Océ | User Guide

Océ Professional Document Composer V3.10

...and Training?

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our Training Center in Poing.

Information:
Phone +49 8121 72-3940
Fax +49 8121 72-3950

Océ Printing Systems GmbH
Postfach 1260
85581 Poing
Germany

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1 Introduction

1.1 Overview

To cost-effectively produce the short press runs usually associated with Printing on Demand you need a highly automated process. The Professional Document Composer meets this demand. This state-of-the-art prepress application performs the imposing of files that have been converted into the print format. The program not only makes optimal use of the print format; it also adjusts the page sequence during printing to the selected type of binding.

The Professional Document Composer is a highly flexible software product that works with the POD-Module and all DEMANDSTREAM printers, both for cut sheet and continuous forms processing. As a multipurpose application it is also designed to accommodate the most diverse post-processing methods, both offline and online.

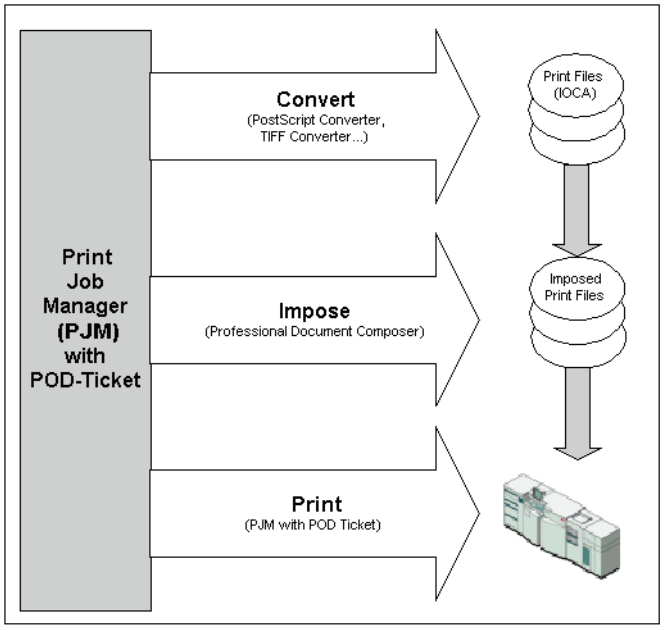


Figure 1 Integration of the Professional Document Composer into the PoD workflow.

When you use the Professional Document Composer to imposition files, the print file is automatically adjusted to the type of:

- Printed material
- Print output
- Post-processing

You'll find The Professional Document Composer useful in a diversity of ways:

- Accommodates wide range of publications.
- Optimizes printing of small-format printed materials and thereby shortens printing times.
- Simplifies job preparation and job acquisition.
- Facilitates seamless post-processing after the printing process.
- Reduces paper costs.
- Helps you fit the printed materials and the PoD process to your preferences, not the other way around.
- The Professional Document Composer provides a command-based as well as a graphical user interface.

1.2 Requirements for Operation and Use of PDC

Format of input files

Input files for the Professional Document Composer must be provided in the MODCA format. Files in the following formats can be converted into MODCA by the POD-Module converters: PDF, PostScript, EPS, TIFF, PCL5 and PCL 6. These converted files can then be processed by the Professional Document Composer. Restrictions apply to other MODCA files from other converters or filters.

Naming conventions for input files

Input, output and resource files must not include the following characters as part of a file name:

'!' '<' '>' '$' '*' '/' '%' ',' '"'

These are internal special characters of the Professional Document Composer.

Operating System

Caldera Opern Linux 3.1.1 is required to run the PRISMA Professional Document Composer with graphical user interface. To use the PRISMA Professional Document Composer in graphics mode under X-Windows, you need an appropriate graphics card and monitor for 1024x768 resolution.

Paper Sizes

When using the Professional Document Composer, consider the paper sizes accommodated by the printer.

Page Numbering

The Professional Document Composer in no way changes the page content that's to be printed in a document. All page numbers remain exactly as generated by the editor.

When you use the Professional Document Composer for documents with page numbering, you must therefore make sure that the generation of blank pages (especially in duplex and folded printed materials with a front cover printed on one side only) doesn't result in inconsistencies between the printed page number and the actual page.

1.3 Start-up of PDC V3.xx on the Basis of PDC V2.0

With the Professional Document Composer (PDC) version 3.0 the directories for the resource files of the composer have been modified.

The old directories '$MERGE', '$OVERLAYS', $VARIABLE' and '$MARKS' and $COMPOSER in `u/prismapro/composer/resource` have merged into one directory '$COMPOSER' in `/u/prismapro/resources/composer`.

You have to copy all resource files stored in the old directories under `u/prismapro/composer/resource` into the new directory '$COMPOSER' in `u/prismapro/resources/composer`.

If you start the PDC V3.0 with a parameter file (from the graphical user interface or from the command line), which still uses the old names of the resource files, the resources will automatically be taken from the '$COMPOSER' directory. Therefore you don't have to modify anything.

2 Main Window

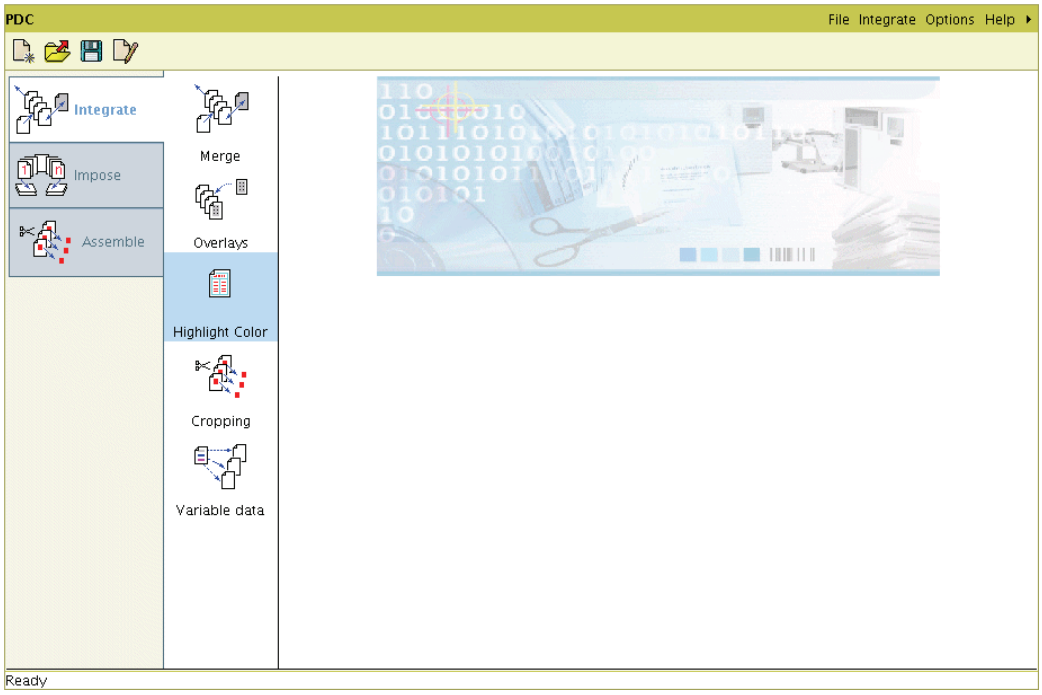


Figure 2 Composer Main Window

You can select one of the three main function groups **Integrate**, **Impose** and **Assemble** on the left side of the PDC main window (Navigation Area). All applications which belong to these components are then displayed in a second row of the Navigation Area. Clicking on one of the components, opens the corresponding application in the Workspace Area on the right side of the PDC. Here you can insert and modify the corresponding parameters. If parameters have been inserted or modified, the color of the corresponding symbol gets darker. If the changes have been applied, a green check mark is added to the symbol.

