

Automatic imposition version 9

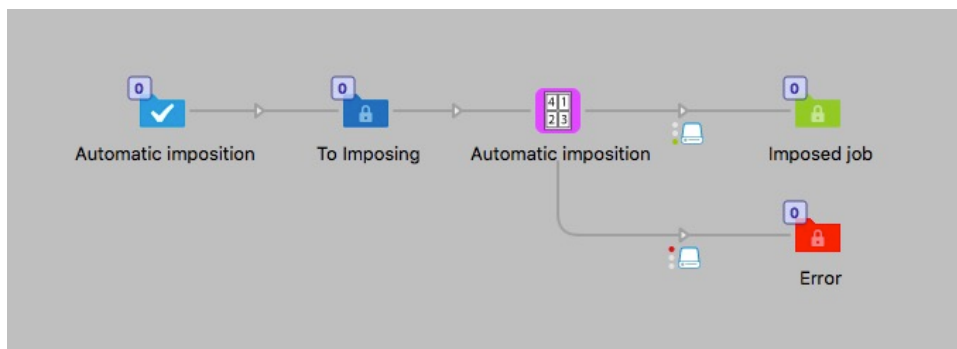
Description

Automatic imposition will do the most common impositions for your digital printer. It will automatically do folders for A3, A4, A5 or US Letter page sizes in either saddle stitch or perfect binding. For the formats A3, US Letter, A4, 210x210, A5, A6, A7, 99x210mm and business cards in the most common sizes, it automatically do step and repeat, N-Up and cut and stack imposing. Note that some other page sizes will work, if not, the job will fail. All settings for the app can be set by variables giving you the possibility to send jobs through the web portal client or other systems that can access the submit point. One example flow with a pre-configured submit point is part of the package.

This app uses callas pdfToolbox server as the imposition engine and consequently you have to have it installed on your Switch server.

You have a few settings besides the imposing settings themselves, you can add page boxes to the imposed area with trimbox and bleedbox. This can be useful for post processing of the imposed result. You can set the gap between the pages on the sheet and also set the bleed for the pages. There is also an option to add a slug line and for that you can add your own text to the slug line, it can also be rotated and positioned. Add press marks and a color bar. Also an option to set the bottom and left margin to the imposition on the sheet.

The imposed sheet sizes are SRA3 (460x320mm) or the larger B2 (530x750mm), if you need any other size of the resulting PDF it can easily be changed with a post processing profile in pdfToolbox or PitStop Server.



Compatibility

Switch 13 update 1 and higher. Windows or Mac OSX.

