script.

For more information regarding the Switch 2018 release, feel free to contact me.

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Thanks,

Toon Van Rossum

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