The **File** menu contains functions for managing, saving and organizing parameter sets. The **Options** menu contains the possibility to generate internal page segments to fully use the 'Enhanced Page Segment Support' function of the Demandstream 8090.

The fields **Integrate**, **Impose** and **Assemble** as a group serve to define the logical workflow within the Professional Document Composer.

Integrate

This group contains all "logical operations", i. e., all functions that manipulate the print file on the logical page level prior to the actual imposition. This includes multi color processing (**Highlight color**), the insertion and deletion of pages (**Merge**), page cropping (**Cropping)**, and the insertion of **Overlays** and of **Variable data**.

Impose

Once prepared in this manner, the file can then be imposed, i. e., the page sequence and page layout can be changed. The corresponding settings are selected in the Impose group with the functionality of **Impose** and **Signature**.

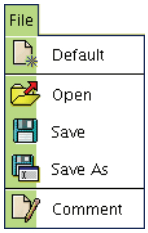
Assemble

The third group provides the means of processing the output resulting from Integrate and Impose on the physical page level. Assemble functions include the moving of logical pages on the physical sheet (**Positioning** and **Creep**) and the insertion of **Blank Sheets**, **Marks** and **Barcodes**. In addition, a print range (**Print Range**) can be defined and the individual sheets can be assigned to the paper input trays of a cut sheet printer.

If you don't make any parameter settings, the default applies. In that case no **Integrate** and **Assemble** parameters are selected.

The **Impose** parameters **N-up**, **Page-Sequence**, **Page layout** and **Paper size** are set to the value **from file**. This means that the page sequence as well as the page layout and the target paper size are retrieved from the input file.

2.1 The File Menu



'Default'	This command generates a new parameter set with default settings. All preceding entries that have not been saved with **'Save copy as'** are now deleted without a warning message.
'Open'	This command opens a file selection box for you to select the parameter set you want to load. The File Selection Box displays all files in the currently selected directory. You can change directories either by double-clicking an element in **Directories** or by entering the name in the input field **Filter** and clicking the **Filter Button** once. You can select a parameter set in the **Files** list. You can also enter the fully qualified name of the parameter in the **Selection** input field. Click the **OK** button to load the selected file and return to the previous window. **Cancel** aborts the file selection and returns to the PDC main window.
'Save the parameter set'	Clicking this button displays the 'Save' file selection box along with the listof the parameter sets already stored in the 'Home' directory. The Professional Document Composer always automatically adds the suffix '.imp' tothe set name, if you haven't already done so. Please be aware that the Composer will add a suffix if such a suffix has already been inadvertently entered in capital letters ('.IMP'), since the Composer would identify these as part of the name (e.g., 'xxx.IMP.imp').
'Save the parameter set as'	Allows you to save the parameter set under a different name.
'Comment'	This command opens a window in which you can edit a description of your current parameter set.

2.2 Common Controls

2.2.1 List of settings

To accept settings made in the input fields, they must be stored in the list of settings before pressing 'Apply'. These lists appear in most of the applications of the **Professional Document Composer**. The following icons are used to manipulate the list of settings:

Add new Item 	Inserts settings from the input fields into the list.
Remove selected items from the list 	Removes a previously selected line from the list.
Modify the item 	Select the line which should be modified. Now you can modify the entries in the input fields. Then click the icon to change the setting in the list accordingly.
Move selected items up 	Moves a selected entry up in the list.
Move selected items down 	Moves a selected entry down in the list.

2.2.2 Buttons

Apply Accepts all modified settings.

Cancel Discards all modifications.

Clear Clears all text fields.

Help Opens the context sensitive help file for the active application.

3 The Integrate Menu and Section

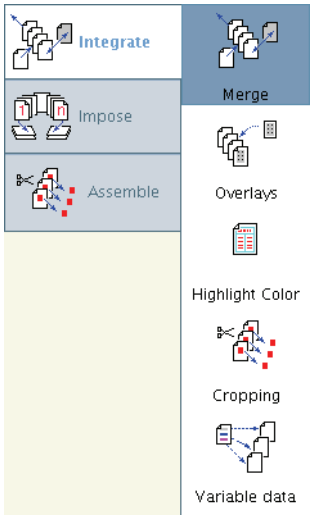


Figure 3 'Integrate' section

3.1 Introduction

Here the document is manipulated on the logical page level. You may define custom tone printing, insert, replace and delete pages, cut out printable areas, place overlays or variable data. The respective functions are **Merge** (page 10), **Overlays** (page 13), **Highlight Color** (page 19), **Cropping** (page 22) and **Variable data** (page 25).

3.2 Merge

The functions available in this window enable you to directly manipulate the print file. The file can be adapted to the current requirements by inserting, removing or replacing logical pages in the document as required.

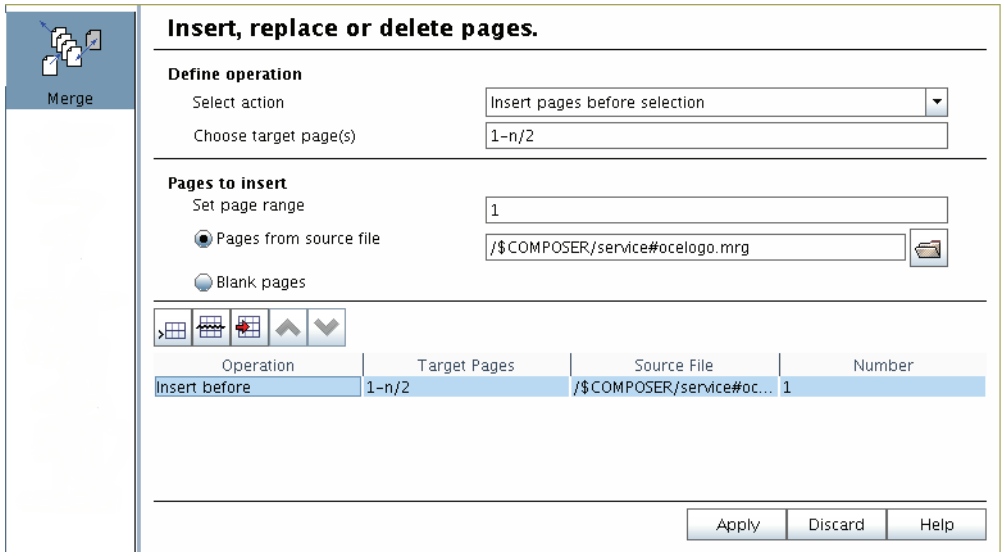


Figure 4 Window 'Merge'

3.2.1 Define Operation

'Select action'	The following actions are possible: **Delete one or more pages**: Deletes one or more selected page(s). **Insert pages before selection**: Adds additional pages before the selected target page of the print file. **Insert pages after selection**: Adds additional pages after the selected target page of the print file. **Replace one or more pages**: Replaces the target pages specified with selected pages or blank sheets.

