

Ultimate Impostrip[®] 2023.2 Release Notes

Windows & macOS

2023.2
November 2023



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Introduction

Welcome to Ultimate Impostrip 2023.2

We are delighted to be able to release Ultimate Impostrip 2023.2 to you.

Highlights of this release include:

- Processing Speed Improvements

- A major update to our AutoNesting technology

- Generic Camera registration marks for any Cutting Table

- LaneFlow, a new template-less Lane-based Ganging Imposition Type

- Support for CSV files in the Universal Mapper

- Increased control of Spot Colors and PDF Layers with the new Color Merging Module

- Improvements to Marks and working with Marks and Barcodes

- Improvements to Output File Naming

- Major changes to the Batching functionality

- Plus, lots of other improvements and fixes

Regards

The Ultimate TechnoGraphics Team

News

Windows Server 2012 and 2012 R2 reaching end of support.

<https://learn.microsoft.com/en-us/lifecycle/announcements/windows-server-2012-r2-end-of-support>

Please note that the above operating systems are reaching end of life at the end of 2023.

The 2023 versions of Ultimate Impostrip will be the last to support these versions of the Windows Operating System!

You will not be able to install future versions of Ultimate Impostrip on these platforms.

We would therefore advise any customers using these platforms to plan to migrate to a newer operating system to maintain their production integrity.

macOS Installer – Operating System Check

The macOS version of Ultimate Impostrip now has an operating system version check to ensure that the application cannot be installed on operating systems which may cause issues and which are not supported. The windows version already contains such a check.

Important: The minimum required version for Ultimate Impostrip 2023.2 is macOS 11.7 Big Sur.

Important notes for your attention before you install!!!

One: A bug has been fixed in this release related to the positioning of custom marks. This only relates to custom marks where the PDF Media Box and PDF Crop Box are different sizes. In this scenario the defined position was not honored as there was a double compensation calculation happening.

If you have a custom PDF Mark that has these characteristics, you may find that the mark is now placed in a different (more accurate) position on the imposed output to previous Impostrip versions.

Two: Also, within this Ultimate Impostrip version there has been an improvement in accuracy of the text marks placement, this is particularly relevant to text that is positioned ranged right and centered, but also improves all other points of the nine-point placement control.

Any movement of text compared to the previous Ultimate Impostrip last version should be small, but the longer the text string the larger the movement. This change now allows much more accurate placement of text marks.

Three: AutoFlow "Minimum Gutter Size for Cut Marks". This option has been removed as it is no longer needed, the gutter size and marks are now handled in the normal way. You should ensure that your Cut Marks and particularly their distance from the Trim is not larger than your defined Gutter, or the Marks will not appear on the printed sheet as they will be clipped away.



IMPORTANT: You should also ensure that 'MinimumGutterSizeForCutMarks' is removed from any AutoNesting XML for Redirection XML files as this instruction is no longer recognized by the Hot Folder Schema validation and such files will error.

Four: Scalable Split and Output, the Signatures Split Limit value is now respected in the Chunk Size.

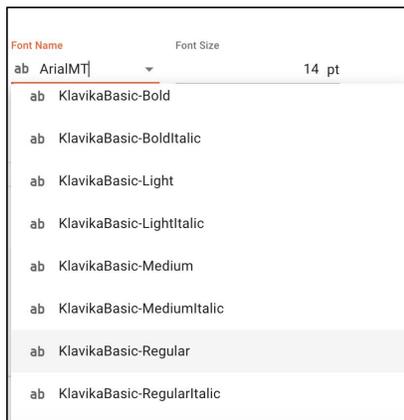
New Features and improvements

Processing Speed improvements

This version of Ultimate Impostrip has undergone some internal re-engineering which has resulted in a faster per file processing speed. This improvement is applicable to all automated versions of Ultimate Impostrip.

Fonts – System fonts now available

The fonts available in Ultimate Impostrip were up until this version a fixed hardcoded set. In this version you are now able to access all available system fonts on your operating system to use within Ultimate Impostrip for marks etc. This includes fonts that are from the Adobe Creative Cloud. It's recommended to check the output of all intended fonts before using them in production.



Dynamic Media Size now works with XML for Redirection

It is now possible to specify Dynamic Media Size using XML for Redirection. This functionality is available for all Imposition that use the Dynamic Media functionality with XML for Redirection.

Dynamic Height

```
<PaperSize Dynamic="true">
  <Width Value="20" Unit="INCH" />
  <Height Value="14" MinValue="10" Unit="INCH" />
</PaperSize>
```

Dynamic Width

```
<PaperSize Dynamic="true">
  <Width Value="20" MinValue="5" Unit="INCH" />
  <Height Value="14" Unit="INCH" />
</PaperSize>
```

Renaming of the Output PDF

It is now possible to rename your Imposed Output PDF file with this new functionality within a Hot Folder. Two variables are currently implemented. \$JOBNAME which takes the existing filename and (\$JOBNUMBER) which adds a unique job id to the file name based on the Imposstrip internal job number.

It is also possible to add static information to this option as you can see in the second screenshot below. These examples are using the PDF Output Option of Sig/File which outputs one PDF per Signature which also adds a File name Suffix.

General

Output File to Temporary Folder First

Use Output Filename Format

Output Filename Format

\$JOBNAME_(\$JOBNUMBER)

Output Filename Format

\$JOBNAME_(\$JOBNUMBER)_NESTED

Sheetfed_(17879) (both 1).pdf

Sheetfed_(17879) (both 2).pdf

Sheetfed_(17879) (both 3).pdf

Sheetfed_(17879) (both 4).pdf

Sheetfed_(17877)_NESTED (both 1).pdf

Sheetfed_(17877)_NESTED (both 2).pdf

Sheetfed_(17877)_NESTED (both 3).pdf

Sheetfed_(17877)_NESTED (both 4).pdf

Preference – File Name Suffix Settings

File Name Suffix Settings ▾

| | | | | | |
|--------|--------|--------|-------|-------------|-----------|
| Top | Bottom | Front | Back | Both | Web Group |
| (TP #) | (BM #) | Front# | Back# | Front/Back# | (WG #) |

With this option you can adjust the naming of the various suffixes Imposstrip adds to a file name for various output methods. For example, in the screenshot above Side/File = 'Front' and 'Back', Sig/File = 'Front/Back'.

This option can be useful when your output file is going to be used by a downstream process that has limitations on certain characters or naming conventions.

Preference – Option for Network Share import



This is a new preference option for Ultimate Impostrip Scalable which should create significant speed improvements for Scalable users who have their input Hot Folders on a shared mounted volume.

If you use network shares in this way **you should turn this option OFF**, note it is ON by default.

If this option is OFF, **files are copied locally before they are processed** so during processing they accessed locally rather than across the network, this can have a major benefit on processing speed. We have seen **significant speed improvements** during testing when using this new option with input from network shares.

Barcode Improvements



Define Color

You can now define a color or a combination of colors to apply color to a Barcode.

Knockout and Overprint

You can also now define Knockout or Overprint for a Barcode

Barcode Data Length Warning

There are data length limitations when working with 1D and 2D Barcodes. For most 1D Barcodes there is a limitation of 60 characters, and for 2D Barcodes the limitation depends on the Barcode size and other factors. Impostrip will now generate a warning if the data length in Barcode is too long.

Color Scheme Improvements

There are two important changes to the color scheme options in this release. The first is the ability to define an alternate color for the Custom Spot Color option, this was previously hard coded and would appear as a brownish color.

Custom Spot

You'll notice in the screenshot below you can define a Custom Name, a CMYK Alternate Color (viewing color) and a percentage tint value,

Color ▾

Color Schemes: Custom Spot ▾

Custom Name: Spot Green

Custom Spot: 100 %

Spot Color Definition

| | Cyan | Magenta | Yellow | Black |
|---|-------|---------|--------|-------|
|  | 100 % | 0 % | 100 % | 0 % |

CMYK + Custom Spot

You also now have the ability to define a new Color Scheme, CMYK + Custom Spot.

This enables you to color an object in Ultimate Impostrip with CMYK and a defined Spot Color which is useful when you need output for both print and for post-processes that require a specific spot color name.

Color ▾

Color Schemes: CMYK + Custom Sp... ▾



| | Cyan | Magenta | Yellow | Black |
|--|------|---------|--------|-------|
| | 0 % | 0 % | 0 % | 100 % |

Custom Name: Spot Red

Custom Spot: 100 %

Spot Color Definition

| | Cyan | Magenta | Yellow | Black |
|---|------|---------|--------|-------|
|  | 0 % | 100 % | 100 % | 0 % |

Color Merging Profile

Introduction

For many types of production work the control of Spot Colors and PDF Layers (Optional Content Groups) is particularly important.

Many downstream devices and systems utilize Layers or Spot Color names to indicate which post-process elements of a PDF file are to be used for such as Digital Embellishment, Cutting tables or other processes.

To control Spot Color and Layer naming Ultimate Impostrip uses a 'Color Merging Profile' which you can configure to suit your particular production requirements.

The Color Merging Profile is not available with all Ultimate Impostrip versions, it is part of the Color Separation License, so if that option is not licensed the Color Merging Profile will not be visible.

Use cases of Color Merging and Color Separation in Ultimate Impostrip

It is extremely important to understand the limitations of the functionality and the scope of the color merging and color separation functionality within Impostrip to avoid any confusion. The functionality is designed to work for additional finishing and embellishment color separations that part of a production PDF file. Such as Varnishes, Emboss, CutContours, Perforations and other such content.

These objects are required to be a single unique spot color and are normally solid colors or tints. The functionality is designed to merge color separations that are designed for the same use case but have different color separation names.

For instance, you may input PDF files that have the different color separation names 'cut', 'cutter', 'dieline', 'die line'. Color Merging can then make sure that these different colors are combined into one 'CutContour' when they are nested, and Color Separation can then separate the 'CutContour' from the rest of the file.

This makes nesting and color separation much easier as you know the actual name of the color separation to be used for the cut path on the cutting table or the varnish separation name for Digital Embellishment.

The Color Merging and Color Separation are not designed to work with content, images or blends of more than one channel, such as DeviceN, Multi-Color Images, Blends, Duotones, Tritones or Quadtones.

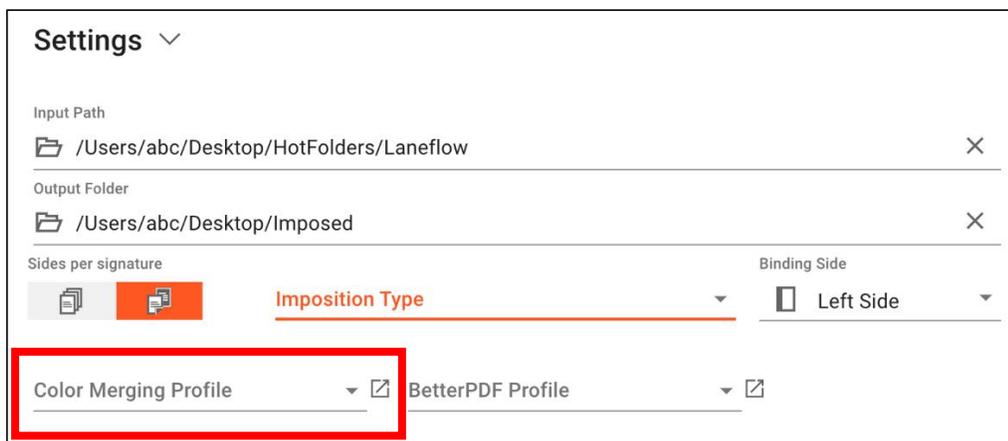
You cannot for instance expect the color separation to separate an image into C, M, Y, K, or separate a multi-channel image with CMYK + CutContour into two separate images. These need to be two separate images on input.

It maybe that such content may merge and output correctly, but this is not by design and such output is not tested or part of our quality assurance process. If you wish to do this, you should proceed with caution.

If you need to do such Spot Color Mapping you should do so prior to processing Ultimate Impostrip and use a dedicated PDF software application such as Adobe Acrobat, Enfocus PitStop, Callas PDF Toolbox or a similar PDF application.

For more guidance on how to create PDF files for Embellishment or Finishing, Ultimate have produced an Orange Paper 'PDF Creation for Digital Embellishment' that offers advice and guidance.

Color Merging Profile



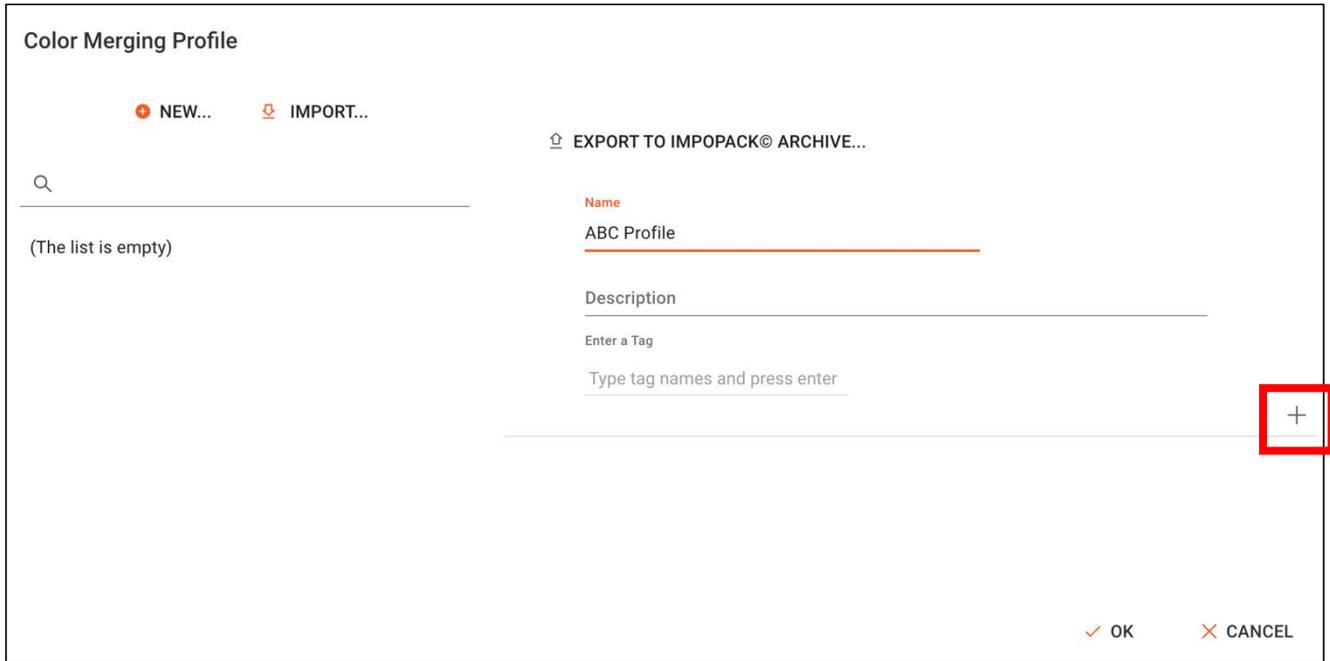
Many downstream devices and systems utilize PDF Layers or Spot Color names to indicate which post-process elements of a PDF file are to be used for processes such as Digital Embellishment, Cutting tables or other processes.