Compatibility third-party applications

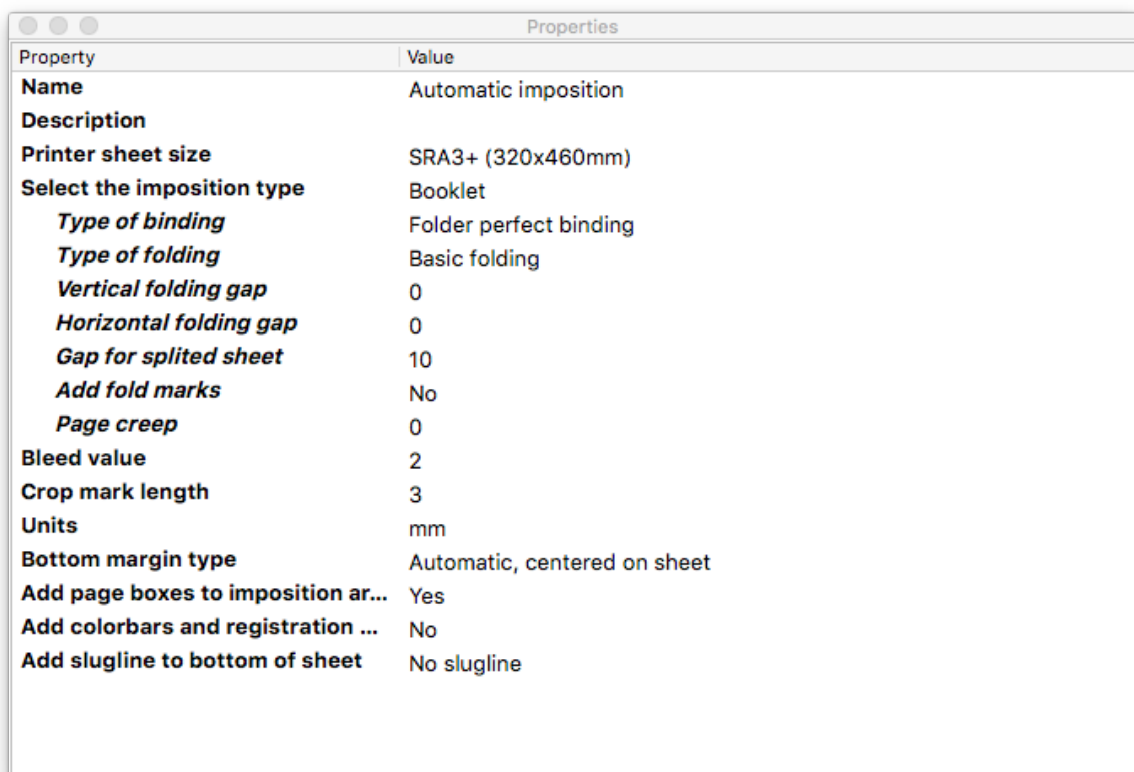
The app requires callas pdfToolbox server version 9.2 or version 10 to be installed on the system, it will use the CLI version of the program. The app will try to find the program in its normal installed locations, if that is not successful you can by right clicking on the app icon in the app section if the Flow elements and choosing "Set path to application..." to point to where the callas pdfToolbox server CLI can be found by the app. This will then be remembered by the app. This process is needed when pdfToolbox is updated to a new version.

Connections

This app can have several input connections and use the traffic light outgoing connections for Success or Error.

Properties detailed info

The app has several options and some are depending on other properties values. The default settings are as below.



| Property | Value |
|---|------------------------------|
| Name | Automatic imposition |
| Description | |
| Printer sheet size | SRA3+ (320x460mm) |
| Select the imposition type | Booklet |
| <i>Type of binding</i> | Folder perfect binding |
| <i>Type of folding</i> | Basic folding |
| <i>Vertical folding gap</i> | 0 |
| <i>Horizontal folding gap</i> | 0 |
| <i>Gap for splited sheet</i> | 10 |
| <i>Add fold marks</i> | No |
| <i>Page creep</i> | 0 |
| Bleed value | 2 |
| Crop mark length | 3 |
| Units | mm |
| Bottom margin type | Automatic, centered on sheet |
| Add page boxes to imposition ar... | Yes |
| Add colorbars and registration ... | No |
| Add slugline to bottom of sheet | No slugline |

Flow element properties

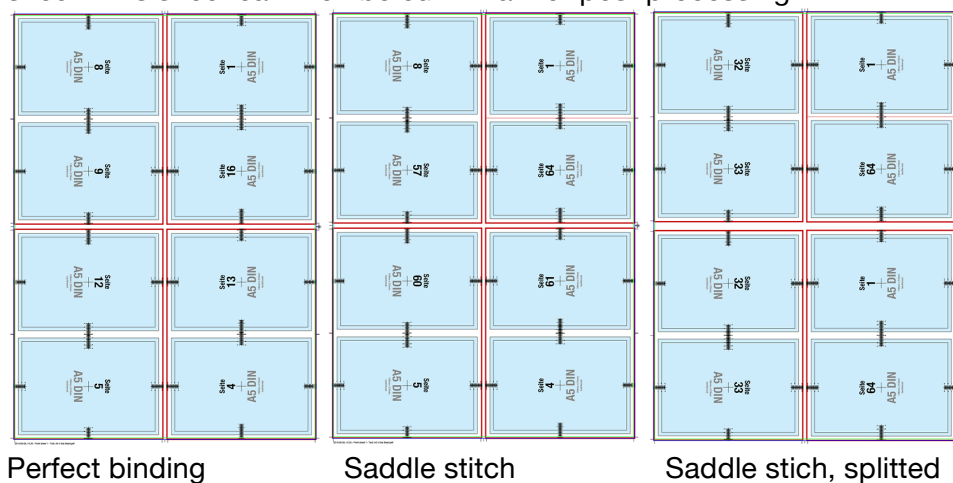
- Printer sheet size
 - Select between 318x458mm and 530x750mm
- Select the imposition type