'Choose target pages'	Enter the target page(s), which should be deleted, inserted or replaced. "n" represents the last page of the file, "n-1" the second-last page, etc. The following expressions are valid: n n-integer n/integer n/integer - integer integer integer - integer integer - n integer - integer : integer (if 'Insert pages before selection')

Examples	**Operation**	**Target pages**
Delete page 8 Delete pages 1 through 8: Delete the second half of the print file Delete the first half of the print file	Delete one or more pages Delete one or more pages Delete one or more pages Delete one or more pages	8 1-8 n/2+1-n 1-n/2
Insert before the second-last page: Insert after the last page Insert in the middle of the print file Insert before every page Insert before every second page	Insert pages before selection Insert pages after selection Insert pages before selection Insert pages before selection Insert pages before selection	n-1 n n/2+1 1-n 1-n:2
Replace pages 8 to the end of the file Replace second half of the print file	Replace one or more pages Replace one or more pages	8-n n/2+1-n

3.2.2 Pages to insert

If you have selected the functions **Insert...** or **Replace...** in the **Define Operation** section, you can choose whether to insert or replace one or more blank (logical) page(s) (**Blank pages**) or whether pages from another file (**Pages from source file**) are to be integrated in the document. The file must be in the IOCA format.

'Set page range'	The number of pages or the range of pages to be inserted or replaced is defined in this field. The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + interger

'Pages from source file'	If pages from another file are to be inserted in the document, you can select the file by clicking the folder icon or by entering the fully qualified file name in the text field. The source files must be stored previously in the directory **$COMPOSER** in IOCA-format. This is done with the PJM 'Store' option (Store as resource -> Merge).
'Blank pages'	Inserts blank pages at the given position.

Examples	**Pages**	**Source file**	**Number**
Insert 3 blank pages	Blank		3
Insert page 3 from file /$COMPOSER/source.mrg	from file	/$COMPOSER/source.mrg	3
Insert pages 3 through the last page from file /$COMPOSER/source.mrg	from file	/$COMPOSER/source.mrg	3-n

3.2.3 List of settings

The settings only become effective, if you add them to the list of settings at the bottom of the window (see chapter 'List of settings" on page 8). Then click 'Apply' to finally accept the settings.

3.3 Overlays

Overlays are useful for inserting a static element (e.g., a corporate logo) in an otherwise completed page. The Professional Document Composer features options for inserting your own overlays on any desired page(s) in the document.

An overlay is always inserted at the origin of the logical page and remains permanently linked with the logical page.

You can insert either **single page overlays** or multi page overlays (**File mapping**). A free positioning is possible for both possibilities.

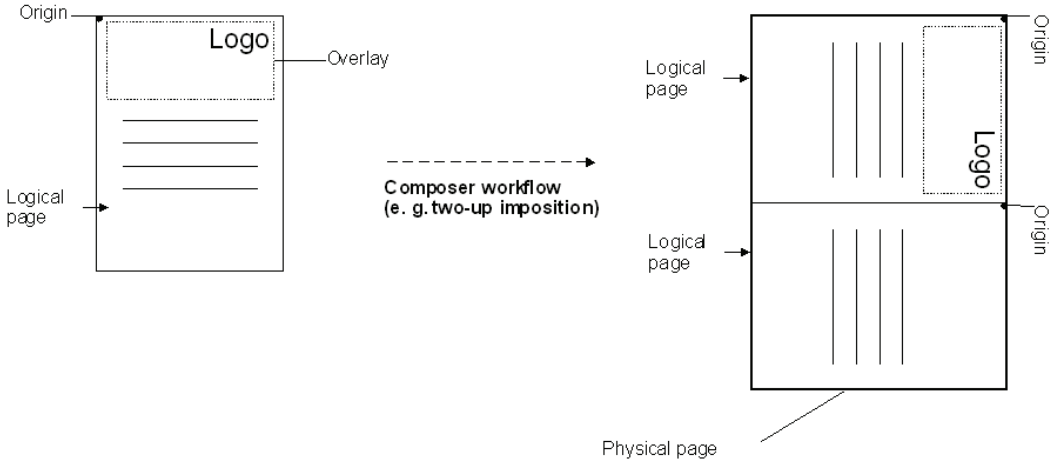


Figure 5 Static linking of the overlay with a logical page.

3.3.1 Single Overlays

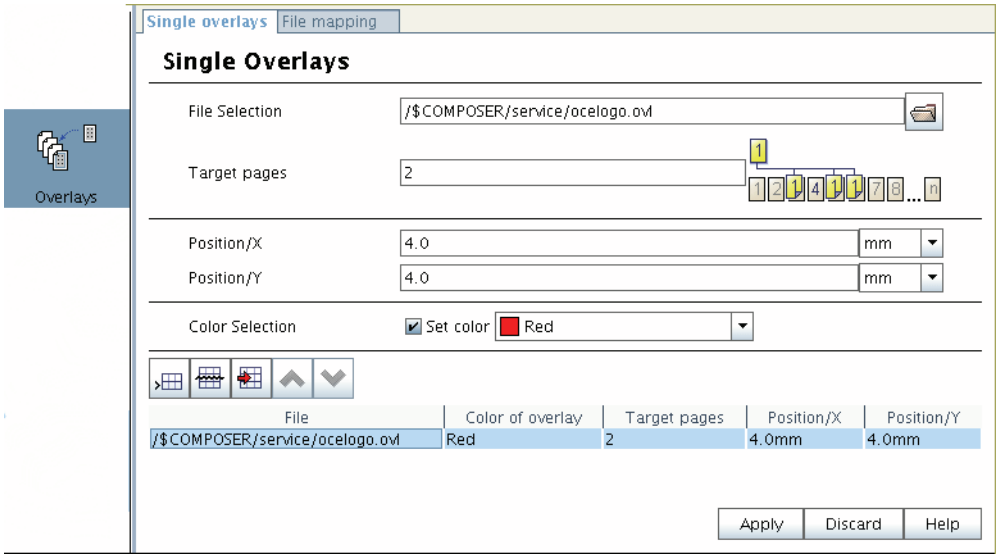
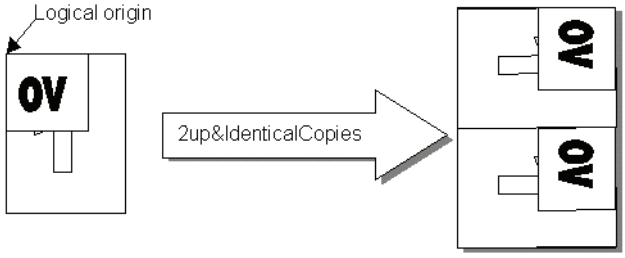
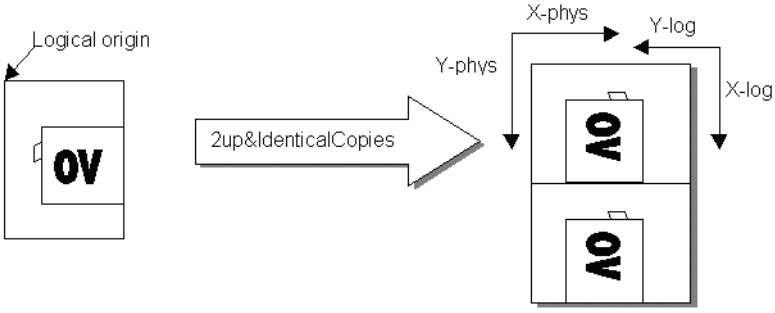