To control Spot Color and Layer naming Ultimate Impostrip can now use a 'Color Merging Profile' which can be configured to suit your particular production requirements.

The Color Merging Profile is not available with all Ultimate Impostrip versions, it's part of the Color Separation License, so if that option is not licensed the Color Merging Profile will not be visible.

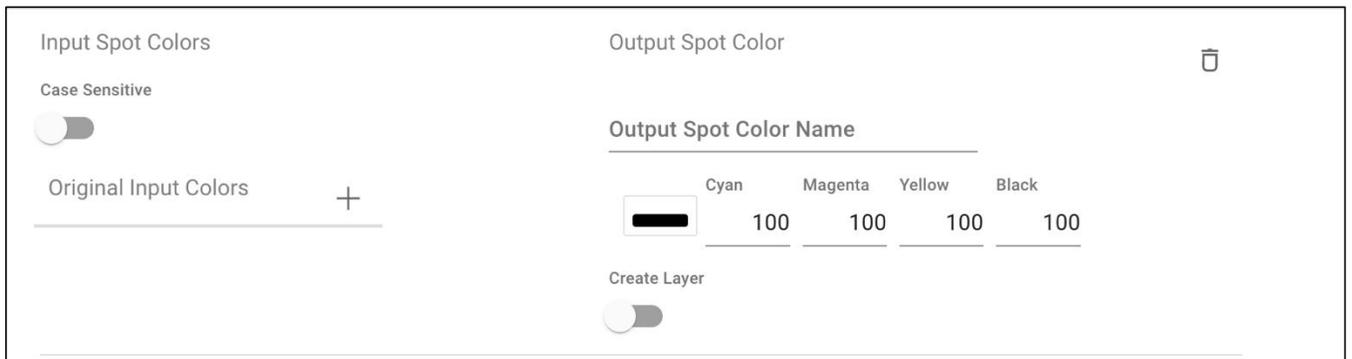
When you first open the Color Merging Profile by clicking  the list will be empty as there are no default profiles, so you will need to first make a Profile (NEW). You will then need to give your Profile a name, and if you wish a description and a Tag.

You can then start to add your configuration by pressing ‘+’.



You can define the import rules for every output Spot Color you want to control. You can have multiple output Spot Colors defined in the same Color Merging Profile.

So, for instance you could define merging for the CutContour, UV varnish, Foil, Perforation and Creasing all in the same Merging Profile.

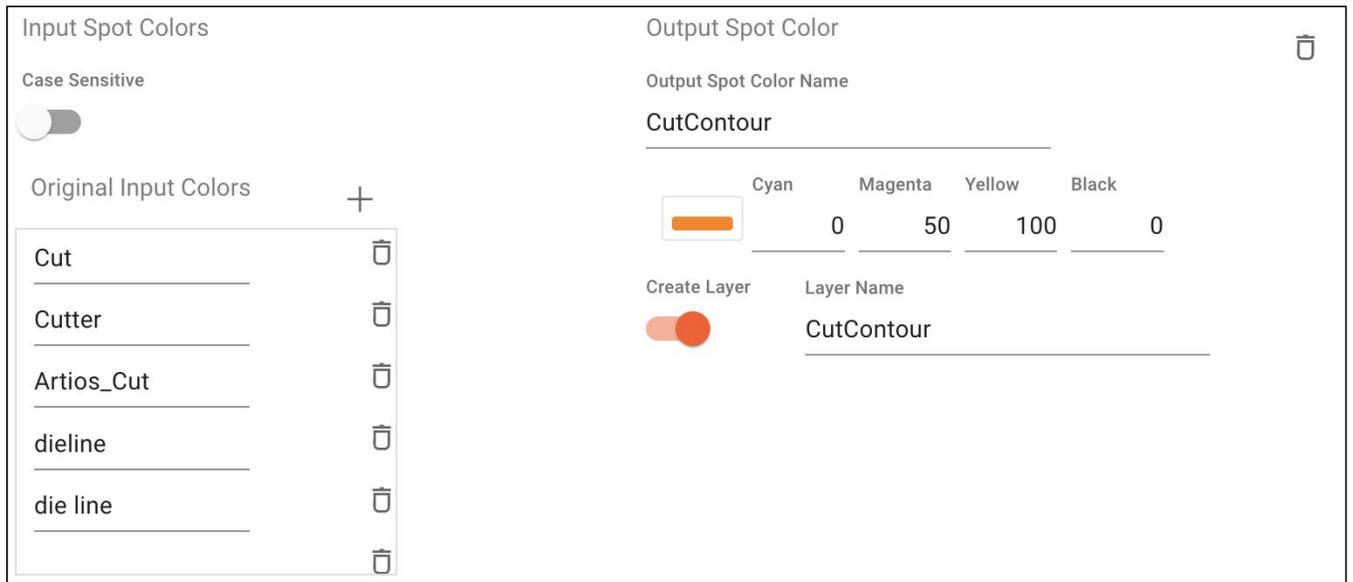


Input Spot Colors

This is a list of potential names of colors that could be in incoming PDF files that you would like to map to a common color(s) for your output device or downstream processes. You will note you have the option for this list to be case sensitive or not.

Wildcards are also supported when matching names, '?' can be used to replace any individual character or '*' can be used to replace any substring. As an example, 'cut*' would match with 'cut', 'cutter', 'cut path', 'cut contour' and 'cut shape'.

You simply press '+' to add names and additional names to the list, once you have a name in the list you can click it to edit the name or delete it by using the respective button.



The screenshot shows a software interface with two main sections:

- Input Spot Colors:**
 - A toggle for "Case Sensitive" is currently turned off.
 - A list of "Original Input Colors" includes: Cut, Cutter, Artios_Cut, dieline, and die line. Each item has a trash icon to its right.
 - A "+" button is located to the right of the list.
- Output Spot Color:**
 - The "Output Spot Color Name" is set to "CutContour".
 - Below the name is a color bar with a red-to-yellow gradient.
 - CMYK values are displayed: Cyan (0), Magenta (50), Yellow (100), and Black (0).
 - A "Create Layer" toggle is turned on.
 - The "Layer Name" is set to "CutContour".

Output Spot Color

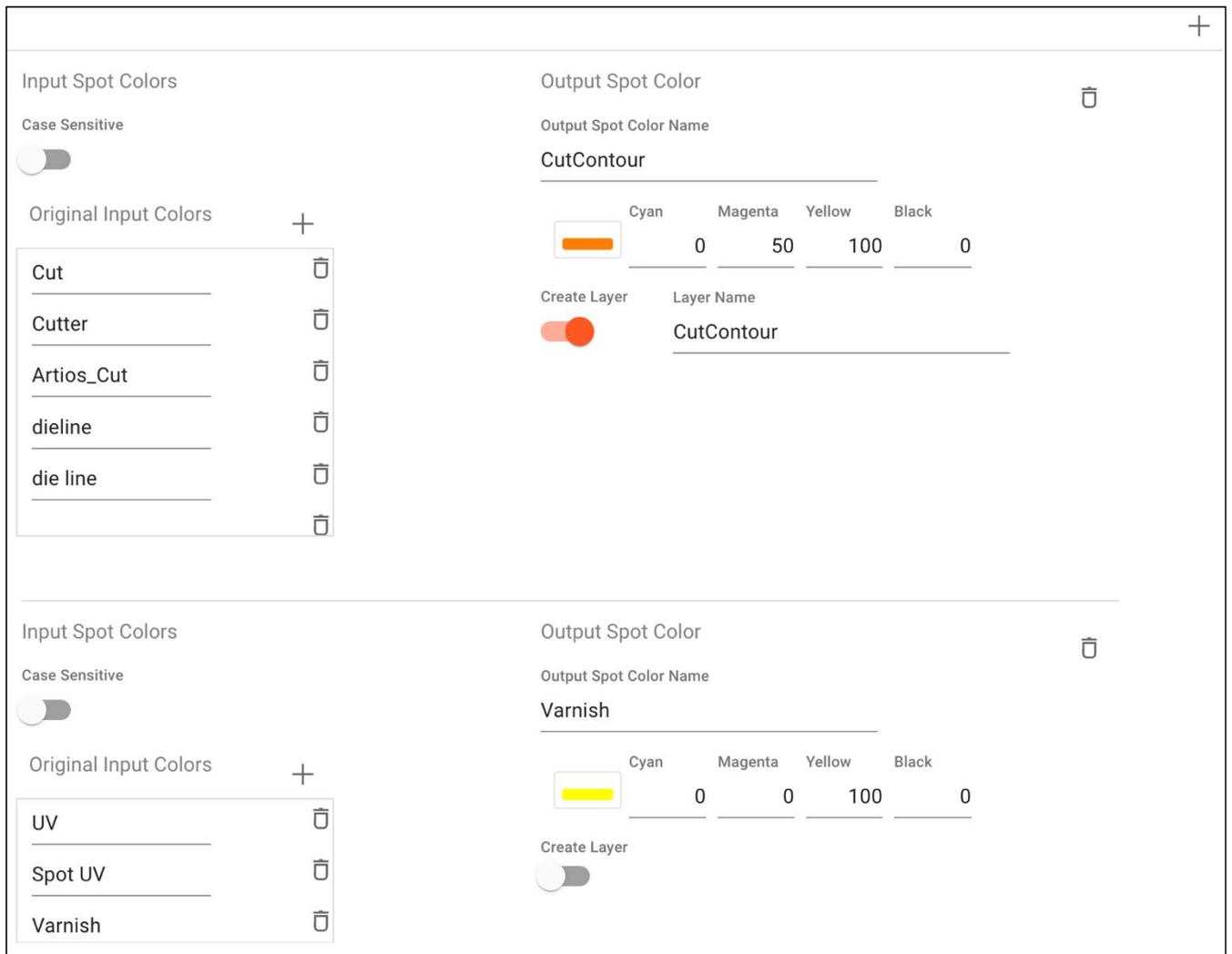
This is the name and also the alternate color that you want all the input colors to be merged to. This is a Spot Color with a CMYK alternate color. Note both solids and tints will be directly mapped to this new color so their values will not change.

Create Layer/Layer Name

Here you have the option of assigning all the objects with your new spot color to a PDF Layer (OCG). If you enable this option, you can define the name of the new Layer, and the objects will be removed from any layers they may have been assigned in the original input file.

Adding additional Output Colors '+'

You can create additional Output Colors and create new rules for them as you wish. So, one Color Merging profile would be able to be configured to work for a Cut Contour, Creasing, Perforation, Foil, Varnish etc.



Understanding the functionality

If you do not want a spot color to be touched, then simply do not add it to an Input Spot Color list. It's not possible to keep the input color of an existing Spot Color and transfer it to the output Spot Color, you always have to define a new color as you are effectively making a brand-new color.

Obviously, you should avoid having the same Input Spot Color name in multiple color rules as that will cause issues, equally avoid having the same output name on multiple output Spot Color names unless you wish them to be merged.

Knockout and Overprint during Merging

Any Knockout and Overprint settings on objects in the original spot color will be carried over to the new Spot Color.

Hot Folder XML Validation

This version of Impostrip now has an XML validation applied to an incoming XML for Redirection file. The XML will be validated against the XML for Redirection schema, and any XML instructions that are not correct or not recognized will generate a warning.

Note that only one warning per file will be generated as we do not want to flood the interface with a long list of warnings. Also note that if your XML contains information for other applications that are not recognized by Impostrip these may also generate warnings.

XML for Redirection Schema

Ultimate Impostrip now has an XML Schema (.XSD) you can use to validate your XML development and learn more about the available XML for Redirection nodes and structure. Its location is inside the Ultimate Impostrip Installer package within the Operating System Applications folder:

macOS: **Ultimate Impostrip > Contents > Resources > Public > Schemas > redirection.xsd**

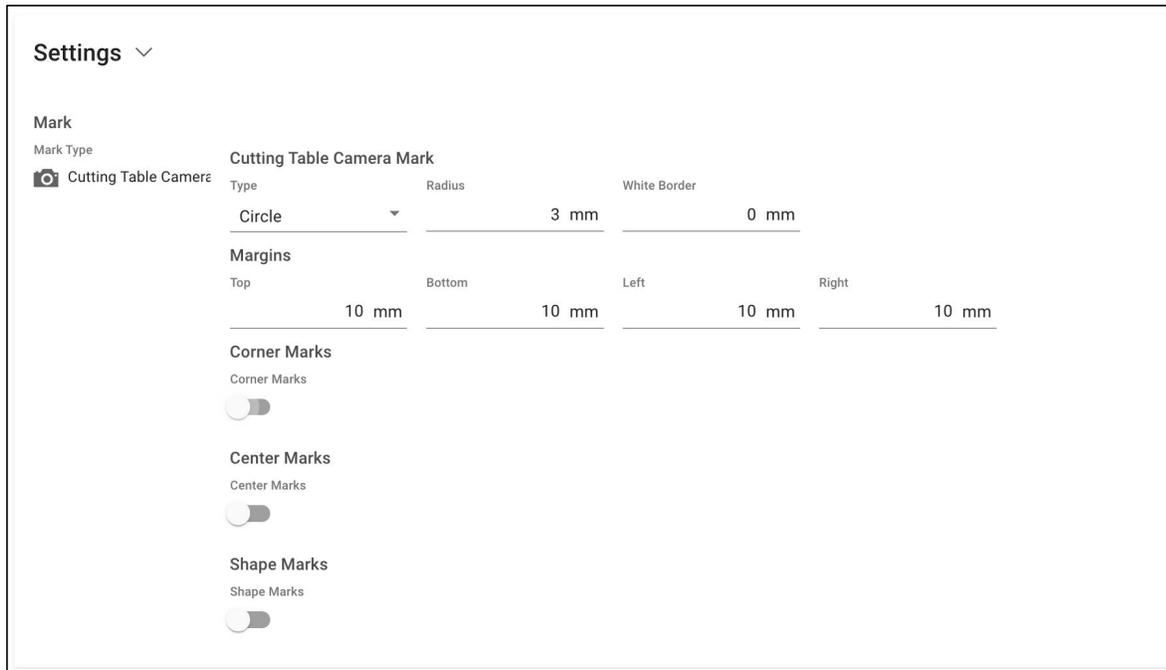
Windows: **Ultimate Impostrip > Public > Schemas > redirection.xsd**

Built-in Cutting Table Camera Marks

When working with a cutting table it is necessary to add Registration Marks for the Camera systems installed on the table. The number of marks, their location, shape and size are dependent on the cutting table camera system you are using, the substrate you are working with, the shape(s) you are cutting, and the tools used.

Ultimate Impostrip has a built-in mark to apply these marks.

To use Cutting Table Camera Marks you must have an AutoNesting License.



Type

The Mark Type can be defined as a Circle or a Cross, when you make this selection different options are available to you.

Circle Mark

Cutting Table Camera Mark

| | | |
|--------|--------|--------------|
| Type | Radius | White Border |
| Circle | 5 mm | 0 mm |

Cross Mark

Cutting Table Camera Mark

| | | | |
|-------|------|-----------|--------------|
| Type | Size | Thickness | White Border |
| Cross | 5 mm | 0 mm | 0 mm |

Radius

Only available for the Circle, this represents the radius of the circle itself.

