Split PDF Layers

Description
The app *Split PDF Layers* splits a PDF file into multiple PDF's based on its constituent layers. This can be done by splitting based on every single layer, or by combining the bottom layer with one of the upper layers. There is also an option to only remove layers without splitting the file.

The splitting behavior can be fine-tuned by defining a list of layers that should never be output and/or by defining a list of layers that should always be output. The fine-tuning can be based on the name of the layer or on its processing step property.

The app also adds private data to the outgoing jobs so it remains possible to know further in the flow from what base job the new ones are derived.

Compatibility
Switch 2019 Fall release. Windows or Mac OSX.

Compatibility third-party applications
This app relies on the presence of PitStop Server 2018 or higher. The presence of PitStop Server is automatically detected.

Connections
Split PDF Layers does not accept folders as input.

The app has outgoing traffic-light connections: Success, Warning and Error. The Warning connection is used when the file does not contain any layers, or when none of the layers present in the file require splitting. The Error connection is available but will very rarely be triggered.

The strategy to only remove layers without splitting only uses the Success connection.

Properties detailed info

Flow element properties
- **Strategy**: a drop-down list with three values
  - Split all layers
  - Split keeping the bottom layer (default)
  - Remove layers without splitting
    The "Remove layers without splitting" strategy only removes layers from the file. In this case one of the "Always remove these layers by name" or "Always remove these layers by processing step" properties must not be "None".
- **Always keep these layers by name**: a multi-line text editor where you can specify the names of the layers that should always be kept in the output files. This can be useful to make sure that a layer with for example a dieline will be in all the different outputs. It is possible to use variables when defining the names of the layers. The

defined layer names are case-insensitive. This property is ignored when the selected strategy is "Remove layers without splitting".
Default: None.

- **Always keep these layers by processing step**: layers can have a property called a processing step. It allows to specify that a layer contains for example a dieline without the name of the layer being important. The "Select from library" editor for this property lists all the processing steps defined in the ISO specification ISO 19593-1. This property can be combined with the previous one.
Default: None.

- **Always remove these layers by name**: a multi-line text editor where you can specify the names of the layers that should always be removed from the output files. This can be useful to make sure that for example a layer with dimension lines never shows up in any of the final output files for print. The defined layer names are case-insensitive.
Default: None.

- **Always remove these layers by processing step**: if the previous properties were clear, so will this one.
Default: None.

- **Remove empty layers**: this is a simple Yes/No property that determines whether or not empty layers will be removed or not. If not, then this can result in empty files being created.
Default: Yes.

- **Output name style**: a drop-down list with two values
    - Layer name as suffix
    - Layer index as suffix
  The output names will look like <original name>_<layer name or index>.pdf.
  Note: a layer name can contain characters that are not allowed in a file name. These are replaced by an underscore meaning that the file name may not contain the exact layer name. The characters that are replaced:
  / \ : * ? < > | " ' ^
  The index goes from the bottom to top, so 1 is the bottommost layer.
  This property is ignored when the selected strategy is "Remove layers without splitting".

- **Private data key**: the app adds the following pieces of private data to the outgoing jobs

Private data key	Stored value
<key>.JobID	The unique identifier of the input job from which the new output jobs have been derived.
<key>.JobName	The full name of the input job from which the new output jobs have been derived.
<key>.NumFiles	The number of output files that have been created on the basis of the input job taking into account the strategy and the the layers that are kept and removed.
<key>.LayerName	The name of the layer as defined in the PDF file. This name may be different from the one used in the output file as it could contain characters that are not allowed in file names.
<key>.LayerIndex	The index of the layer starting from 1 for the bottommost layer and so on. Note that the index in the file may be different as a result of the chosen strategy. When splitting all layers, the bottom layer will have the index 1, but when keeping the bottom layer, it is the layer above it that will have the index 1.

The private data is useful for knowing further in the flow what jobs have been derived from the same job. If you want to group all the split PDF's into a folder for example, you can use Assemble job with "Scheme – Ungrouped job" to accomplish this in an easy way. The only thing you will have to change is the value of the "Privated data key" property from "Ungroup" to "Split", the default for this app, or to whatever value you have chosen to use. This property is ignored when the selected strategy is "Remove layers without splitting".

Some special cases
Layers in PDF files are a bit different from the layers you know from design applications like Indesign or Illustrator. In PDF-technical terms they are not even called layers, but optional content groups (OCG's). This is not the place to go into too much detail, but here are a few special cases that can explain a "strange" behavior on the part of the app.

Not all objects in a PDF have to be on a layer. It is quite obvious that objects that are not on a layer will not get split and will not get removed, they will appear on every output file.

Objects can be on multiple layers. These objects will appear in several output files.

A PDF file can contain layers that are not recognized by Acrobat as layers. The app will not split those layers, but if there is only one such layer you will see the warning message that the file contains layers, but that none of the layers require splitting. PitStop has actions to detect such layers and to correct the situation, so in case you have such files you should correct them before sending them through the app.

In PDF the optional content groups can be structured at multiple levels. In Acrobat you see this as a collapsable list of layer groups with layers inside.
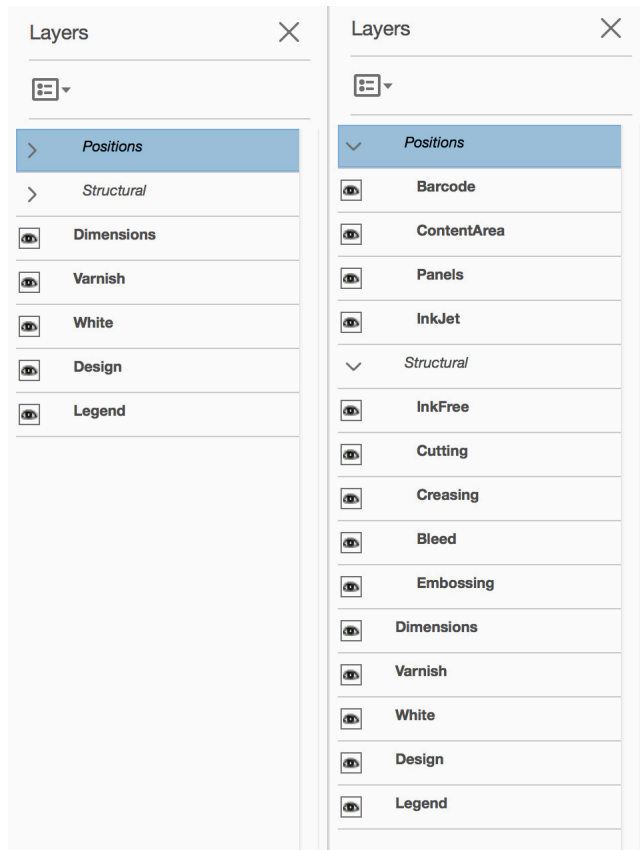
Only the bottom layers are taken into account. In other words, there will be no output for "Positions" or for "Structural".

There can be multiple layers in a PDF with the same name. This is not checked so multiple files with the same name will be created when using the layer name as the output name suffix. As long as the unique ID of the file is present that is not a problem, but when it is removed you could end up with one file overwriting another. This is easily addressed by making sure duplicate names are not overwritten in output folders, or by using the layer index as the output file name suffix.

Layers can have properties like whether they will print or not, whether they are locked or not. These properties are passed on unchanged.

Changelog
v2: fixed a bug when using the property "Always keep these layers by name". Only the first name was taken into account.