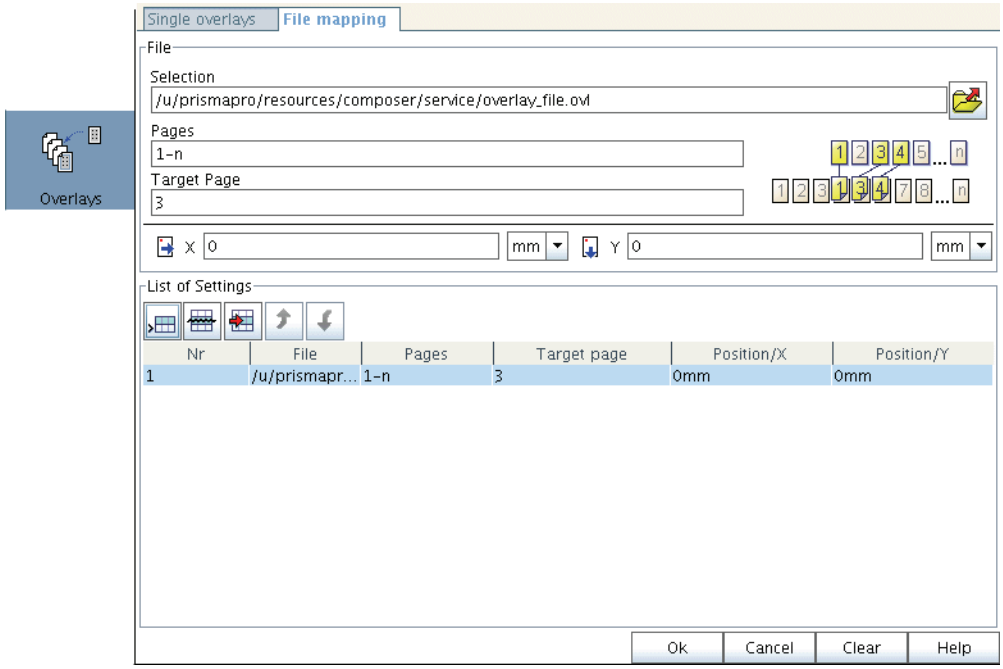
Figure 6 Window 'Overlays' – 'Single overlays'

'File Selection'	You can select an overlay file by entering the fully qualified file name in the Selection text field or by clicking the folder button, which opens a File Selection Box Overlay resource files must reside as 1-page IOCA files (suffix '.ovl') or as multipage IOCA-files (suffix '.map') in the '**$COMPOSER**' directory. The resource generation must be performed with the Print Job Manager (PJM).
'Target Pages'	Here the pages are set, where the overlay is placed onto. There are various possibilities to define a target page: **On single pages:** on page 8 and 10: 8,10 on the last page: n **On pages within a range:** on page 1 to 20: 1-20 on page 8 to the one before last: 8-n-1 **On pages within a range in steps:** on page 1 to 20 on every second page: 1-20:2

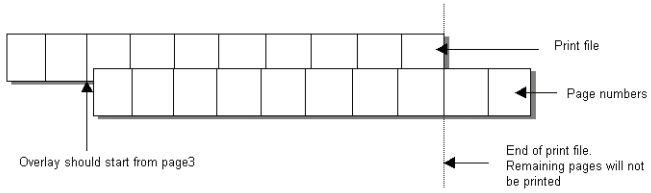
	The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + integer
’Position/X’ ’Position/Y’	The selected overlays may be positioned freely on the print page by setting x and y values. Valid formats are mm, cm, inches or Pels. Without defining those values, the overlay is put on the logical page origin (upper left corner portrait):  Figure 7 Positioning without offset values If positioning values are set, the overlay is moved relatively to the logical page in x and y direction. **Attention**: The positioning starts at the logical page origin and not at the origin of the pysical page. This is imortant, if the images are rotated. In this case the X and the Y axis for the overlay positioning is also rotated.  Figure 8 Positioning with offset values

'Color Selection'	'Set color' If this box is checked, the selected overlay is printed in another color instead of the default color. Next to the check box you can select a specific color for the overlay from a combo box. The list of settings shows the respective color in the 'Color of overlay' column. If no special color is selected for the overlay 'From file' is displayed here. This function works with IOCA files only.

3.3.2 Multipage Overlays 'File mapping':



The merging of the original print file with a multipage overlay file may for example be used for a sequential page numbering throughout a print job made of many single input files.

’Selection’	As with single overlays (see above).
’Pages’	Insert individual pages or page ranges of the multipage overlay file, which should be placed on the pages of the print file. Inserting in individual pages: On page 8: 8 On the last page: n Inserting in pages within a range: On pages 1 through 20: 1-20 On pages 8 through the second-last page: 8-n-1 Inserting in pages within a range, but in interval steps: Within a range of 1 through 20 on every second page: 1-20:2 The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + integer
’Target page’	Using multipage overlays, only a single page may be defined as target page, because the selected overlay pages are always inserted in one block starting with the target page. on page 8: 8 in the middle of the document: n/2 on the fifthlast page: n-5 on the last page: n  Figure 9 Merging a print file with page numbering (from page 3) The following expressions are valid: n n-integer n/interger n/integer-integer n/integer+integer
’Position/X’ ’Position/Y’	As with single overlays (see above).

3.3.3 List of settings

The settings only become effective, if you add them to the list of settings at the bottom of the window (see chapter ’List of settings" on page 8). Then click ’Apply’ to finally accept the settings.

3.4 Highlight Color

This option allows you to use colors to highlight graphical (e.g a company logo) or text information. The 2-color print merges two (or more) pages with different colors applied. These pages may be part of the print file itself (See ‘From mapping file') or come from two different files (See 'From input file'). This function works with IOCA files only.

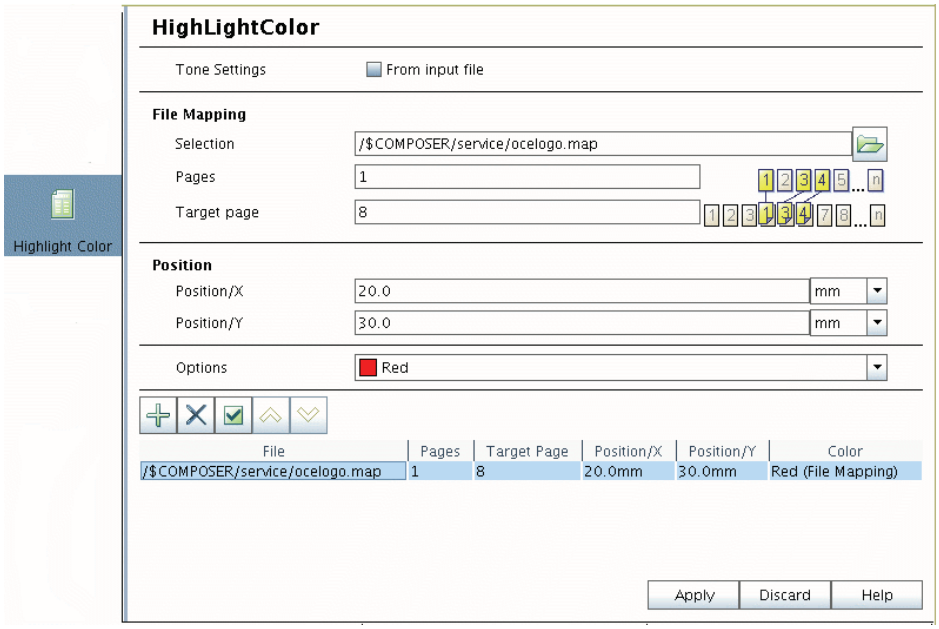


Figure 10 Highlight Color - File mapping

’File Mapping'	If **File Mapping** is selected (’Tone Settings’ -> ’From input file’ is deactivated), a resource file is printed as colored overlay on the print file.
'Selection'	The selection of a 'mapping file' may be done by entering the fully qualified file name in the field **Selection** or by pressing the folder icon, which opens a 'File Selection Box'. Mapping resource files for Highlight Color have to be saved with the ending **.hlc** in the directory **$COMPOSER**