| | |
|-----------------------------------|--|
| Name | Automatic imposition |
| Description | |
| Printer sheet size | 318x458 |
| Select the imposition type | <div> <div>✓ Booklet</div> <div>Small cards</div> <div>Step and repeat</div> <div>N-up</div> <div>Cut and stack</div> </div> |
| Type of binding | |
| Vertical folding gap | |
| Horizontal folding gap | |
| Gap for splitted sheet | |

- **Booklet** (default). You have three extra options when this is selected. Type of binding, Dropdown with values Folder saddle stitching (the default setting), Folder saddle stitching, splitted or Folder perfect binding.

| Property | Value |
|-----------------------------------|--|
| Name | Automatic imposition |
| Description | |
| Printer sheet size | 318x458 |
| Select the imposition type | Booklet |
| Type of binding | <div> <div>✓ Folder saddle stitching</div> <div>Folder saddle stitching, splitted</div> <div>Folder perfect binding</div> </div> |
| Vertical folding gap | |
| Horizontal folding gap | |
| Gap for splitted sheet | 10 |

The setting “Folder saddle stitching, splitted” will only work on the larger sheet and with French folding. It will create two impositions as 2-up on the sheet. This sheet can then be cut in half for post processing.



Type of folding

Drop down menu with choices of **Basic folding** (default) or **French folding**. Note that in some cases the French folding is not possible and it will change to the Basic folding.

Vertical folding gap or **Horizontal folding gap** In the Booklet option there is this new property, it can be set for vertical folding gap or horizontal folding gap. The values will only be used when they are relevant depending on the type of imposition scheme that is used. Default = 0. Note that decimal delimiters must be with a dot, not comma.

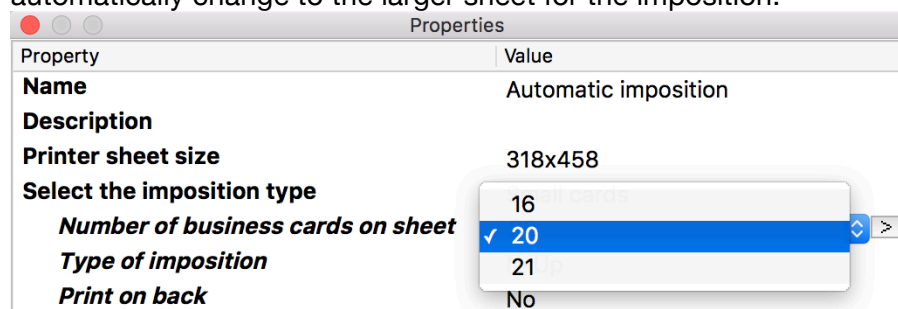
Gap for splitted sheet For the splitted option there is a special property for the splitted gap. Even though the value is selectable in the other types of binding its value will only be used when the splitted scheme is used. Default = 0. Note that decimal delimiters must be with a dot, not comma.

Add fold marks Dropdown with Yes or No, default = No. You now have the option to add Folding marks to the imposed layout.

Page creep Set the value of the paper thickness and the page creep will be calculated and applied to the binding, default = 0. Note that if “Add page boxes” are set to “Yes” they will be set to the smallest value for the imposed layout. Note that decimal delimiters must be with a dot, not comma.

- **Small cards.** This is the choice for business cards or A7 pages (or slightly larger). When selecting this option you have three more options.

Number of business cards on sheet, Dropdown with values 16, 20, 21, 56, 60 or 72. Note that A7 pages will only work with the value of 16. Default value = 20. Note that Small cards will only output to the smaller sheet size for 16, 20 or 21 cards per sheet and on the larger sheet for the others. If for example the small sheet is selected together with 60 cards per sheet it will automatically change to the larger sheet for the imposition.