Size

Only available for the Cross, this is the Height/Width of the Cross shape.

Thickness

Only available for the Cross, this is the thickness of the Cross elements.

White Border

For some dark substrates or a type of work it may be necessary to add a white border to the mark to ensure there is sufficient contrast between the mark and the background so the camera can successfully identify the mark.

Margins

Margins

Top Bottom Left Right
 _____ 0 mm _____ 0 mm _____ 0 mm _____ 0 mm

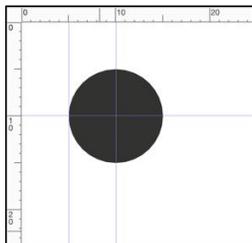
Because of the nature of these Registration marks, they are not placed individually by X/Y coordinates as other marks. With these marks you define a margin around the outside of media sheet or roll, and the marks are positioned related to it. There are three different types of Camera Marks that work in conjunction with each other and these all have their own individual options. These will be covered later in this document with the description of each mark.

Camera Mark Positioning

The Cutting Table Registration Marks/Camera Marks in Ultimate Imposstrip are agnostic and designed to work with any Cutting Table, there are three different Marks options, and these can be enabled independently so you can choose to activate, one, two or all of them based on your production requirements.

Corner Marks

As the name suggests, these are marks that are positioned in each corner of the media. These are positioned based on the margin values that were discussed earlier.



The Margin value represents the measurement from the edge of the defined Media to the center of the Corner Mark. In the example above you can see a 5mm Radius Corner Mark, that has a 10mm Margin defined.

Corner Marks

Corner Marks



Double Corner



Double Corner Space



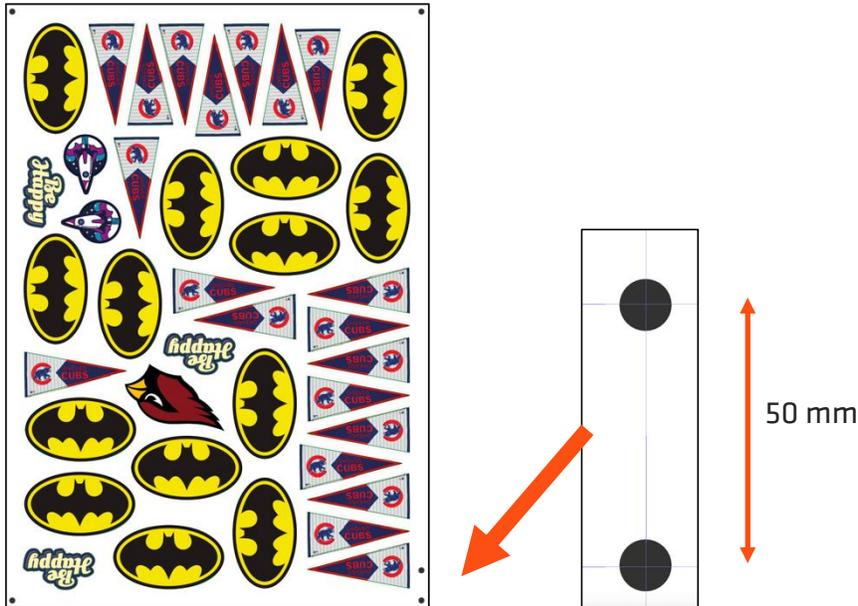
0 mm

Indent for Barcode



0 mm

Double Corner



Depending on the Cutting Table and the workflow used to drive it, it may be necessary to have a Double Mark in one of the corners of the Media. If you turn this option on you then see a further option for the 'Double Corner Space'. In Ultimate Impostrip the Double Mark is positioned in the bottom right-hand corner of the media as shown in the image on the previous page.

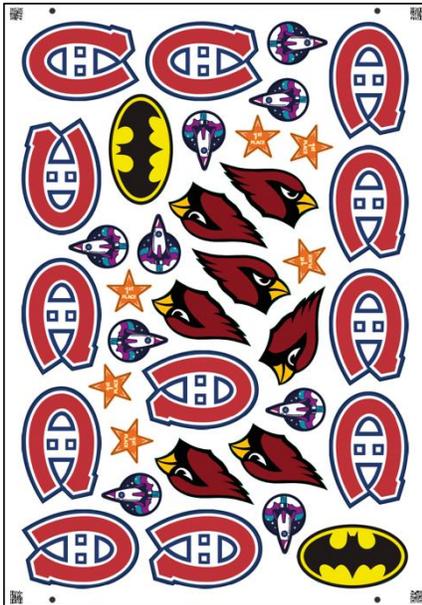
Double Corner Space

The value of the Double corner space represents the distance from the center of the bottom right-hand Corner Mark to the center of the Double Corner Mark. The distance from the edge of the media is the same as the Corner Mark and is taken from the margin value.

In the screenshot above you can see the bottom right-hand corner of the sheet with the Corner Mark, and a Double Corner Mark with a define distance of 50mm.

Indent for Barcode

In the event that you don't want to position your corner marks exactly in the corners of your media, perhaps because that space will be taken by a barcode, you can use this option to move the corner marks inward by a given amount as shown in the screenshot below.



Center Marks

Center Marks are Marks that appear on the edge of the media between the corner marks, their distance from the edge of the media is defined by the margin values. There are two different options you can choose when defining Center Marks.

Center Marks by Number

Center Marks

Center Marks



Generate Mark Method

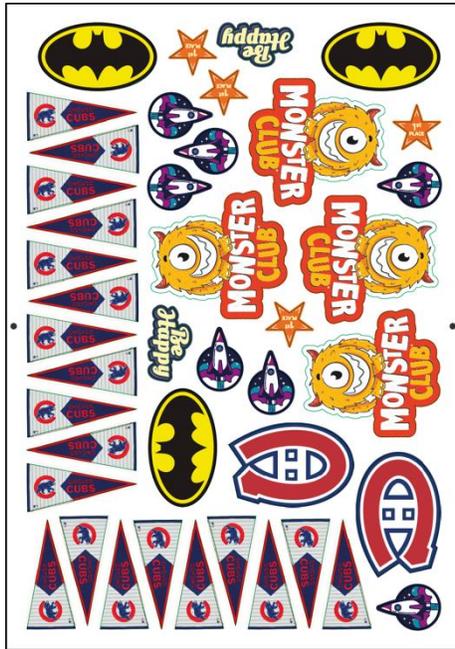
Number



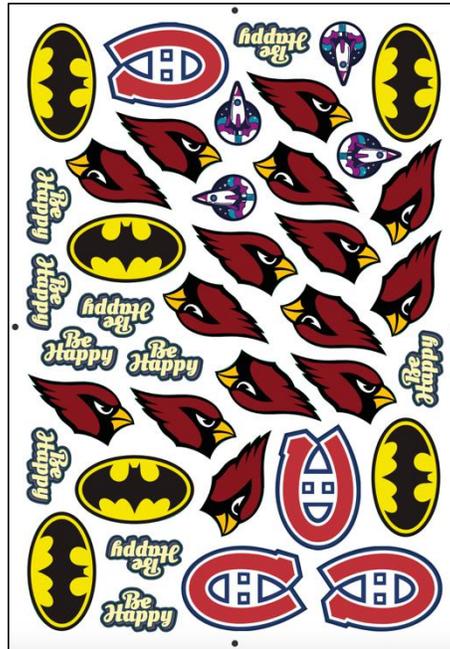
Total Marks



Center Marks by Number allows you to define a hard coded number of Marks, 2, 4, 6, or 8. Below you can see the output using all four options. You will notice the marks are equidistant apart on the media and also the position of the existing Corner Marks is taken into account.



Two Center Marks



Four Center Marks



Six Center Marks



Eight Center Marks

Center Marks by Distance

If you require more control over these Marks, or perhaps want to have more of them on a Roll fed device for example, then the alternative way of working with Center Marks may be preferable. This is Center Marks by Distance; this enables you to control the amount of Center Marks by defining the distance between them.

Center Marks

Center Marks

Generate Mark Method: Distance

Distance: 0 mm

Here you see an example where the Marks Distance is set for 150mm on the Media size of 700mm x 1000mm. You will notice that with Marks set to Distance, the marks are not equidistant and are the actual defined distance apart.



Shape Marks

The third set of marks are called Shape Marks. The placement of Shape Marks is in relation to the nest or the products in the nest and there are several configurable options related to them.

Shape Marks by Product

These Marks are positioned around the products in the nest, there are two placement strategies, Number and Distance which work exactly the same way as described in the Center Marks section, the only difference is that they are positioned around each product in the Nest.

Shape Marks

Distribution: By Product

Generate Mark Method: Number

Total Marks: _____

Number/Distance

This allows you to select the strategy you want to adopt for placing the marks around the product. This can either be a defined number of marks that will be added around each product, or a distance

between each mark around the product. Note this is the distance around the edge of the product, not the direct distance.

Total Marks

Allows you to define the number of Marks around each product.



Two Product Marks



Four Product Marks



Eight Product Marks

Shape Marks

Shape Marks



Distribution

By Product

Generate Mark Method

Distance

Distance

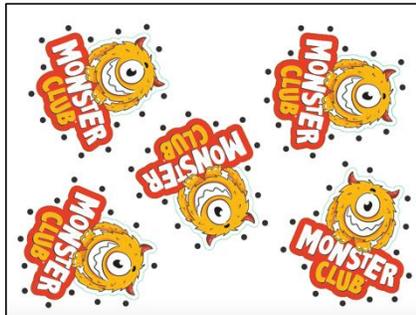


0 mm

Minimum Distance



40 mm



50mm Distance by Product Marks



100mm Distance by Product Marks



200mm Distance by Product Marks

Minimum Distance

As you have seen there are three different types of Marks potentially being added to a job (Corner, Center and Shape). Each type of mark is calculated independently so it is possible that marks may be closer together than needed, or that there are too many marks for the substrate being finished which will slow down your cutting table make ready.

To give greater control and minimize the amount of marks there is a Minimum Distance option that you can use. This is calculated according to the direct distance between all marks and will remove any marks that appear together within the defined distance.

To illustrate this, you can see an example below. The first image has Corner Marks, Center Marks and Shape Marks (50mm distance).

The second image visualizes the effect of a Minimum Distance value of 80mm, you can see that some of the Black marks fall inside the range of the distance being measured from the Red marks . The third image shows the result of the 80mm minimum distance, and you can see that the Marks that fall in that range have been removed.



Shape Marks by Distance 50mm



Impact of a Minimum Distance of 80mm



Result of 50mm/80mm Minimum Distance

Shape Marks by Sheet

As well as being placed around a product, Shape Marks can also be defined by the Sheet, with option of defining a number of marks or a distance between marks as you have seen before.

This approach allows you to add a small number of Marks within the Nest that can be handled quickly by the Cutting Table and not take too long to make ready.

This approach enables you to add Marks in the nest and enables a range of marks to be set from one upwards.

Shape Marks

Shape Marks



Distribution

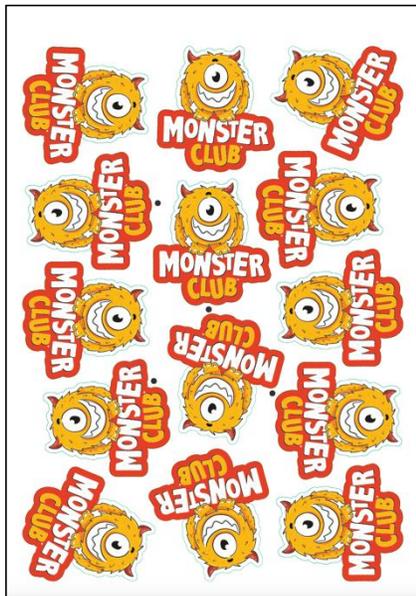
By Sheet

Generate Mark Method

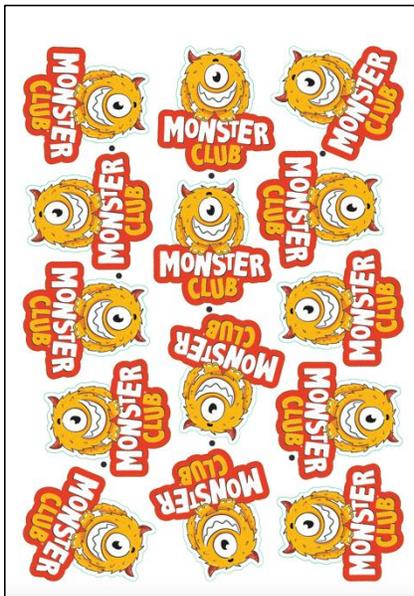
Number

Total Marks

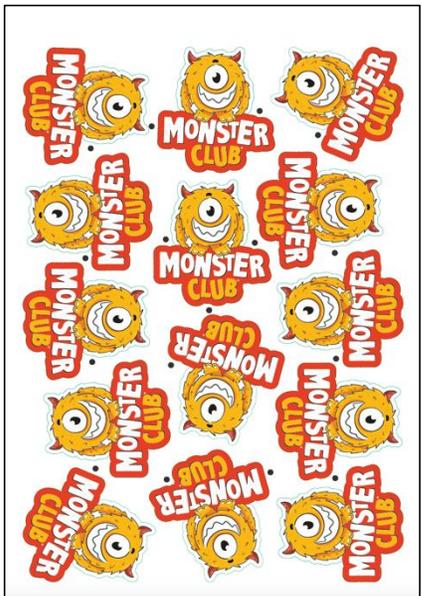
2



Sheet Marks by Number = 4



Sheet Marks by Number = 8



Sheet Marks by Number = 16

Shape Marks

Shape Marks



Distribution

By Sheet

Generate Mark Method

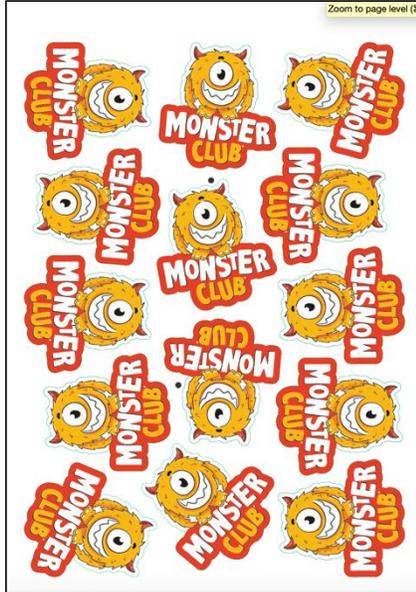
Distance

Distance

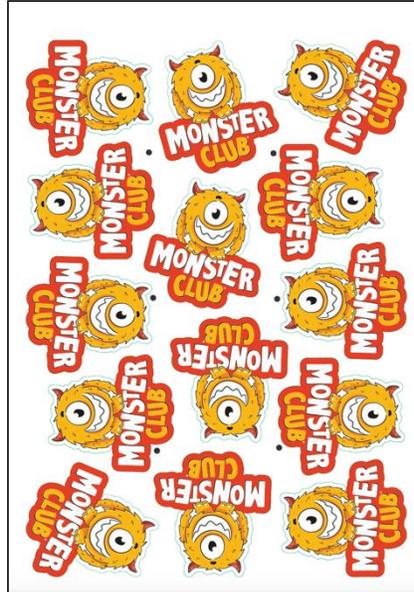
0 mm

Minimum Distance

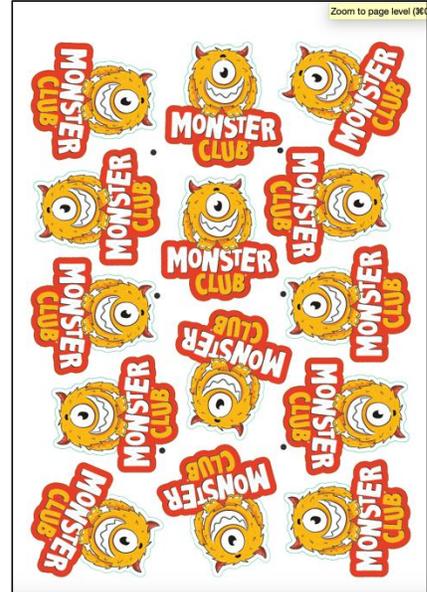
40 mm



Sheet Marks 300mm Distance

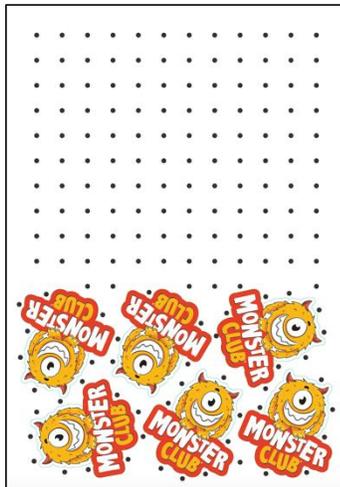


Sheet Marks 200mm Distance



Sheet Marks 100mm Distance

IMPORTANT: One thing to bear in mind when using Shape Marks by Sheet with a fixed media sheet size and small distances. If you have partially printed sheets, then you have the possibility of seeing the following result. It may be worth considering a different Marks approach in this case or a higher distance value.