'Pages'	If a mapping file is used, single or multiple pages may be selected to be used for custom tone printing. The following entries are allowed: **Selection of a single page:** Page 8, last page: n **Selection of a page range: page 8 to the page before last:** 8-n-1 The following expressions are valid: n n – integer n / integer n / interger – integer n / integer + interger
'Target page'	Here the target page is defined, from where the mapping file is to be used. Only a single page entry is allowed, because the mapping file is always merged as block. The following expressions are valid: n n – integer n / integer n / interger – integer n / integer + interger
'Position/X' 'Position/Y'	The mapping file may be positioned freely on the print file, always relating to the print origin of the print file itself. the X and Y values may be entered in mm, cm, inches or Pels.
'Options'	You can use this combo box to select a specific spot color apart from 'Brown (Alternate Colour)' or 'Printer default' (usually Black). **Note**: The selected printer must support this feature (e.g. VS9000).

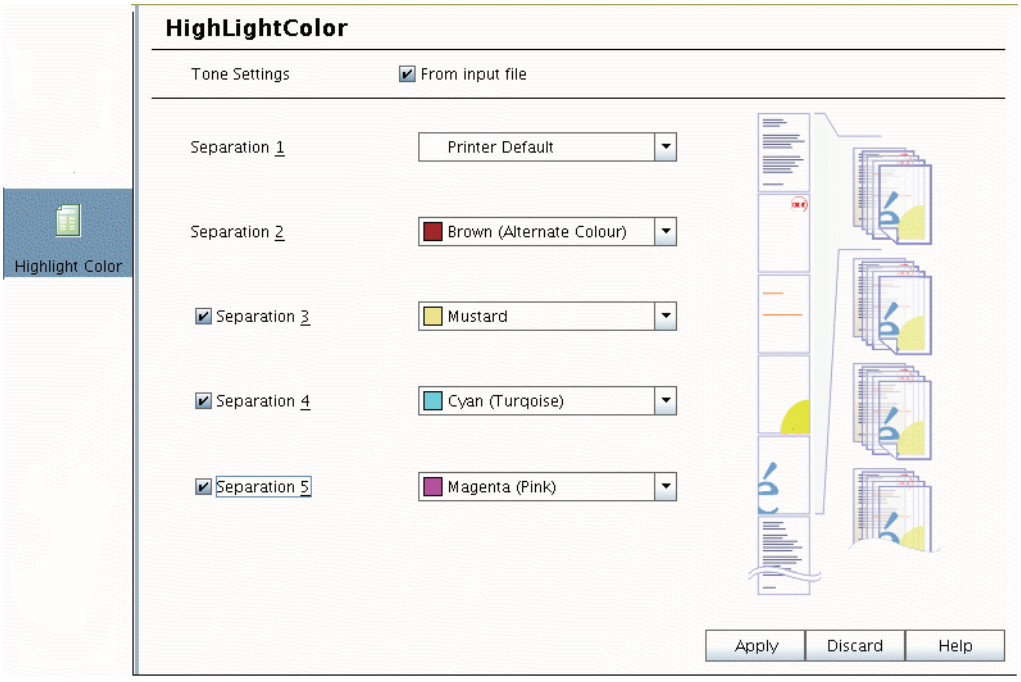


Figure 11 Highlight Color - From input file

'From input file'	If the option **From input file** is activated, the input file must be already in a format, which supports multi color printing. In these files the colors of the images are still separated, i.e. each of the single pages contains the image information for one specific color. Using this mode, you can assign a specified color to each page (color separation) within the 'set'. The PDC then overlays all pages of one set, which belong together to create one logical page of the output document. Consequently the number of pages of the output document results from the number of pages of the input document / number of pages of one 'set' (or the number of active color separations). The maximum number of pages per set is restricted to 5.

3.4.1 List of settings

The settings only become effective, if you add them to the list of settings at the bottom of the window (see chapter 'List of settings" on page 8). Then click 'Apply' to finally accept the settings.

3.5 Cropping

The Cropping function enables you to trim IOCAs prior to imposition. This is desirable, for example, when the crop marks present in the data file must not be printed.

You can choose any size of cropping area. There are two ways of positioning the area: centered to the image (**Center**) or originating from the object origin (**Standard**).

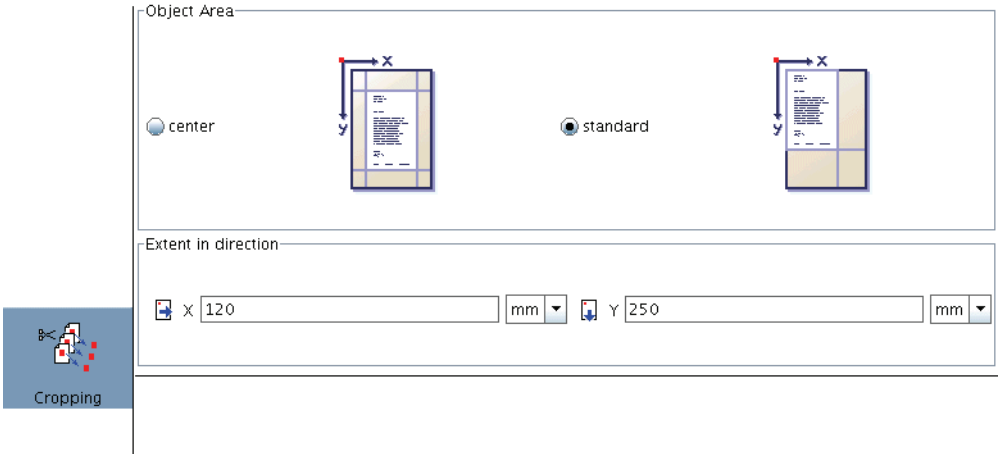


Figure 12 Window 'Cropping'

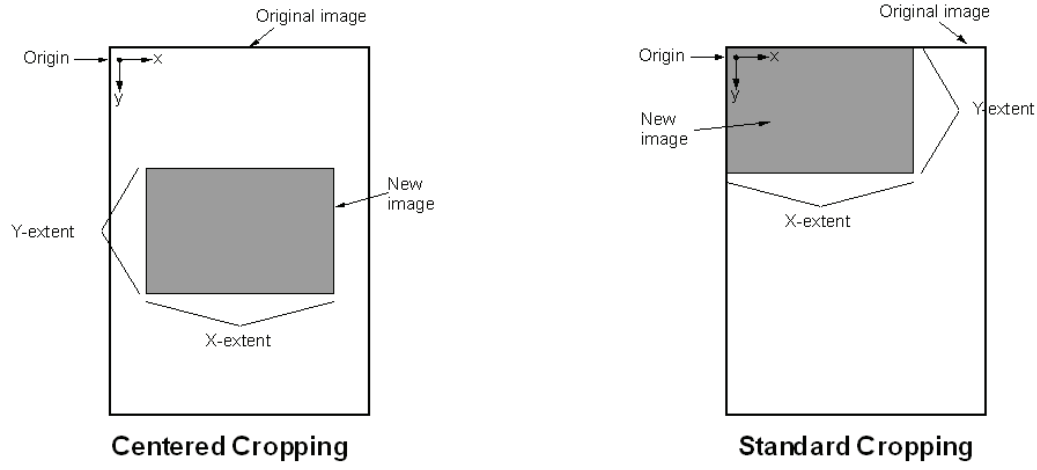


Figure 13 Comparison between 'centred cropping' and 'standard cropping'

'Object area'	You have two ways of cutting an image out of the document: **center** The new image is cut out concentrically from the original image. **standard** The new image is cut out in relation to the origin of the original image in the left upper corner.
'Extent in direction'	The extent of the cropped image is defined by the X-Extent and Y-Extent. Click **OK** to confirm all settings or click **Cancel** to disregard all changes.