Type of imposition, Dropdown with values N-Up, Step and repeat or Cut and stack. Default = Step and repeat.

| Property | Value |
|--|---|
| Name | Automatic imposition |
| Description | |
| Printer sheet size | 318x458 |
| Select the imposition type | Small cards |
| Number of business cards on sheet | 20 |
| Type of imposition | <div> <input checked="" type="checkbox"/> N-Up <input type="checkbox"/> Step and repeat <input type="checkbox"/> Cut and stack </div> |
| Print on back | |
| Vertical page gap | |
| Horizontal page gap | 0 |

Print on back, Dropdown with Yes or No. Default value = No

For some imposition formats the backside has to be rotated to work properly in the press. If set to “Yes” the backside will be rotated. For N-Up and Cut and stack the odd pages in the job file are considered to be front pages and even pages to be the back side.

| Property | Value |
|--|--|
| Name | Automatic imposition |
| Description | |
| Printer sheet size | 318x458 |
| Select the imposition type | Small cards |
| Number of business cards on sheet | 20 |
| Type of imposition | |
| Print on back | <div> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </div> |
| Vertical page gap | 0 |

- **Step and repeat**, the same page will be repeated over the sheet.
- **N-Up**, all the pages will be placed on the sheet or sheets if they exceed the number of pages per sheet.
- **Cut and stack**, the pages will be arranged so that pages turn up in the page order down through the stack of sheets. It will be distributed over the sheet so that you get a number of stacks for the minimal number of printed sheets.
- **Print on back**
 - Print on back, Dropdown with Yes or No. For some imposition formats the backside has to be rotated to work properly in the press. If set to “Yes” the backside will be rotated. Default value = No, For N-Up and Cut and stack the odd pages in the job file are considered to be front pages and even pages to be on the back side.
- **Vertical page gap**
 - The distance between each page vertically on the sheet. This property is not used in Booklet. Default = 0. Note that decimal delimiters must be with a dot, not comma.
- **Horizontal page gap**
 - The distance between each page horizontally on the sheet. This property is not used in Booklet. Default = 0. Note that decimal delimiters must be with a dot, not comma.

- **Bleed value**

- The value of the bleedbox, this will give you bleed between pages if you have set the imposition to have gaps between the pages. It will also set this value as bleed to the outside of the imposed layout. If the gap values are larger than 2 times the bleed value there will be a white gap between the bleeds. If the gap value is less than the bleed value the bleed between the pages will be half of the gap value.

Note that if the gap value is too large the imposition might fail because the sheet size isn't large enough.

Note that this value is not dependent on the job files eventual bleed value. If it has more bleed than this property that bleed will be cropped. If the pages have no bleed there will still be a gap the size of this property value.

Default = 2. Note that decimal delimiters must be with a dot, not comma.

- **Crop mark length**

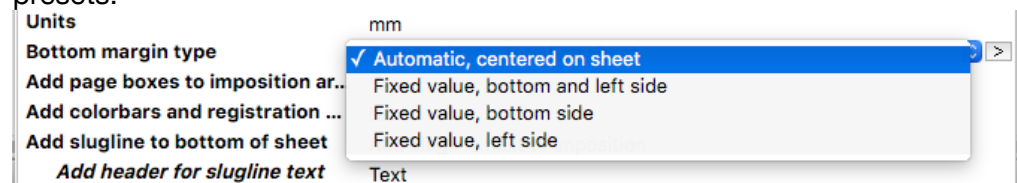
- You can set the length of the crop marks that are placed around each page outside of the bleed box on the imposition. If the gap between the pages are smaller so that there is no white space in the gap there will be no crop marks.

- **Units**

- The units used for the Page gap, Bleed and Crop mark length properties. Dropdown menu with the selection of mm, inch or points. Inches must be entered in decimal numbers, like 0.125 for 1/8". Note that decimal delimiters must be with a dot, not comma. Default = mm

- **Bottom margin type**

- You can set a margin to the bottom and/or the left of the sheet. This makes it easier to send the sheet to cutting machines that work with defined presets.