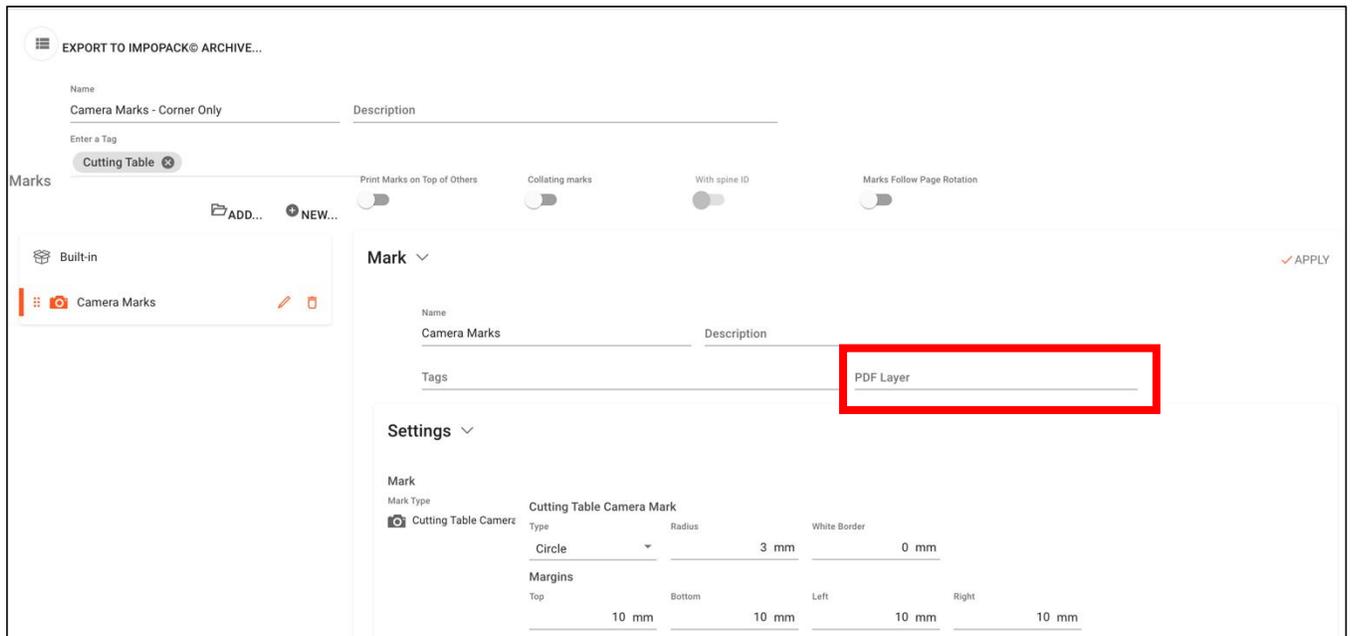


Adding Camera Marks to a PDF Layer

For many applications and Cutting table front end software it is essential that the Camera Mark is assigned to a particular PDF layer with a certain naming convention.

The option to add a Camera Mark to a Layer is not in the Mark Design itself, but in the Marks Profile (as below).

If you do not want or need a PDF Layer for the Camera Marks, then you can leave this field empty.



Default Barcode Mark Profiles for Zund and Kongsberg

For ease of use we have added two pre-configured Dynamic Barcode Marks Profiles to Ultimate Imposstrip for Zund and Kongsberg Cutting Tables. These Marks Profiles are fully editable, and they provide a good usable starting point for both cutting tables, so users do not have to configure them from scratch.

The default configuration of both Marks Profiles is explained below.

Kongsberg Barcode Marks Profile

Marks Profile Name: Kongsberg Barcode JobFile

Tag: Kongsberg

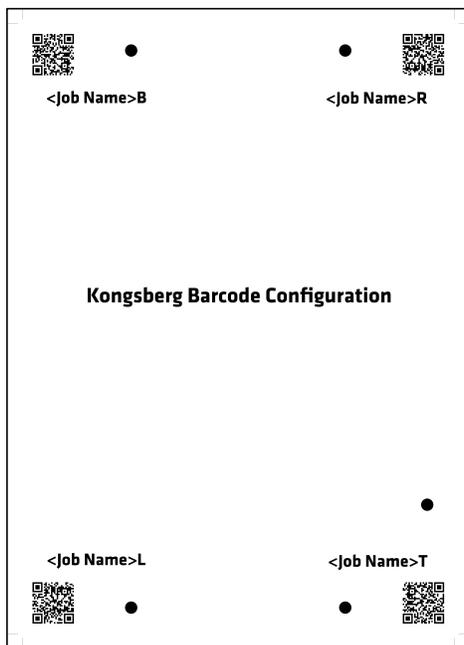
See Interface screenshot on the following page.

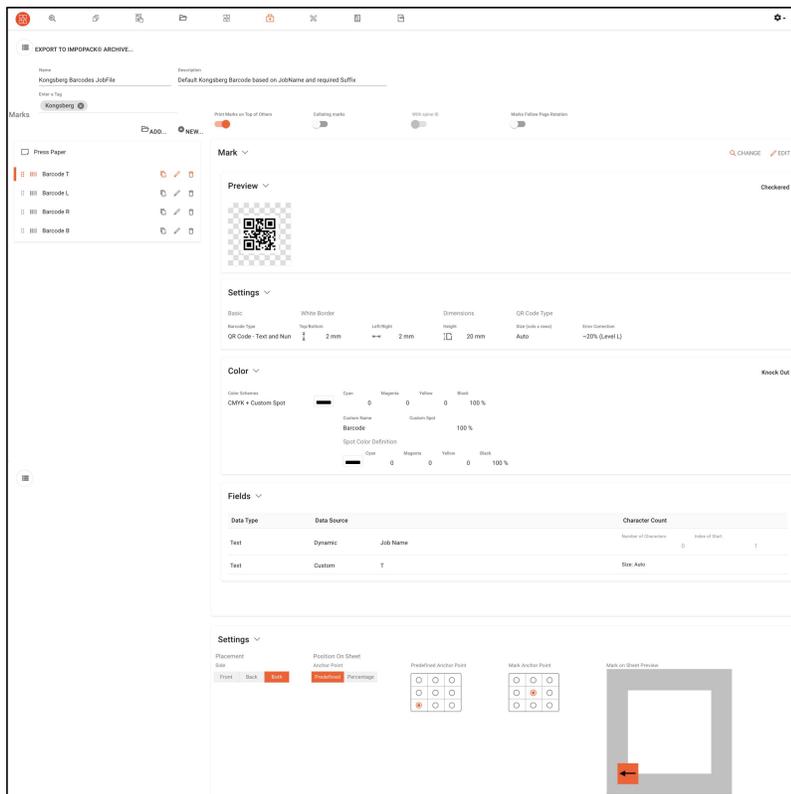
The Marks Profile consists of four QR codes that are individually placed in the corners of the media. Each is rotated so the open side of the barcode is pointed inwards as defined by Kongsberg: T, L, R, B.

The QR code is set to be 20mm high and is colored CMYK + a Custom Spot color called 'Barcode'. The CMYK breakdown is set at CMY=0%, K=100%. The Barcode Spot color is colored K=100%.

The dynamic Barcode data is configured as "Jobname" and then each Barcode has a different suffix based on the corner in which it appears as per the Kongsberg requirements.

If you wish to adjust the configuration or the Barcode data, the profile is completely editable.





Zund Barcode Marks Profile

Marks Profile Name: Zund Barcode JobFile

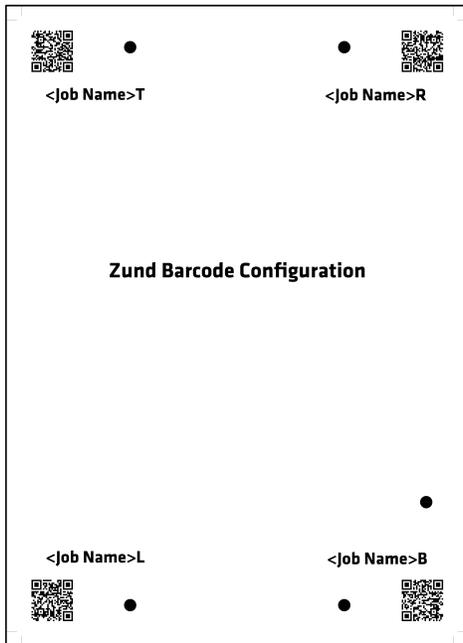
Tag: Zund

See Interface screenshot on the following page.

The Marks Profile consists of four QR codes that are individually placed in the corners of the media. Each is rotated so the open side of the barcode is pointed outwards as defined by Zund.

The QR code is set to be 20mm high and is colored CMYK + a Custom Spot color called 'Barcode'. The CMYK breakdown is set at CMY=0%, K=100%. The Barcode Spot color is colored K=100%.

The dynamic Barcode data is configured as "Jobname" and then each Barcode has a different suffix based on the corner in which it appears as per the Zund requirements: B, L, R, T. If you wish to adjust the configuration or the Barcode data, the profile is completely editable.



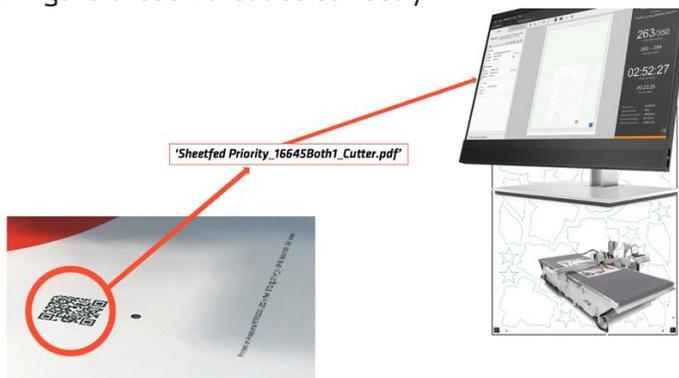
Configuring Barcode data for a Cutting Table

When using Barcodes in conjunction with a Cutting Table, each manufacturer may have slightly different requirements, but they are generally similar in approach.

There are normally four barcodes, one in each corner of the media, and the barcodes need to contain the file name or some kind of unique reference that matches with the Cut file PDF that is stored on the Cut Table Controller. Additionally, each barcode has a different file name suffix that identifies which in corner the barcode is located.

The position suffix is used to identify the rotation of the sheet on the cutting table bed, and the file name/reference links the printed sheet to the cut file that is resident on the Cutting Table Controller. The barcode is read, and relevant cut file is then loaded to begin cutting.

As different Imposstrip output options can affect file naming, here is some guidance on how to configure these Barcodes correctly.



Default Marks Profiles for Cutting Table Barcodes

As a starting point there are two standard Marks profiles available in Ultimate Impostrip for Kongsberg and Zund Cutting Tables. These give you a usable default Marks Profile with Barcode type, rotation, positions, and Barcode data that have already been proven to work for the related table.

PDF File Naming

As stated before, the purpose of the barcode data is to match the cut file on the cutting table controller with the printed sheet by using a barcode printed on the sheet, this is done via a job name or a unique reference number.

Ultimate Impostrip has several ways to modify the PDF file name. The first is the actual File Naming details, the second is by controlling the naming and characters used for the various suffixes. That information can be represented as a whole or in part within the Barcode.

Job/File PDF Output (Default)

If you are using the normal PDF output your barcode will require the file name and a suffix related to the corner in which the barcode is positioned on the media, normally either L, T, R or B.

To achieve this, you will need the Dynamic Barcode option and the barcode should be configured as you see below with a Dynamic text variable for the Job Name, and a Custom text option which is static for the Suffix.

You would then need to configure each of the four corner barcodes separately with the relevant suffix.

Fields ▾

| Data Type | Data Source | Character Count |
|-----------|------------------|--|
| Text | Dynamic Job Name | Number of Characters <input type="text" value="0"/> Index of Start <input type="text" value="1"/> |
| | | <input checked="" type="checkbox"/> Auto |
| Text | Custom T | Number of Characters <input type="text" value="2"/> Index of Start <input type="text" value=""/> |
| | | <input checked="" type="checkbox"/> Auto |

Sig/File Output

Sig/File output will add additional information to a job name that we must take into account when we configure our Barcode. See the examples below in which our original file name is 'Sheetfed More_(17916)'

-  Sheetfed More_(17916) (both 1).pdf
-  Sheetfed More_(17916) (both 2).pdf
-  Sheetfed More_(17916) (both 3).pdf
-  Sheetfed More_(17916) (both 4).pdf
-  Sheetfed More_(17916) (both 5).pdf
-  Sheetfed More_(17916) (both 6).pdf

In order to mimic this separated file name in the Barcode you will need to configure the Dynamic Barcode with the following options in the screenshot below, be careful with the use of spaces and check with a barcode scanner to ensure that the resulting barcode accurately reflects the name of the PDF file name.

Fields ▾

| Data Type | Data Source | Character Count |
|-------------------------------------|---|---|
| <small>Number of Characters</small> | | |
| | | 0 |
| Text ▾ | Dynamic ▾ Job Name ✕ | Index of Start ✕ |
| | | 1 |
| | | <input checked="" type="checkbox"/> Auto |
| Text ▾ | Custom ▾ (both | Index of Start ✕ |
| | | 2 |
| Number ▾ | Dynamic ▾ Sheet Number ✕ | Index of Start ✕ |
| | | <input checked="" type="checkbox"/> Auto |
| Text | Custom) | Size: Auto ✕ |
| | | <small>Number of Characters</small> |
| | | 2 |
| Text ▾ | Custom ▾ T | Index of Start ✕ |
| | | <input checked="" type="checkbox"/> Auto |

Color Separated Output

If are using output from the Color Separation option, then depending on the Color Separation configuration you use, you may, or may not need to adjust for the separation name in the Barcode.