3.5.1 Tips & Tricks

How to position the cropping area with any desired offset from the image origin (in the event the desired page area is not concentric with the image):

Convert the data file (e.g., PS or TIFF file), specifying "variable paper size". The values for the correct paper size in the X- and Y-direction are determined as follows:

X-dimension:

Measure the distance from the left edge of the image to the left crop mark (Diagram: X1). Measure the distance between 2 crop marks in the X-direction (Diagram: X2). New X-dimension: 2 * X1 + X2

Y-dimension:

Measure the distance from the lower crop mark to the lower image edge (Diagram: Y1). Measure the distance between 2 crop marks in the Y-direction (Diagram: Y2). New Y-dimension: 2 * Y1 + Y2.

After converting the data file with this variable paper format, you get an IOCA file whose crop marks are positioned concentric within the image.

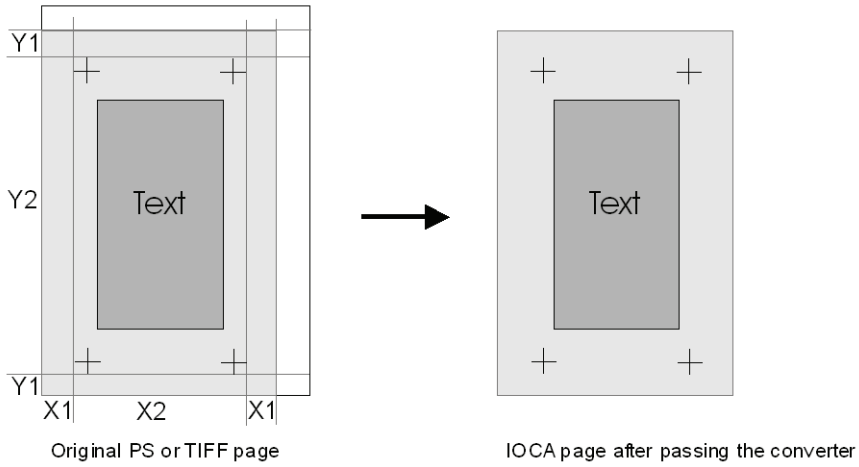


Figure 14 Conversion with variable paper size

Set '**centred cropping**' in the Composer, with the extent of the cropping area selected small enough to hide the crop marks.

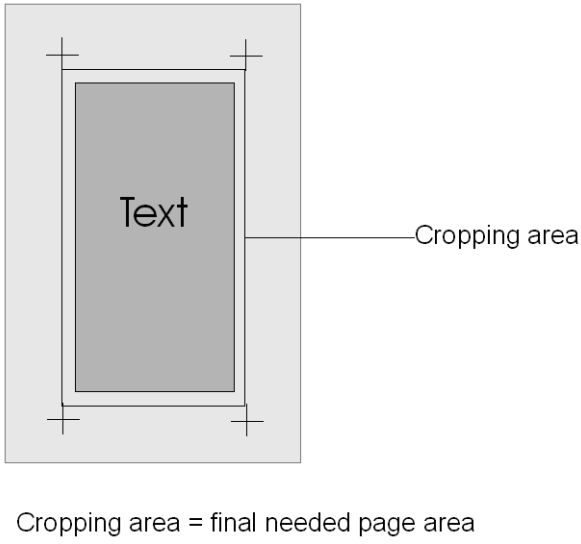


Figure 15 Centred position of the cropping area

3.6 Variable Data

The Professional Document Composer let's you do "personalized printing" the easy way. Using the overlay technique, you can include variable data (e.g., addresses) in documents. The formatting of the variable data is an upstream process, performed using databases and publishing programs. For example, the mail-merge function in WORD can be used to generate the PostScript address file.

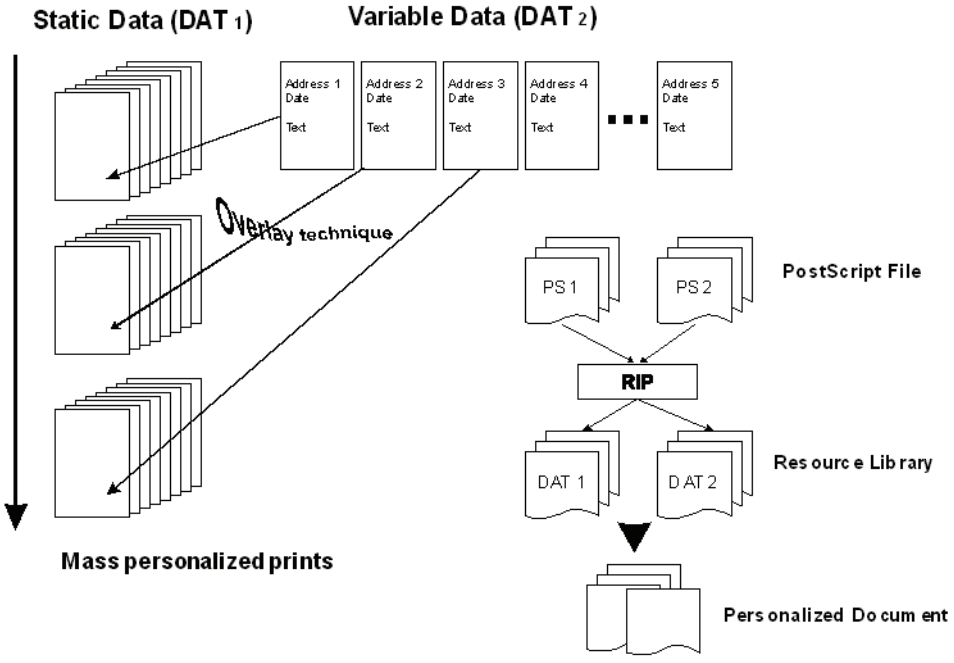


Figure 16 Window 'Variable Data'

This file must then be converted and made available as a resource for the **Variable Data** function (PJM -> Store as Resource -> Variable). You use the **Variable data** window to select the file with the variable data and define the target pages of the static data file:

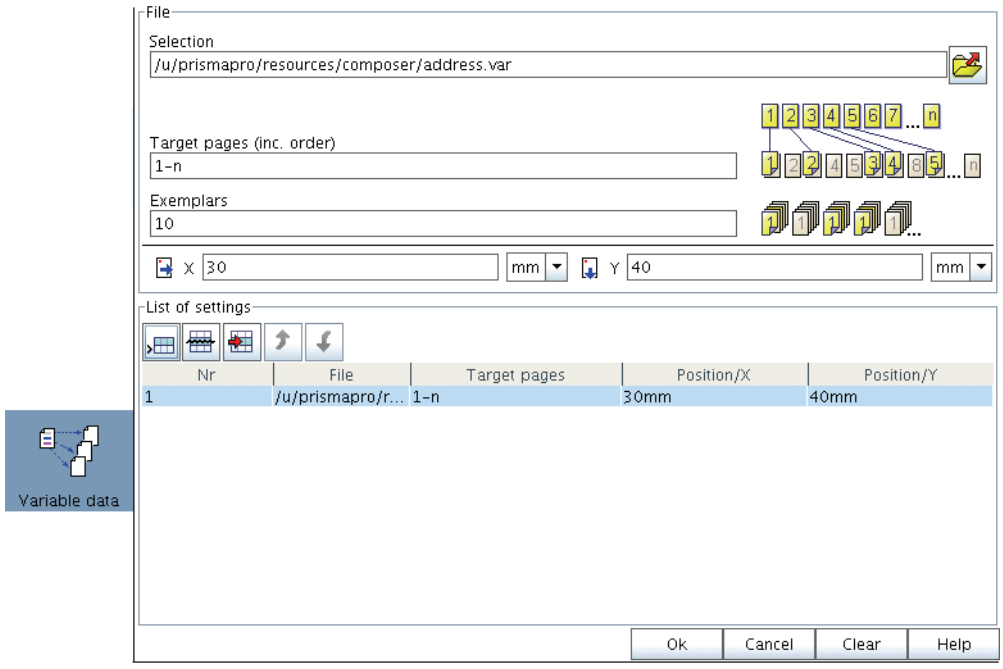


Figure 17 Generating personalized documents

The function **Variable data** may be combined with the impositioning schemes **Identical copies** or **Two Up & Identical copies**. In this case the variable data will not be copied but each data set will be printed only once. In the case of 2 **Identical copies** each sheet contains 2 logical pages with two different data sets (i.e. copy 1 with address 1 and copy 2 with address 2).

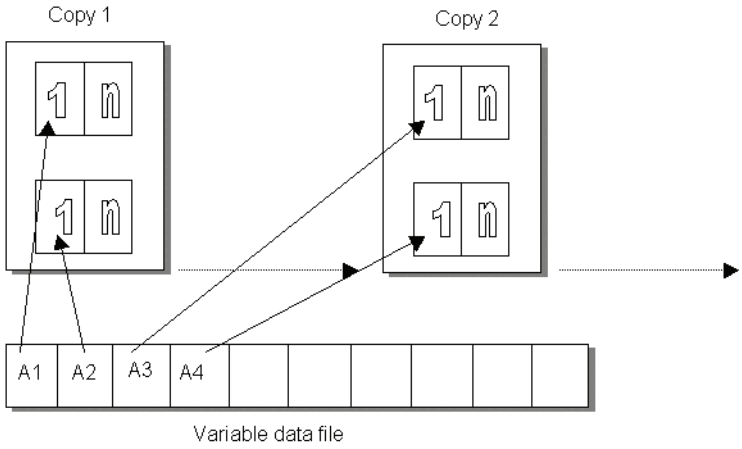
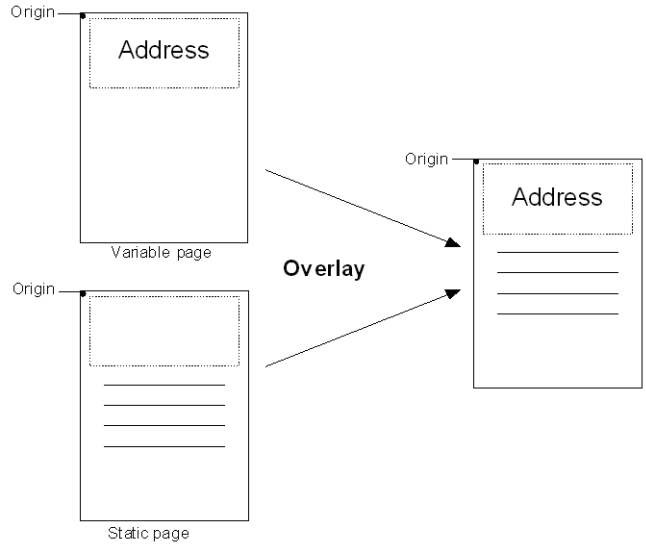


Figure 18 Combination of variable data and "Two Up & Identical copies"

Window Functions

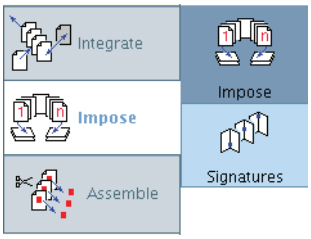
'Selection'	You can select a variable data file by entering the fully qualified file name in the 'Selection' text field or by clicking the **Select files** button, which opens a File Selection Box. The variable data file must be available in IOCA format in a resource library under **$COMPOSER**. The resource generation is performed by the Print Job Manager (PJM). The variable data file must be page-oriented, with each page in this file containing exactly one variable record (e.g., an address). In addition, the pages are correctly formatted, so the variable records are correctly positioned on the static document after the overlay.  Figure 19 Merging of a document with variable data
'Target pages (increasing order)'	Here, you define the pages on which the variable data is to be placed (e.g., page 1, page 5, page 9 - pattern: 1,5,9). The page numbers must be entered in increasing order. In this example, the first page of the variable data file (address 1) was placed on page 1 of the static document; the second address on page 5 of the static document; and the third address on page 9. As a result, the first copy of the output file contains 3 variable records on pages 1, 5 and 9. The variable records 4, 5 and 6 are inserted on the first, fifth and ninth page of the *second* copy, etc. In this manner, the entire variable data file is sequentially processed until all records have been inserted.

	The following expressions are valid: n n - integer n / interger n / integer - integer n / integer + integer Integer * n Interger * n / integer Interger * n / integer+integer Interger * n / integer-integer
'Exemplars' (Copies)	Here the selection of copies (relating to data sets) may be done. The Default setting is 1-n (all exemplars with all data sets will be used) If a single exemplar is selected, one print sheet is printed in the case of identical copies with the selected datasets (in case of duplex we would have 4 data sets on a sheet with 4 logical pages) In case of multiple exemplars the above single setting is used for the chosen range. The following expressions are valid: n n-integer n/interger integer*n/integer
'X' / 'Y'	The selected variable data may be positioned freely on the logical pages of the print file itself (details see in 'Overlays').

3.6.1 List of settings

The settings only become effective, if you add them to the list of settings at the bottom of the window (see chapter 'List of settings" on page 8). Then click 'Apply' to finally accept the settings.

4 The Impose Menu and Section



4.1 Impose: Create an impositioning scheme

Here the actual **Impositioning** of the print file is applied, i.e. the logical pages are placed on the print sheets accordingly. Important parameters are Layout (simplex, duplex or tumble, impositioning scheme paper size etc.

The selection of an impositioning scheme strongly relates to the output form (continuous or cut sheet) and on the paper post processing. The variety of printed material, i.e. different sheet sizes, various binding forms, etc. are already to be considered while setting up the print file. The Professional Document Composer places the logical pages in such a way, that the reading sequence of the document remains indifferent in spite of the sequence gaps and jumps due to the post processing (see below).