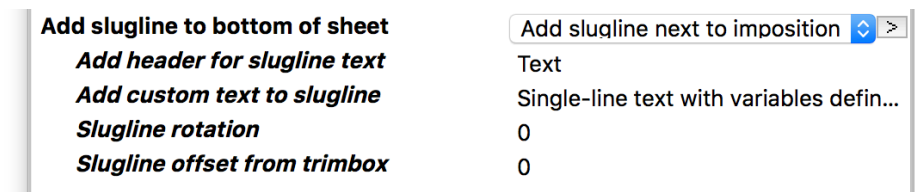
| | |
|----------------------------|-----------------------------------|
| Bottom margin type | Fixed value, bottom and left side |
| Bottom margin value | 10 |
| Left margin value | 10 |

- **Automatic, centered on sheet**
This is the same as in previous versions, the imposition is placed centered on the sheet. This is the default setting.
- **Fixed value, bottom and left side**
With this option you can set the left margin and the bottom margin to the imposed pages. Default value for both margins is the value of 10
- **Fixed value, bottom side**
Set the bottom margin value, default is 10. The left margin will be automatic centering the imposition side ways.

- **Fixed value, left side**
Set the left margin value, default is 10. The bottom margin will be automatic centering the imposition vertically on the sheet.
- **Add page boxes to imposition area**
 - This property will add a trimbox and bleedbox around the imposed layout.
Dropdown menu with Yes or No, Default = Yes
- **Add colorbars and registration marks**
 - Dropdown menu with Yes or No, default = No.
If set to Yes registration marks will be added on each side of the sheet and a colorbar with CMYK patches in 100, 80, 40 % values and RGB patches will be placed on the right edge of the sheet. When using the smaller sheet size some impositions will be too wide for the colorbar to fit on the sheet. In this case the job will fail and an error message will be sent to the log.
A separate pdfToolbox Fixup will be supplied that has the colorbar and the registration marks, if you need the colorbar in another way on your sheet you can turn the colorbar off in the app properties and add the colorbar from the supplied Fixup in a separate step using pdfToolbox in Switch.
- **Add slugline to bottom of sheet**
 - You have the option to add a slugline to the sheet,
The standard information in the slugline is the date and time of when the imposed PDF was created and the sheet number. You can also add text in the property field or from variables in Switch.
The options you have in the dropdown are: No slugline, Add slugline and position, Add slugline next to imposition. Default = No slugline.
 - **No slugline**, no slugline will be added to the sheet.
 - **Add slugline and position**, this option will add a slugline and give you the option to position it on the sheet, the values are calculated from the lower left corner of the sheet.
When this option is selected you can add your own header and text that is placed after the sheet number in the line.
You then get the values for the position, vertical and horizontal.
You can also set a rotation angle for the slugline, 0 or 90. With the value 0 the slugline will be placed under the imposition, if the value the slugline will be rotated and placed on the left side of the imposition.

| | |
|--|---|
| Add slugline to bottom of sheet | Add slugline and position |
| <i>Add header for slugline text</i> | Text |
| <i>Add custom text to slugline</i> | Single-line text with variables defin... |
| <i>Slugline vertical position</i> | 2 |
| <i>Slugline horizontal position</i> | 2 |
| <i>Slugline rotation</i> | <div> <div>✓ 0</div> <div>90</div> </div> |

- **Add slugline next to imposition**, this option will place the slugline a short distance outside of the impositions trimbox.
When this option is selected you can add your own header and text that is placed after the sheet number in the line. You can also set a rotation angle for the slugline, 0 or 90. With the value 0 the slugline will be placed under the imposition, if the value is 90 the slugline will be rotated and placed on the left side of the imposition.



Slugline offset from trimbox, will let you adjust the distance of the slugline from the trimbox. A negative value will move the slugline closer to the trimbox.

Private data

There are some metadata generated by the app that you can reach as private data.

For some type of errors the app will catch the error messages and embed it as Private data in the job. The Private data key is: *"errorText"* [Job.PrivateData:Key="errorText"]

You can also get information on how many sheets that your imposition will print in three private data entries.