Colors ▾

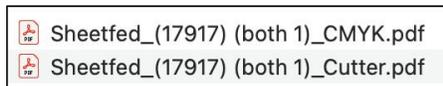
Group / Color name in filename
 Suffix ▾

Single Output Folder for all Spots Output Folder
 X

GROUP UNGROUP

| <input type="checkbox"/> Name | Required | Separate As Dieline | |
|---------------------------------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> CMYK | <input type="checkbox"/> | <input type="checkbox"/> | + |
| <input type="checkbox"/> Cutter | <input type="checkbox"/> | <input checked="" type="checkbox"/> | + |

So, if your color separation configuration is similar to the above, you may need to reference the file name for the color separation related to the Cutting Table such as the following. This example uses sig/file output.



For such an example you should use the previous Barcode example for Sig/File output and before the Suffix add an additional Custom Text that represents the separation name for the Cutter such as the following.

Fields ▾

| Data Type | Data Source | Character Count | |
|-----------|-------------|----------------------|--|
| Text | Dynamic | Job Name | Size: Auto |
| Text | Custom | (both | Size: Auto |
| Number | Dynamic | Sheet Number | Size: Auto |
| Text | Custom |) | Size: Auto |
| | | Number of Characters | <input type="text" value="2"/> |
| Text | Custom | _Cutter | Index of Start <input type="text"/> <input checked="" type="checkbox"/> Auto |
| Text | Custom | T | Size: Auto |

Grouped Color Separated Output

Within the Color Separation options it is also possible to make groups (such as below) so that multiple color separations for various finishing options are combined in one separated output PDF file that is delivered to the Cutting Table.

Colors ▾

Group / Color name in filename
Suffix ▾

Single Output Folder for all Spots Output Folder
 X

GROUP UNGROUP

| <input type="checkbox"/> | Name | Required | Separate As Dieline | |
|--------------------------|---------------|--------------------------|-------------------------------------|--|
| <input type="checkbox"/> | Cutting Table | Require At Least One ▾ | <input checked="" type="checkbox"/> | |
| | Cutter | | | |
| | Crease | | | |
| | VariCut | | | |
| <input type="checkbox"/> | CMYK | <input type="checkbox"/> | <input type="checkbox"/> | |

This would result in separated output PDF files with the following file names. The 'Cutting Table' PDF can contain multiple color separation related to the cut table.

- Sheetfed_(17924) (both 1)_CMYK.pdf
- Sheetfed_(17924) (both 1)_Cutting Table.pdf

To manage this situation in the cutting table barcode we use the same approach as before simply with a different custom text as below.

Fields ▾

| Data Type | Data Source | Character Count | |
|-----------|-------------|----------------------|--|
| Text | Dynamic | Job Name | Size: Auto  |
| Text | Custom | (both | Size: Auto  |
| Number | Dynamic | Sheet Number | Size: Auto  |
| Text | Custom |) | Size: Auto  |
| | | Number of Characters | <input type="text" value="2"/> |
| Text | Custom | _Cutting Table | Index of Start <input type="text" value=""/>  |
| | | | <input checked="" type="checkbox"/> Auto |
| Text | Custom | T | Size: Auto  |

AutoNesting Layout Improvements

AutoNesting

Die Line

Color Name  **CutContour** Type **Sheetwise Turn** Intershape Gutter **12 mm** Bleed **3 mm**

Nesting Layout

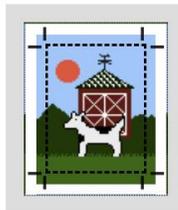
Layout  **Best Fit** Rotation Step  **Free Rotation** Center on Material Fallback to Bounding Box

Nesting Computation

Computation Time **60** Origin Point **Bottom Right** Do not Generate Repetitive Sheets Uniform Layout **None** Scatter Mode **High**

Margins

Top  **25 mm** Bottom  **25 mm**
 Left  **25 mm** Right  **25 mm**



Layout

Determines the direction in which the Nest is calculated and created. Vertically, Horizontally, Best Fit or Step and Repeat. If you are working with Sheet based material the selection particularly effects the result if the last sheet is only partially filled. You should also take care if you are using Dynamic Media when defining this option so to ensure your dynamic edge is not impacted by your selection. The Origin Point also plays a role when defining the Layout (see below).

Rotation Step

This option sets the Rotation values available for the Nesting algorithms. With Free Rotation the algorithms will calculate using any rotation angle for each product to achieve the best nesting result based upon the other defined nesting parameters. 180 will keep similar alignment for grain direction, and 90 will allow cross grain allowances.

Center on Material

Centers all nested results on the defined media, in the case of Dynamic Media only the Fixed Edge will be centered. When working with Sheet based material you should be aware that with any partial sheets the nested content will be placed in the middle of the media.

Fallback to Bounding Box

If a Cut path/Die Line cannot be found, as this option allows using the Page box of the PDF as an alternative.

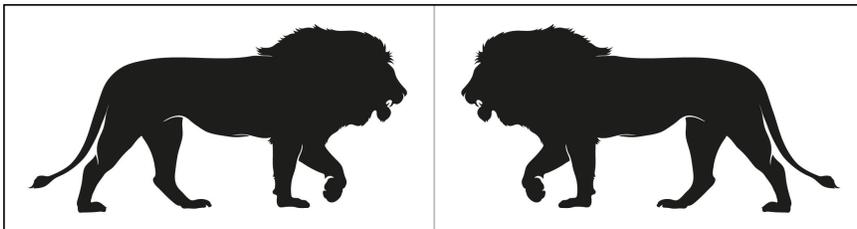
If the option is OFF and the file does not have a cut path, or that cut path cannot be found (possibly as the wrong spot color is defined) then the entire job will fail with an error. If the option is ON and a Cut Path cannot be found, then the PDF Page Boxes will be used as an alternative (Trim Box > Crop Box > Media Box).

Backside is Mirrored

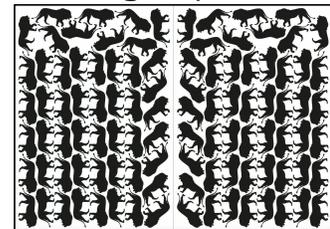
This option is only available when you select Duplex output and its configuration depends on whether your input files are mirrored on the backup or require mirroring during Nesting. Note all files in a Nesting job must be configured the same way as the Mirror option is applied to the complete job, not individual files.

Input PDF: Page 2 is already mirrored.

'Backside is Mirrored' should be **ON**

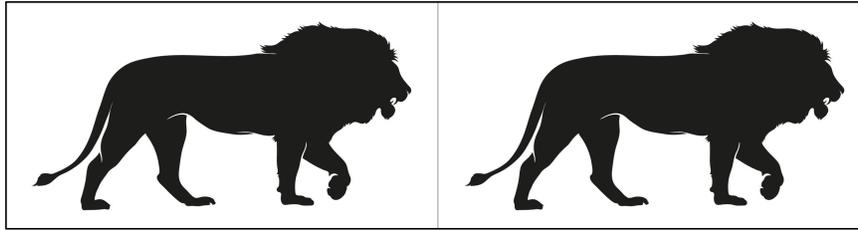


Resulting Output

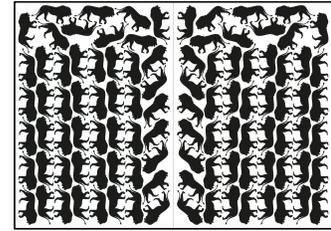


Input: Page 2 is NOT mirrored.

'Backside is Mirrored' should be **OFF**



Resulting Output



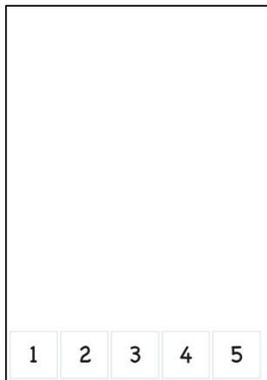
NOTE: If in Duplex output this option is not set correctly and does not correspond to the incoming file(s) then the back side output maybe corrupted and not usable. Similarly, if you have mixed input files that are both mirrored and not mirrored then the back side output may also be unusable.

Origin Point

This option defines the point where the nest starts, it is also influenced by the 'Layout' selection as this defines the direction in which the nest grows. If you are using Dynamic Media you should also take care of the selected Origin Point and make sure it does not clash with your Dynamic Media. You can see this in the examples below. '1' is the first file placed and '5' is the last. The default option is the 'Bottom Left'. Note: The examples below use 'Free Rotation'.

Horizontal

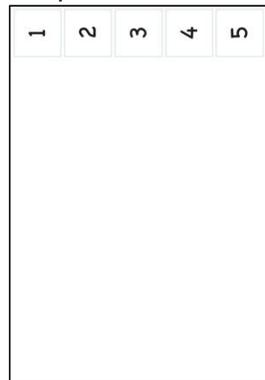
Bottom Left



Bottom Right



Top Left

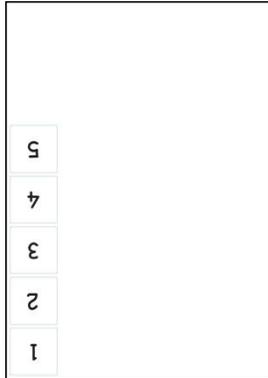


Top Right



Vertical

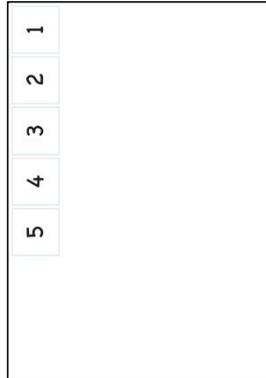
Bottom Left



Bottom Right



Top Left



Top Right



Do not Generate Repetitive Sheets

When Do Not Generate Repetitive Sheets is checked, Imposstrip® will only generate one sheet that needs to be printed many times. This is relevant in the use of 'Uniform Layout' within AutoNesting.

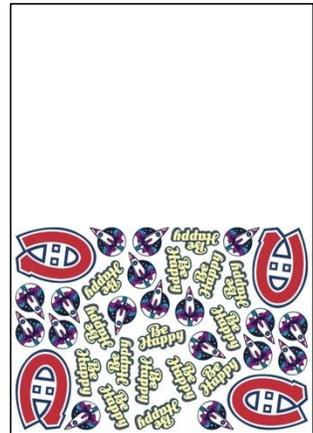
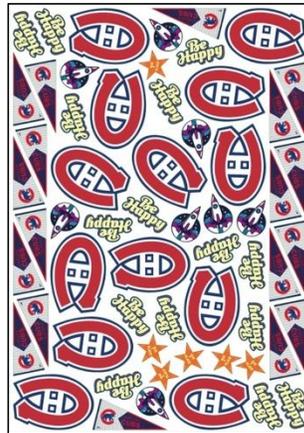
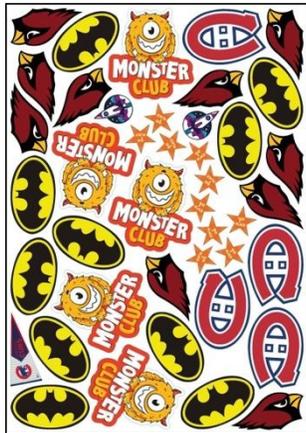
Uniform Layout

Uniform Layout influences the way that the nest is calculated. Uniform Layout ensures where possible that the Nest is the same on every sheet, this can be useful if your output includes additional processes like Embellishment, or consumables like Plates or Dies.

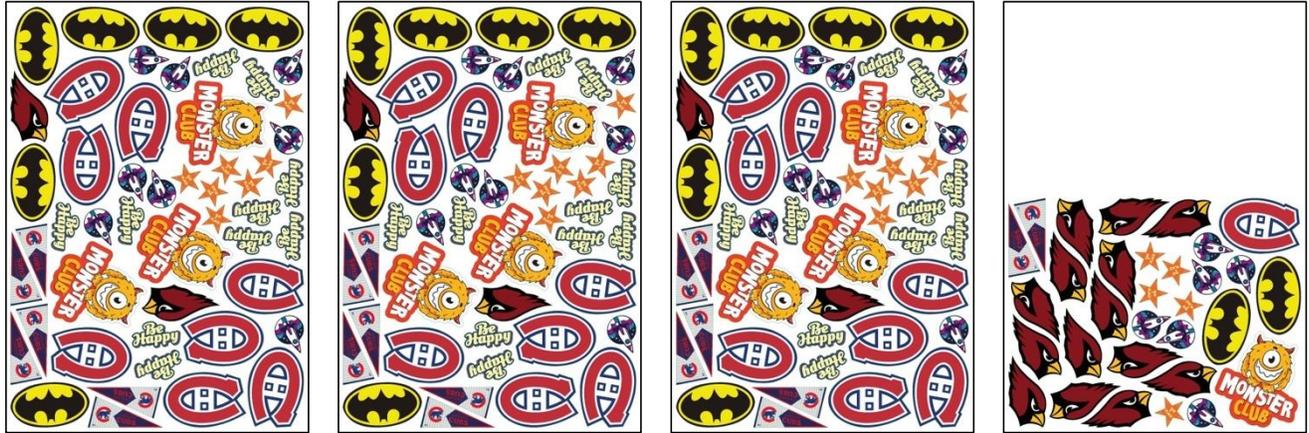
As you can see below there are four configuration options available: Low, Medium, High or Very High. The higher the value the less efficient the nest, but the greater the uniformity between the nested sheets. As with all nesting the results depend on the shape of the product being nested, the defined quantities and the defined Nesting Calculation time.

Below are some results of nests using the same configuration, but different Uniform Layout settings for comparison. Typically, the last sheet is not uniform as it contains the remnants that are needed to make up the desired quantities.

Low



Medium



High



Very High



Scatter Mode

This is another option that influences the nesting result. It is an alternative to the Uniform Layout.

You can select either Scatter Mode or Uniform Layout, but not both.

Scatter Mode gives you control over the amount products are scattered throughout the complete nest. If the nesting algorithm is working at its most efficient, it does not take the scatter into consideration, the software just calculates the most efficient way to fit all the products onto the media using the smallest amount of media.

However, it may be for Production considerations that you would prefer the products in the nest to be less scattered and to be positioned closer together in groups. For instance, if you want to pack products as they come off the cutting table, particularly if you are working with a roll of material, Scatter Mode allows you to make sure products are placed in the same area on the roll so they can be packed more efficiently as they come off the bed.

Another more precise way to achieve this would be to use Priorities, but that can have a greater impact on the nesting efficiency. Priorities are a clearly defined order as you will see later in this document.

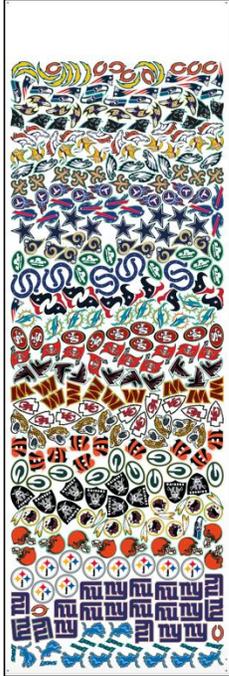
The default Nesting configuration is Scatter Mode, High. This means a high degree of scatter is allowed in the nest, and the Nest is optimal with minimal media usage. The other two Scatter options are Medium and Low, which allow less scattering of products but may use more media (see examples below).

The results of the Scatter Mode depend on many factors, but the option works best when a high number of parts and high number of quantities are being calculated. If you really want the products in a defined order at all times, then setting Product Priorities is a better approach.

Scatter Mode High



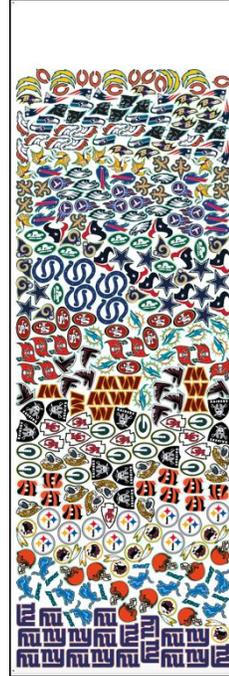
Scatter Mode Low 1



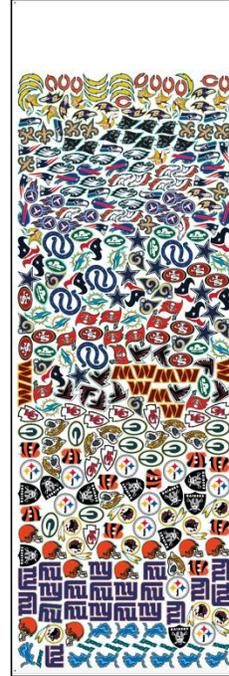
Scatter Mode Low 3



Scatter Mode Low 5



Scatter Mode Low 10



Maximum Scatter Number

Above you can see the results of Scatter Mode Low, with varying Maximum Scatter values. In these examples you can see a Maximum Scatter value of '1' gives the best results, but also uses the most media.

Other values still achieve a degree of grouping but generally with a large scatter and with less media usage.

Nesting Priorities

Another method of controlling the Nest is to use priorities. This is not controllable in the user interface, instead you assign a priority to each file in the nest either through a file naming convention, or via XML for Redirection.

The naming convention works as follows. 'Filenameisthis#15!1#.pdf'

You'll notice there are two numbers within the # now. The first number '15' in this case is the number of copies we want to print of this product, and for the priority we also add an exclamation mark after the quantity, and then add a priority number, the '1' indicates the priority of that product in the nest. Note the # brackets both the quantity and the priority.

Note: Using priorities can have an aggressive negative effect on the quality of the nest, but of course is extremely useful if you absolutely wish to control the order in which products will be output. This is particularly useful when working with roll-fed output on a cutting table.

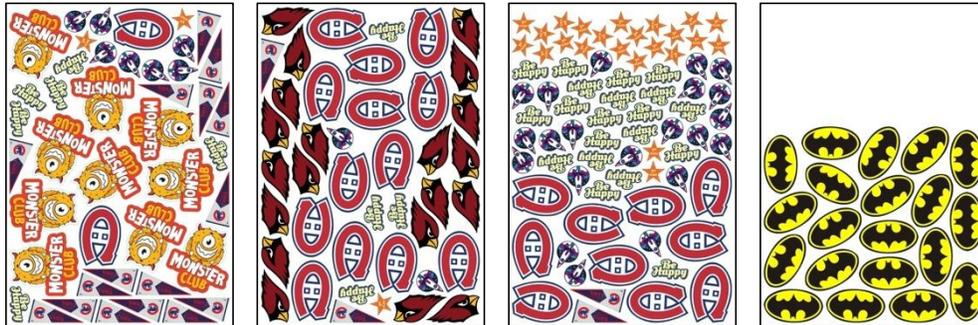
Here are two examples of Nesting Priorities in action.

The nesting configuration is:
 Origin Point = Bottom Left
 Uniform Layout = None
 Scatter Mode = High.

These are the contents of my first folder of files that I want to be nested (below). As you can see, I have only one file that has a priority '!1'. The Batman logo.

- Arizona#20#.pdf
- Batman#20!1#.pdf**
- BeHappy#30#.pdf
- Canadiens#25#.pdf
- Cubs#20#.pdf
- Fuse#30#.pdf
- stickers#10#.pdf
- Winner#26#.pdf

Here is the resulting output. As I only had a priority set on one product, that prioritized product actually comes out last! Although that sounds counter-intuitive, there are scenarios where this may be useful. If you select the PDF Output Option 'Sig/File' in the Impostrip Hot Folder, Impostrip will output one PDF file per sheet (signature), which means you can easily take the last PDF from the output hot folder that contains the prioritized product and print that first.

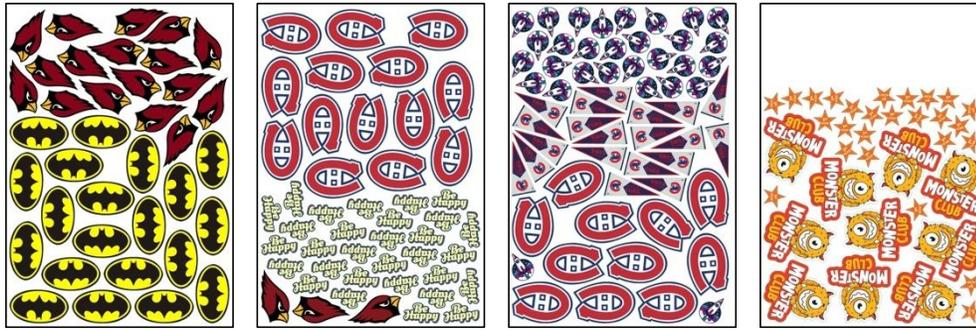


Here is the second example, in which all the files in the folder have priorities set.

- Arizona#20!2#.pdf
- Batman#20!1#.pdf**
- BeHappy#30!3#.pdf
- Canadiens#25!4#.pdf
- Cubs#20!5#.pdf
- Fuse#30!6#.pdf
- stickers#10!7#.pdf
- Winner#26!8#.pdf

Here is the resulting output of the second example.

You can clearly see in this example the output is fully respecting the requested priority order, and also that the nest is less efficient than before regarding media usage.



Nesting Computation

Computation Time allows you to define a target time for how long the nesting algorithms will run for before producing a finished nesting result. The algorithms work by producing a result, and then trying to find a better result and then a better result until the computation time limit is reached.

Testing shows us a minimum of 30 seconds and a maximum of 300 seconds is the best range. If nesting time is an important factor in your production, then dependent on the input files and quantities, 30 seconds is a good starting point. If you allow longer then the nest will be more efficient, but there will always be a point where an optimal result is achieved, and no improvement can be found.

If you are producing simple nested single products, then 30-60 seconds would be a good recommendation. If you are producing many different products with high quantities that result in complex nests, then you should define higher values. The longer the time allowed, the more complex the nest, and the greater number of products you will get on each piece of media.

Margins

Top, Bottom, Left, Right

Refers to the non-printable area of the media to be printed and finished.

The margins need to be wide enough for any marks and barcodes you wish to apply to the media.

Other AutoNesting Improvements

Support for Multi-page PDF input files

AutoNesting now supports Multi-page input PDF files for both simplex and duplex.

Support for Multiple Cut Contours in the input PDF file

AutoNesting now supports multiple cut contours on the same file.

Support for Non-Continuous Cut Contours in the input PDF file

AutoNesting is now much more tolerant of badly formed cut contours.

You also have the option of using a PDF Page Box as a fallback or erroring the job if a Cut Path cannot be used. Please see 'Fallback to Bounding Box'.

Support for AutoNesting Duplex output

AutoNesting now supports Duplex Output, please see the notes on the 'Backside is Mirrored' option to ensure your Duplex Hot Folders are correctly configured for your input files.

Updated AutoNesting XML for Redirection

The XML Schema for AutoNesting has been updated to incorporate the new functionality available in this release.

AutoNesting Priorities with XML for Redirection

You can control the priorities of PDF files in AutoNesting via XML for Redirection using the following Schema. You can also set Nesting priorities in XML but as discussed previously this will affect the efficiency of the resulting nest.

```
<Documents>
  <DocFile>
    <FullPathName>/Users/abc/REPOSITORY/Fuse.pdf</FullPathName>
    <PageRange UseAllPages="true"/>
    <Quantity>30</Quantity>
    <Priority>6</Priority>
  </DocFile>
```

AutoNesting with XML for Redirection

Example:

```
<AutoNesting>
  <Layout Value="Horizontal" />
  <RotationStep Value="None" />
  <DieLineColorName Value="Cutter" />
  <MaxComputationTime Value="60" />
  <Type Value="sheetwiseTurn" />
  <InterShapeGutter Value="10" Unit="MM" />
  <Bleed Value="3" Unit="MM" />
  <CenterOnMaterial Value="False" />
  <FallbackToBoundingBox Value="False" />
  <BackSidesMirrored Value="True" />
  <DoNotGenerateRepetitiveSheets Value="False" />
  <OriginPoint Value="BottomLeft"/>
  <UniformLayout Value="None" />
```

```
<ScatterMode Value="High" />  
<MaxScatterNumber Value="0" />  
</AutoNesting>
```

Layout

```
<Layout Value="Horizontal"/>
```

Options are: Vertical, Horizontal, BestFit, StepAndRepeat

Rotation

```
<RotationStep Value="None"/>
```

Options are: "0", "free Rotation", or "10", "20", "30", "60", "90", "180".

DieLine Color Name

```
<DieLineColorName Value="Cutter"/>
```

Represents the separation name of the contour in the one-up PDF that should be used for nesting geometry.

Computation Time

```
<MaxComputationTime Value="60" />
```

Sets the target time for the Nesting Calculation

Type

```
<Type Value="sheetwiseTurn"/>
```

Options are for Simplex and Duplex: "sheetwiseTurn" or "sheetwiseTumble".

Intershaped Gutter

```
<InterShapeGutter Unit="MM" Value="10"/>
```

Bleed

```
<Bleed Unit="MM" Value="3" />
```

Ideally should not exceed half of the Intershaped Gutter Unit

Center on Material

```
<CenterOnMaterial Value="False"/>
```

Options are: "True" or "False"

Fallback to Bounding Box

```
<FallbackToBoundingBox Value="False"/>
```

Options are: "True" or "False"

Backside is Mirrored

```
<BackSidelisMirrored Value="True" />
```

Applicable only for Duplex output. Options are: "True" or "False"

Do Not Generate Repetitive Sheets

```
<DoNotGenerateRepetitiveSheets value="False" />
```

Options are: "True" or "False"

Origin Point

```
<OriginPoint Value="BottomLeft"/>
```

Options are: "BottomLeft", "TopLeft", "BottomRight" or "TopRight"

Uniform Layout

```
<UniformLayout Value="None" />
```

Options are: "None", "Low", "Medium", "High", "Very High"

Scatter Mode

```
<ScatterMode Value="High" />
```

Options are: "High", "Medium", "Low"

Scatter Mode Number

```
<ScatterModeNumber Value="2" />
```

Options are : Zero (0) = no limit, otherwise an integer

Updated AutoNesting XML Audit file

The XML Audit file for AutoNesting has been updated and now contains additional information. The information is delivered in a per product and also per sheet format, so you can easily identify where the products are located in the nested output.

You can get the Sheet Coverage by a %, and from this you can also calculate the waste percentage. Waste is also included as a square unit value, and you can also get the total length of the cut path per sheet.

LaneFlow

LaneFlow is a template-less Lane-based ganging solution that maximizes media usage and is available for sheet and roll-fed devices.

LaneFlow is an optional add-on module to Ultimate Impostrip.

It can be used with a fixed lane size, or it can take its lane widths from the page boxes of the incoming PDF files. When using the width from the incoming PDF files it is also possible to have mixed lane sizes across the media.

LaneFlow ▾

Frame

Page Orientation: Portrait Only ▾ Lane Gutter: Inter Page Margin: Type: Sheetwise Turn ▾

Frame Edge Margins

Top: 0 mm Bottom: 0 mm Left: 0 mm Right: 0 mm

Lane

Automatic Lane Doubling: Collated Copies: Left Alignment: Bottom Alignment: Fixed Lane Size:

Additional Settings

Do not Generate Repetitive Sheets:

Page/Product size from the input PDF file(s).

LaneFlow takes the size of the product from the Page Boxes from the input PDF file(s). If the Trim Box is available that will be used first, if that is not available then the Crop Box will be used, if the Crop Box is not available then LaneFlow will fall back to the PDF Media Box. Every PDF must have a Media Box so that will always be available, whereas the Crop Box and Trim Box are not.

If your product is an irregular or non-rectangular shape, you should take care that the PDF Trim or Media Box is an appropriate size so that your product and also the space between the products (Inter Page Margin) gives you the results you expect.

Page Orientation

| |
|--|
|  No Rotation |
|  90° Rotation |
|  Mixed Orientations |

Determines how pages must be laid out:

- No Rotation: Documents are placed as they appear in the original PDF.
- 90-degree Rotation: Documents are rotated 90 degrees when placed.
- Automatic One Direction: It lays out all documents with No Rotation or 90 Degree Rotation (but not both), depending on what gives the best result.

Lane Gutter

Here you define the width of the Gutter between the Lanes.

Inter Page Margin

This is the distance between products that are placed in the Lane based on the PDF Page Boxes in the input PDF files.

Type

The options you see here change depending on whether you are working with a Simplex or Duplex Hot Folder

If you select Simplex, you have a single option 'FullSheet' as you are only printing on one side. For Duplex you have the option of Sheetwise Turn or Sheetwise Tumble which Indicate how the media will be turned to print the reverse, either by Turning or Tumbling.

Frame Edge Margins

Top/Bottom/Left/Right

Margins will define the non-printable area on the four edges of the Media

Lane

Automatic Lane Doubling

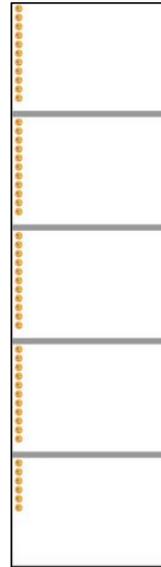
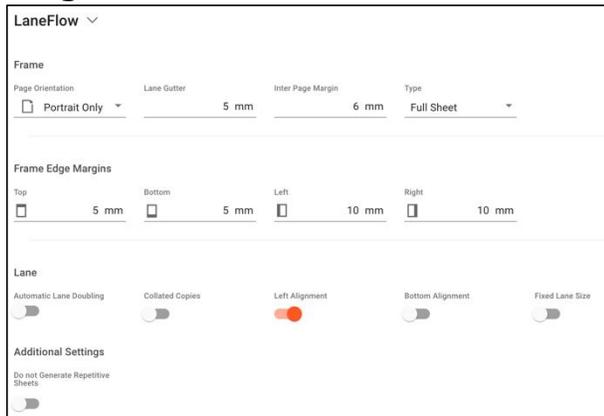
With LaneFlow you can define what Lane a product(s) appears in by using the '@' as a Suffix in your filename or defining a Lane via XML. If 'Automatic Lane Doubling' is OFF, then the product will be placed in that Lane as many times as needed to meet the quantity for it you have defined.