- **Private data key:** *"Number of printed sheets"* [Job.PrivateData:Key="Number of printed sheets"] will give you the number of prints that is needed for this job.
- **Private data key:** *"Number of sheets"* [Job.PrivateData:Key="Number of sheets"] is the number of paper sheets that is required for the job, if the option to "Print on back" is selected you will get the correct number of paper sheets needed for the job.
- **Private data key:** *"Number of pages on sheet"* [Job.PrivateData:Key="Number of pages on sheet"] will give you that value.
- **Private data key:** *"Sheet size"* [Job.PrivateData:Key="Sheet size"] will give you the result "318x458" or "530x750" which can be useful for routing jobs. For example if you want to impose the smaller sheet on the larger sheet.

Preparation of jobfiles

For some type of impositions you have to prepare the order of pages in the PDF that is going to be imposed. If not, your result might not be as expected.

Error checking

The app will do some checking on the incoming PDF file before the app will do anything.

Following errors will be reported with job failed and output sent to the error connection.

- If the file is not PDF
- If the pages in the PDF have different sizes.
- If the pages in the PDF have different orientation.
- Some page sizes are not supported.
- Other page sizes than A3,A4, A5, Tabloid or US Letter is used for Booklet. There is a small tolerance that is accepted from the standard sizes. Which sizes that are allowed is also dependent on the sheet size.
- If a variable with the wrong value is used in one of the drop down menus. Only values that exist in the drop down menus are accepted.
- If a page size is too large for the selected imposition type.
- If the slugline don't fit on the page.
- If the imposition is too wide to give space for the color bar.
- Job failed to process.

All these errors will be stored as private data for use in other systems.

The Private data key is: `"errorText"` [Job.PrivateData:Key="errorText"]

Following warnings will be reported as information only.

- For certain options like the "Small cards" it will not be imposed on the large sheet. Instead you will get the output to the smaller sheet size.
- Some special pages sizes will not be imposed on the large sheet but will output on the smaller sheet size.
- For some page formats the splitted binding is not supported. They will instead be imposed as normal Saddle stitching.

Example flows

An example flow is provided with a pre-configured submit point and the app has all the variables connected to the metadata fields in the submit point. This flow can be used as is or implemented in a larger flow. Just copy and paste the elements to your other flow.

Note: The app must be installed before you import the flow.

One example flow is provided where you can impose the smaller sheet on the larger sheet.

Variables

Note that if you use variables to send the property values to the app, the properties that are set with dropdown menus in the app must have the exact same values that the dropdown menus have. If not the job will fail.

Extra files in the package

- Automatic imposition with submit point.sflow
 - This is a flow with a preconfigured submit point that uses all the variables available to the app.
- Add registration marks and colorbar small sheet.kfpx
 - This pdfToolbox profile adds registration marks and a colorbar to the small sheet size. The settings in the fixup give you the possibility to place the objects at your choice.
- Add registration marks and colorbar big sheet.kfpx
 - See profile above.

Version history

- Version 2
In version 2 one more Private data key was added to give the number of pages imposed on the sheet.
- Version 3
Minor Property value bug fixed.
- Version 4
Adjustment for new version of pdfToolbox.
- Version 5
Major upgrade with larger sheet size as an option. Folding marks, Folding gaps and Color bars with registration marks can now be added. New imposition scheme for the larger sheet splitted so you get two impositions on the sheet that then can be cut in half to fit you post processing. Creep can be applied to booklet impositions. For the booklets you can chose between French or standard folding. Note that for some configurations French folding is not possible and the imposition will be done with standard folding.
- Version 6
Compatibility issue with pdfToolbox version 10 fixed.
Minor adjustments to some imposition setups.
Renaming of the sheet size property values.
SRA3+ sheet size is now 320x460mm, not 318x358mm as in previous versions.
- Version 7
Minor issue fixed with booklet imposition with standard folding with 2 pages on the sheet when the slugline was rotated 90 degrees.
- Version 8
Minor adjustments of detection for some odd page sizes.
- Version 9
Added function to position the imposition on the sheet. You can set distance from the bottom and/or the left sides of the sheet.