If Lane doubling is ON, then LaneFlow will automatically add products in additional lanes to try to maximize the width of the media, based on the quantity of each product you have defined. You can see some examples of this behavior below.

With Lane Doubling OFF

My filename for this file is **'City Zoo 42mm#50#.pdf'** So, a quantity of 50 copies set in the file name.

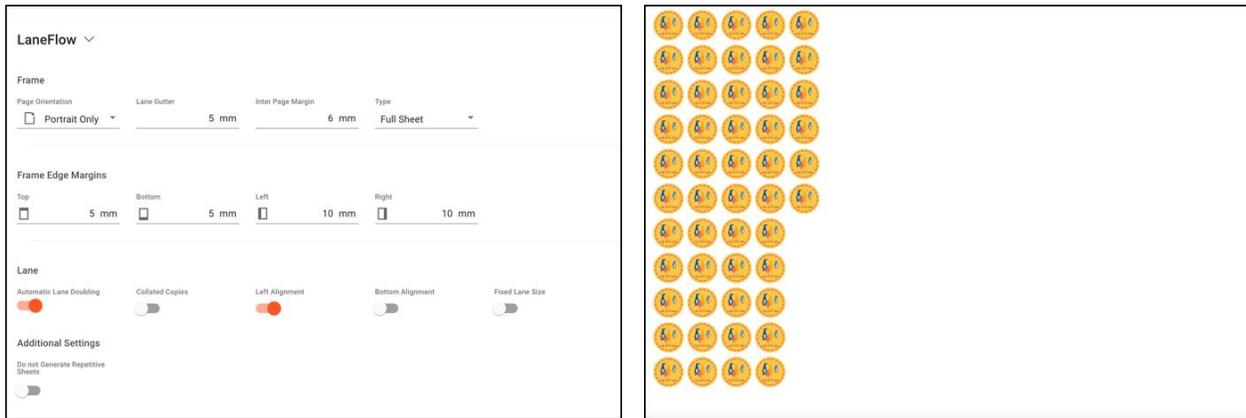
You can see the configuration below and the Output PDF. With Lane Doubling OFF the labels fill one lane, and then make additional pages (5 in total) to create the amount of labels required using that same lane. (50).



With Lane Doubling ON

Using the same file and the same Hot Folder configuration, but with Lane Doubling OFF, you get result below.

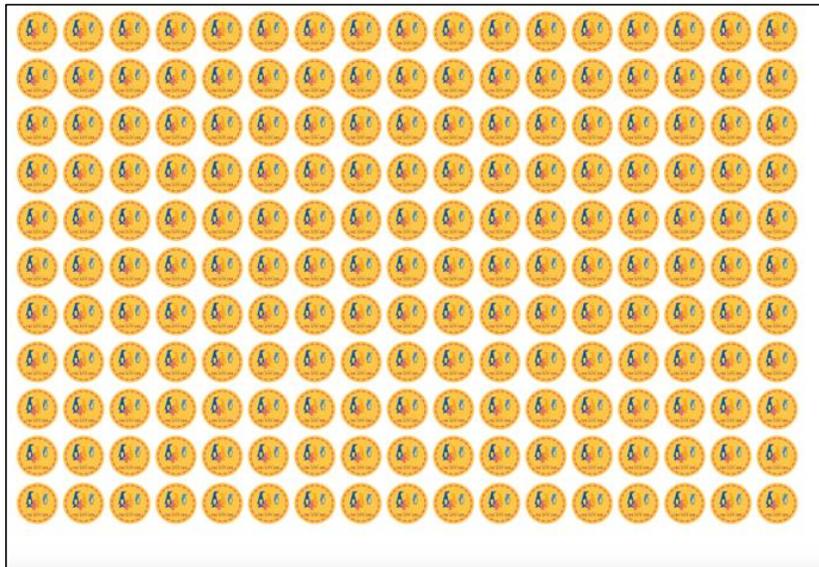
You can see that the file indeed starts processing in lane 1 as requested, and then once that lane is full, as Automatic Lane Doubling is on, it reflows across the lanes until it reaches the required quantity (50).



Filling the Sheet

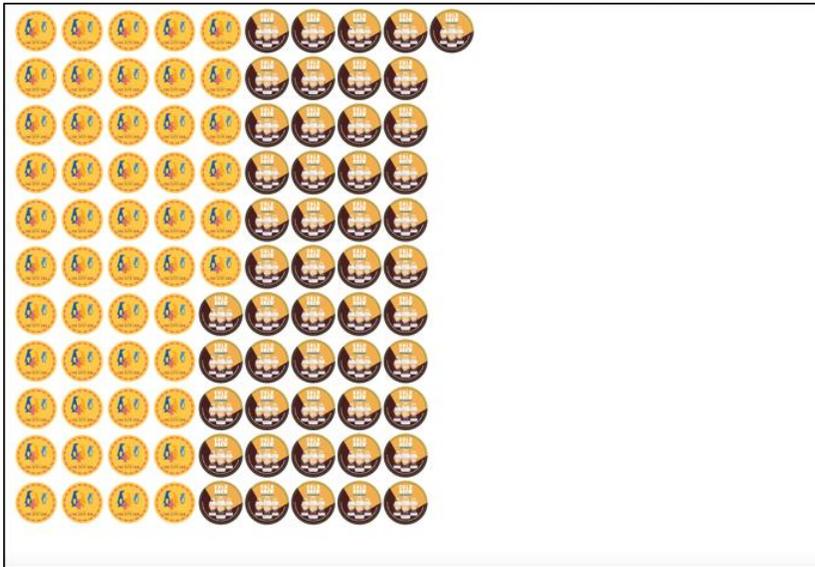
Additionally, if I drop a file into a Hot Folder without a quantity and Automatic Lane Doubling ON. Laneflow will fill the defined sheet with as many copies as it can respecting the configuration of the Hot Folder when it does it. This only works with a single page file.

My filename for this job is **'City Zoo 42mm.pdf'**, so note it does not have a quantity included. This example uses the same Hot Folder configuration as previously shown.



Later on in this document we'll talk about the use of the '@' symbol to define a Lane or a sequence. Here's an example of Automatic Lane Doubling with a job of two files, both with the same '@' value indicating the same lane or sequence.

 City Zoo 42mm#50#@1.pdf
 Coffee sticker#50#@1.pdf



And a further example of Automatic Lane Doubling with the same files, but with the second file have an '@2' suffix

 City Zoo 42mm#50#@1.pdf

 Coffee sticker#50#@2.pdf



Collated Copies

This option gives you the ability to collate multi-page jobs when they are placed in lanes.

Uncollated (option off) Collated (option on)

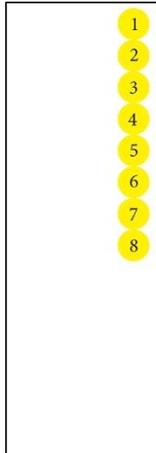
| | | |
|---|---|---|
| 3 | 2 | 1 |
| 3 | 2 | 1 |
| 4 | 2 | 1 |
| 4 | 2 | 1 |
| 4 | 2 | 1 |
| 4 | 2 | 1 |
| 4 | 3 | 1 |
| 4 | 3 | 1 |
| 4 | 3 | 1 |
| 4 | 3 | 1 |
| 4 | 3 | 1 |
| 4 | 3 | 2 |
| 4 | 3 | 2 |
| 5 | 3 | 2 |
| 5 | 3 | 2 |

| | | |
|---|---|---|
| 5 | 7 | 1 |
| 6 | 8 | 2 |
| 7 | 1 | 3 |
| 8 | 2 | 4 |
| 1 | 3 | 5 |
| 2 | 4 | 6 |
| 3 | 5 | 7 |
| 4 | 6 | 8 |
| 5 | 7 | 1 |
| 6 | 8 | 2 |
| 7 | 1 | 3 |
| 8 | 2 | 4 |
| 1 | 3 | 5 |
| 2 | 4 | 6 |

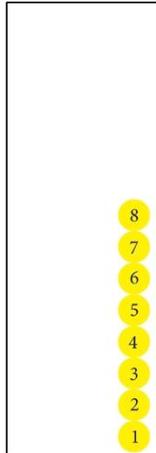
Left Alignment/Bottom Alignment

These options adjust the position of the job on the media based on the defined margins and the media size

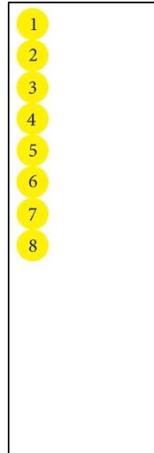
Both Options OFF
ON



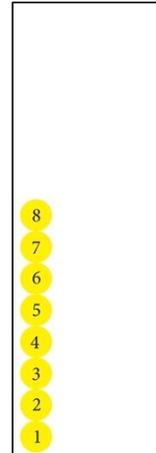
Align Bottom ON



Align Left ON



Align Left and Bottom



Fixed Lane Size

This option allows you to set the width of a Lane so that it is a fixed size rather than taking its Lane width from the largest product in the Lane.

VERY IMPORTANT NOTE: The fixed Lane Width you define should also take into account any defined Lane Gutter, so the value you enter should be the required Lane Width Plus the Lane Gutter.

If a file is too wide for the defined Lane size then an error will be generated and the job will fail. If Page Orientation is ON with Mixed Orientations, then a job will rotate to try to fit into a Lane.

LaneFlow and Dynamic Media

LaneFlow has the option of working with Dynamic Media, but when using Dynamic Media, you have the ability to define if the Lanes are Vertical or Horizontal. You can achieve the same result with a static sheet size by rotating your output PDF, but LaneFlow with Dynamic Media has a separate implementation which is linked to the static fixed dimension in Dynamic Media.

If your Width is fixed, then the Lanes will be vertical. If your Height is fixed, then the Lanes will be Horizontal.

Additional Settings

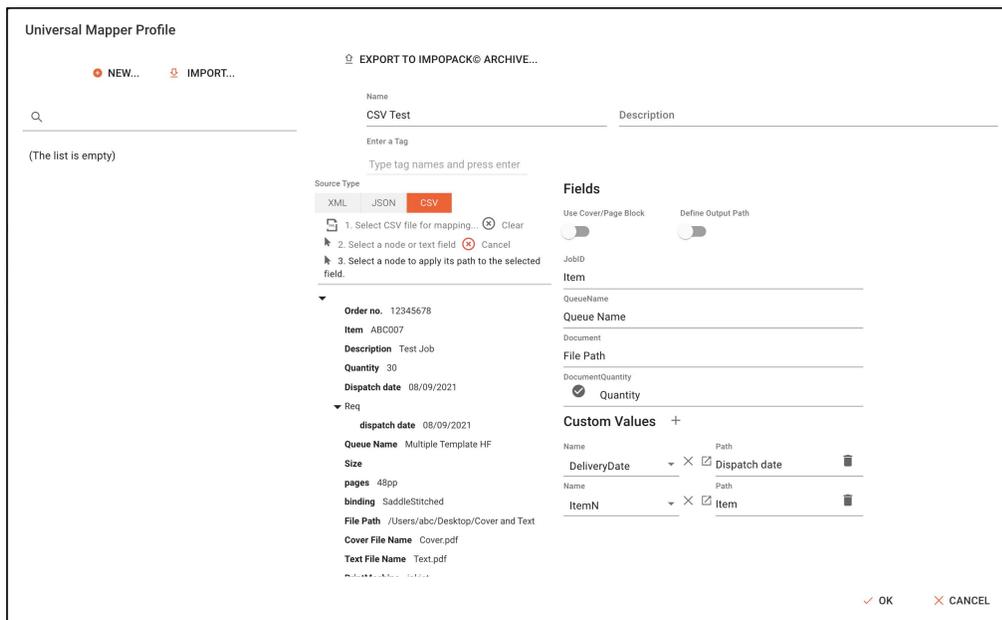
Do Not Generate Repetitive Sheets

When Do Not Generate Repetitive Sheets is checked, Impostrip® will only generate one copy of a sheet that needs to be printed many times. So rather than having six sheets that are identical, you will have one sheet/frame that needs to be printed six times.

Defining Lanes using '@'

You can define via naming conventions which products/pages appear in a certain Lane order or in a defined Lane using the '@' as a suffix in your file name. The results are dependent upon whether the option 'Auto Lane Doubling' is ON or OFF. If it is OFF the Lanes are defined by the '@', if it is ON the @ suffix dictates an order rather than a defined Lane.

CSV and JSON support for the Universal Mapper



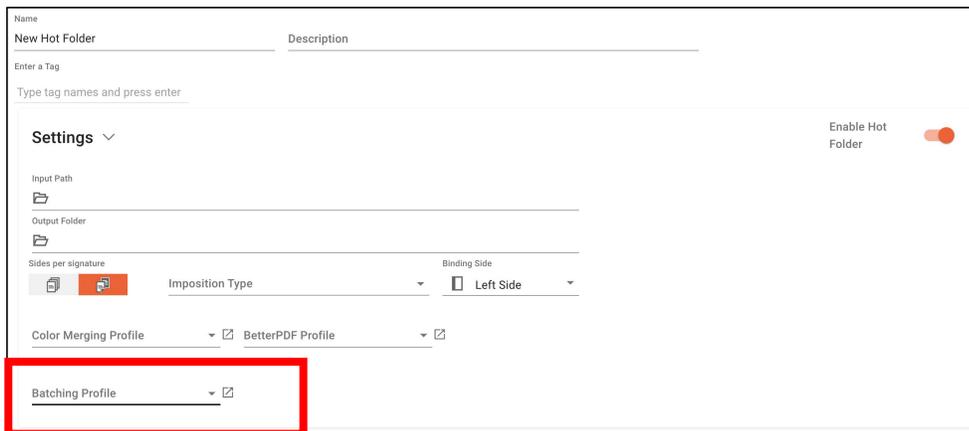
The Universal Mapper now supports .CSV files as well as JSON and XML.

Batching Improvements to Ultimate Impostrip Scalable

Ultimate Impostrip 2023.2 introduces a major behavioral change to the way that Batching Profiles work. In previous versions you would configure a Batching Profile and that included within it input Folders which would then feed batched jobs to a defined Ultimate Impostrip Hot Folder configuration.

In this new release this process is much improved. The Batching Profile no longer has its own input folders, it now uses those of the main Hot Folder.

The Batching Profile is now a part of the main Hot Folder configuration as you can see below.



Name
New Hot Folder

Description

Enter a Tag

Type tag names and press enter

Settings ▾

Enable Hot Folder

Input Path

Output Folder

Sides per signature

Imposition Type

Binding Side

Left Side

Color Merging Profile

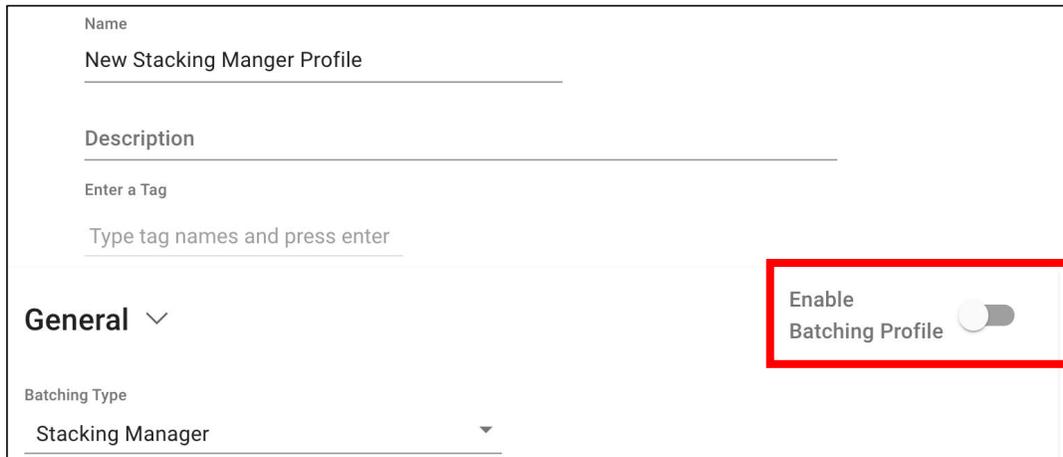
BetterPDF Profile

Batching Profile ▾

Using the standard Ultimate Impostrip functionality here you can select an existing Batching Profile or by selecting the you can open the interface and make a new Profile or edit an existing one.

Very Important: Please note that a Batching Profile can be enabled or disabled inside the Batching Profile itself. See below.

If you add a Batching Profile to a Hot Folder, please make sure it is enabled first. If a Batching Profile is not working when added, then this would be a good place to check first.



Name
New Stacking Manger Profile

Description

Enter a Tag

Type tag names and press enter

General ▾

Enable Batching Profile

Batching Type

Stacking Manager

Stacking Manager additional functionality

The Stacking Manager batching type has new functionality added relating to Blank Padding (Allow Empty Stacks) and also the Quantity Policy (Merge Document Quantities before Pairing and Keep Quantities in the same Stack).

Stacking Manager also now supports XML for Redirection.

Duplo DC20K/DC-746 B2 Support

Impostrip 2023.2 now supports the import of XML data from this Duplo B2 Slitter/Cutter/Creaser and converts the XML into an imposition template with all the Marks and Barcodes as defined on the device controller application.

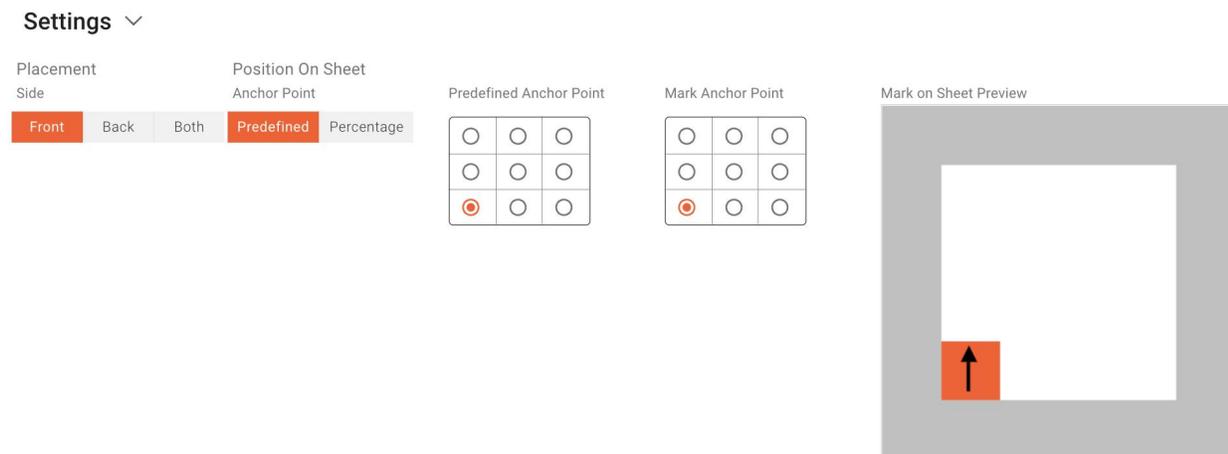
When importing an XML from the this Duplo device, Ultimate Impostrip makes two templates, a Simplex and a Duplex.

Improvements to Marks

Mark Positional Preview in Marks Profile

The Preview gives you a visual representation of how your Mark will be positioned based on the anchor point decisions you have made. This view also supports the rotation setting in the Constraints panel, but not the X/Y positional co-ordinates.

The gray border you see in the Preview represents the Sheet/Page/Plate depending on the type of Mark you are editing.

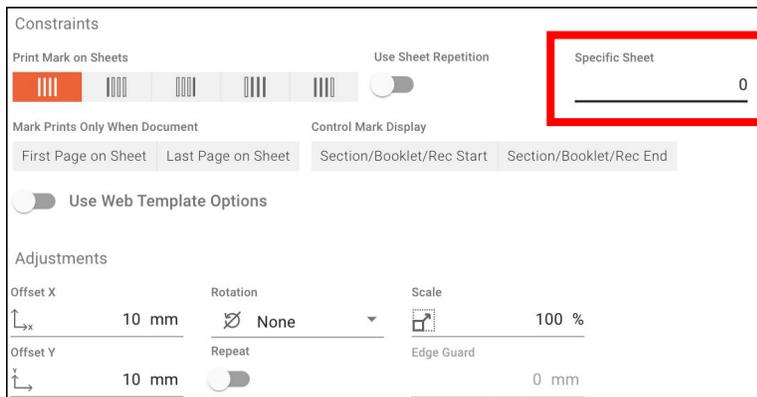


Ability to define Custom Marks to appear on a specific sheet

This new option allows you to define a mark to appear on a specific sheet.

It can be configured using XML for Redirection, UICL or within a Hot Folder.

You can define the sheet with a positive value, which will count from the first sheet in the Imposition, or you can enter a negative value which will count from the last sheet.



The latter is a very useful approach, as if you always want a mark on the last sheet you would add '-1', if you wanted the last but one sheet (penultimate) then enter '-2'. The mark will then appear on the required sheet no matter the number of sheets in the imposition.

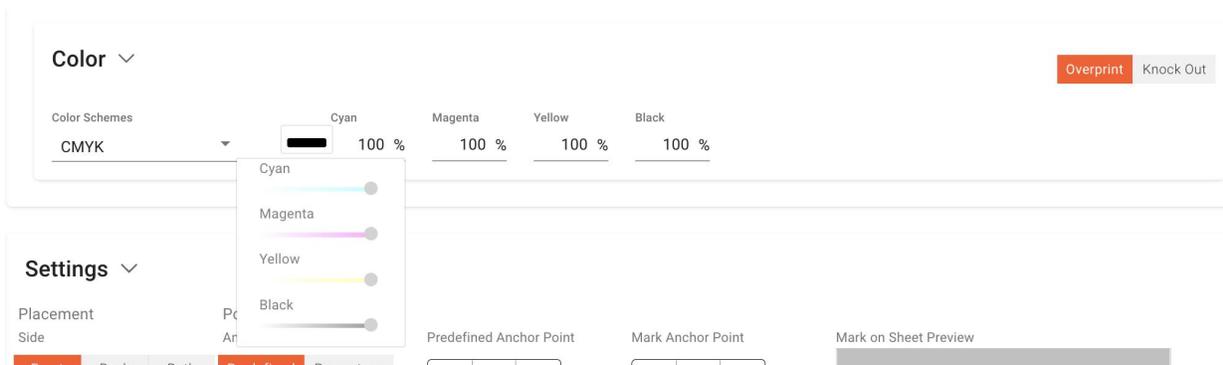
In UICL and XML for Redirection 'AllSheets' should be set to false for 'OnSpecificSheet' to take effect.

```
<Sheet AllSheets="false" First="false" Last="false" Side="Front" OnSpecificSheet="-2" />
</Mark>
```

Note: SpecificSheet takes precedence over other sheet options

CMYK slider-based color editor

Where required CMYK colors can be defined by values or now also by a CMYK slider.



Other Notable Changes

If a UICL workflow has a missing template, the error message has been improved to include the template name.

SmartStacker Hot Folder options have been rationalized

The Horizon SmartStacker options have been rationalized as some of the options were confusing, unnecessary, and created issues with SmartStacker output.

The options: Last To First, Backs Before Fronts, Blanks, and Add Blank Page to Odd Documents have been removed as there were not applicable and caused confusion.

Treat Each Document As Independent Job, and PDF Output Option have been hardcoded to their recommended settings and their options disabled.

Signature Booklet Impopack

If a Signature Booklet includes the 'use cover' option when that Signature Booklet is exported as an Impopack the cover template will now be included in the Impopack.

Print Output Option renamed

'Print Output Option' has been renamed to 'PDF Output Option' to better reflect the functionality.

The PDF Output Option 'Plate/File' renamed

The PDF Output Option 'Plate/File' has been renamed to 'Side/File' to better reflect the functionality. This option outputs a separate PDF file per side and adds an appropriate file name suffix.

The Side/File option is now available in more Imposition bundles, previously it required the 'Offset Module' to be available.

Universal XML/JDF Mapper renamed

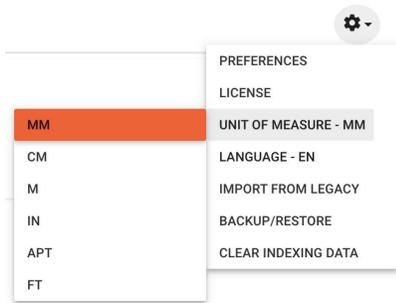
'Universal XML/JDF Mapper' has now been renamed to 'Universal Mapper' to better reflect its functionality as it now additionally supports JSON and CSV formats.

'Manual Duplexing' option removed as it is no longer relevant

The 'Manual Duplexing' option in the Hot Folder > Sides panel has been removed as it was no longer relevant in a modern automated workflow.

'Units' in Preferences > Measurements removed

The 'units' option in the Preference Measurements has been removed. To configure units, you should use the 'Unit of Measure' option.



'Embed Fonts by Default' setting moved

This defines the default value for this option when a new Hot Folder is created. It has been moved to a new more logical location as it is not a preference.

You can find it now at: Settings > Default Values > Profile.

2023.2 Tickets and Fixes

| | |
|--------|--|
| TT3067 | Resolved an issue with Sheets in DXF Output |
| TT3552 | Resolved an issue with Bleed in the Output PDF file |
| TT3726 | Resolved an issue with Optional Content Groups (Layers) |
| TT3823 | Improved the handling of Cut Paths |
| TT4265 | Resolved an issue with groups in Booklet Maker |
| TT4382 | Improved AutoNesting |
| TT4520 | Resolved an issue with Optional Content Groups and multiple Impostrip processing |
| TT4545 | Added the option to influence Output File Naming |
| TT4634 | Improved the handling of Optional Content Groups (Layers) |
| TT4707 | Resolved an issue with Plate size parameters |
| TT4826 | Added the option for OneUpBooklet |
| TT4864 | Improved AutoNesting with regards to Multiple Paths |
| TT4867 | Improved the handling of Optional Content Groups (Layers) |
| TT4931 | Improved the handling of Optional Content Groups (Layers) |
| TT4943 | Resolved an issue with Custom Values in Redirection XML |
| TT4962 | Improved the Impopack handling of "Use Cover" with Signature Booklet Maker |
| TT5017 | Improved the handling of multiple paths in AutoNesting |
| TT5236 | Resolved an issue with Step and Repeat |
| TT5239 | Improved the Impopack handling of "Use Cover" with Signature Booklet Maker |
| TT5248 | Resolved an issue with Embed Fonts |
| TT5357 | Resolved an issue with Custom Variables in AutoNesting |
| TT5374 | Resolved an issue with Banner Pages or Sheets |
| TT5406 | Resolved an issue with 'Total Booklet Number' in a Formula |
| TT5413 | Resolved in issue with "minimum Gutter Size for Cut Marks" in Autoflow |
| TT5438 | Resolved an issue with Marks in Dutch Cut |
| TT5439 | Resolved an issue with Color Separation |
| TT5447 | Resolved an issue with Mirrored page in a Template. |
| TT5448 | Resolved an issue with fonts in Collating Marks |
| TT5454 | Resolved an issue with Simplex output |
| TT5455 | Resolved an issue with Marks in Autoflow |
| TT5456 | Resolved an issue with Multiple Template Agent |
| TT5460 | Resolved an issued with Legacy import of Banners |
| TT5463 | Resolved a Color issue with Dynamic text mark |
| TT5465 | Resolved an issue with adjusting Priority in Job Manager |
| TT5506 | Resolved an issue with Bust Cut Imposition |
| TT5517 | Resolved an issue with XML Redirection Custom Values |
| TT5518 | Resolved an issue with PDF Compression and Legacy Import |
| TT5519 | Resolved an issue with automatically deleting Input Files |
| TT5553 | Resolved a Mark issue regarding number of total pages. |

| | |
|--------|--|
| TT5555 | Resolved an issue with Record End Stop-Start Mark |
| TT5557 | Resolved an issue with Legacy Import |
| TT5567 | Resolved an issue with Cut Marks on Dutch Cut Templates |
| TT5570 | Resolved an Orientation issue with Banner Sheets |
| TT5571 | Resolved an issue with Frame Number in Banner Barcodes |
| TT5591 | Resolved an issue with Edit Copy of template |
| TT5594 | Resolved an issue with Barcodes and JDF preview output |
| TT5597 | Resolved an issue with AutoNesting Duplex Output |
| TT5603 | Resolved an issue with UICL Margins |
| TT5604 | Resolved an issue with AutoNesting and XML for Redirection |
| TT5609 | Resolved an issue with Dynamic Trim Page Size and Signature Book Maker |
| TT5612 | Resolved an issue with Korean characters and QR Codes |
| TT5620 | Resolved an issue with the Color Bar Editor |
| TT5621 | Resolved an issue with Duplo Cut Marks |
| TT5644 | Resolved an issue with XML text mark anchor points |
| TT5648 | Resolved an issue with Dynamic page sizes |
| TT5653 | Resolved an issue regarding a failed job |
| TT5689 | Resolved an issue regarding AutoFlow XML Margins |
| TT5695 | Duplo DuSense Mark size has been changed to 4mm |
| TT5714 | Resolved an issue with Barcode colors |
| TT5736 | Resolved an issue with percentage Mark offset |
| TT5758 | Resolved an issue with Signature Booklet Maker |
| TT5793 | Resolved an error with Color Separation |

Obsolete Features

The following options have been removed from the application as they were no longer relevant.

Manual Duplexing option

AutoFlow 'Minimum Gutter Size for Cut Marks'

How to get Technical Support

If you have an active Titanium Service Plan, get technical support by completing a form on our website to open a ticket. You may also submit feature requests here:

<https://imposition.com/support/> or email us at techsupport@imposition.com

If you would like to renew your Titanium Support Plan, please contact customerservice@imposition.com

Ultimate Technical Services Team

The Ultimate Technical Services Team are experts in print production automation. Whether for software training, implementation support, imposition workflow consulting, or technical support, the Ultimate Technical Services Team can help with your small to complex projects.

To make a Training Request or Implementation Request, please click here: <https://imposition.com/services/>

Thank You

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