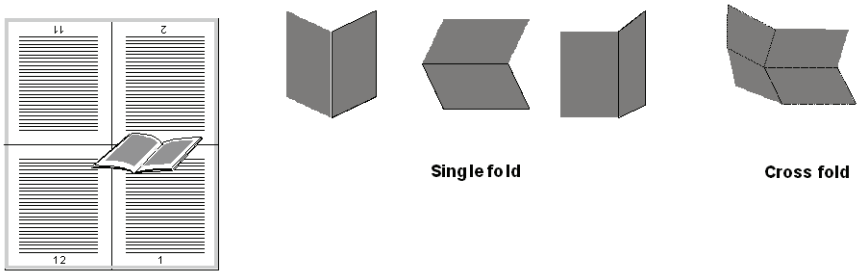


Figure 20 Print order of logical pages dependant on the selected post processing

With the Professional Document Composer you can impose continuous forms paper or sheets to suit the post-processing requirements. The system provides 70 ready-to-use schemes, complete with production flow displays for the most important types of post-processing. In addition, you can create custom schemes with complete freedom in choosing page arrangements.

The **Impositioning** window is where you define the layout and impositioning scheme (**Layout and sequence**), target paper size (**Target paper size**) as well as the number of copies for "Identical copies" (**Number of objects**).

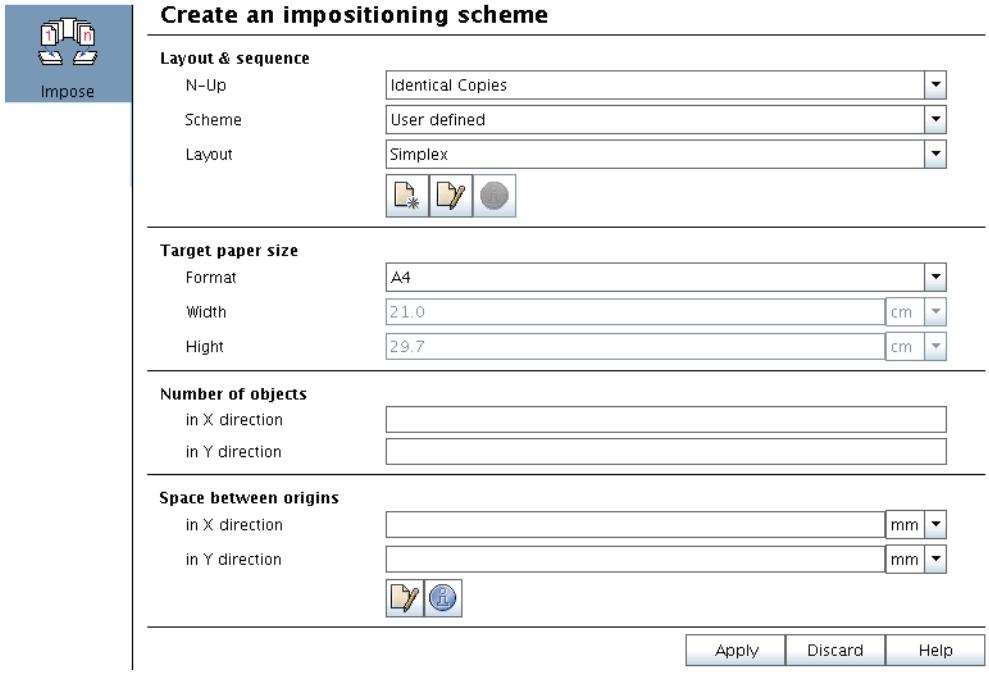


Figure 21 Window 'Impose'

When you are sure that all parameters have been completely entered, click **Apply** to confirm the settings and return to the main window. If you have forgotten to enter the spacing (**Space between origins in direction X and Y**) with **Identical copies** or **2up & identical copies**, an error message is displayed, "Input for spacing not found". To disregard all changes click **Cancel**.

4.1.1 Layout & Sequence

4.1.1.1 N-UP

In this field you determine the distribution of the logical pages on the physical page.

You can choose among a variety of basic impositioning schemes:

'From file'	Accepts the setting that exists in the document (default setting).
'One Up'	One logical page on one physical page
'Two Up'	Two logical pages on one physical page (e.g., page 1 and 2)
'Three Up'	Three logical pages on one physical page (e.g., page 1, 2 and 3)
'Four Up'	Four logical pages on one physical page (e.g., page 1, 2, 3 and 4, always positioned in the clockwise direction).
'Identical Copies'	One logical page arranged several times, parquet-fashion, on one physical page (e.g., page 1 twice)
'Two Up & Identical Copies'	Combination of two up and Identical copies (e.g., pages 1 and 2 twice on one physical page).

4.1.1.2 Scheme

This list contains all predefined standard schemes (scheme 1, scheme 2, ...etc.) for the imposition mode set up under N-UP. In addition, it lets you create custom schemes by selecting **user defined** and **command line** and clicking the **Define page sequence** button:

When you move the mouse pointer to a scheme entry on the open list, a bubble-help box opens which contains a brief comment about the scheme type and the related post-processing workflow. This will help you to find a suitable scheme quickly in the list.

You can define your own schemes in addition to the ones provided.

Modify the scheme list

The scheme list isn't static. You can modify it to suit your requirements. For example, you can enter or delete entries or change the name and the bubble-help comments. Just click the **Modify** button:

The scheme list pertaining to the selected impositioning method opens (e.g., the scheme list for Two Up & Identical Copies):

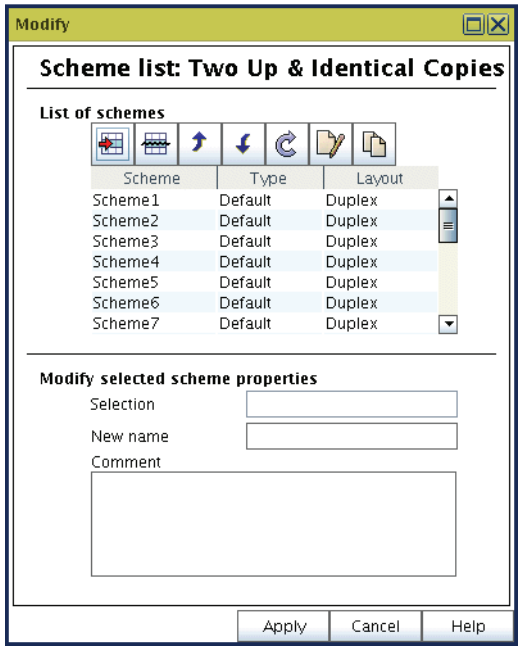


Figure 22 Window 'Impose' - 'Modify the scheme list'

Each scheme on the list is displayed with name, scheme type (**default**, **user defined** or **command line**) and layout (simplex, duplex, tumble). The scheme types **command line** and **user defined** indicate that the corresponding schemes have been defined by the user through **Define page sequence** (see below).

'Rename the scheme' 	If you wish to rename one of your schemes, highlight it with the mouse pointer. The existing name is displayed in the text field **Selection**. Type in the new name in the box underneath. Click the **Rename the scheme** button to confirm the new name.
'Remove selected items from the list' 	To remove one or more elements from the list, select them with the mouse pointer and then click the **Delete the current scheme** button. **Caution:** Once user-defined schemes have been deleted, they cannot be restored!
'Move selected items up/ down' 	Click **Move selected items up** or **Move selected items down** to move any one or any group of selected elements up or down on the list, one notch at a time. In this manner you can change the sequence of the schemes to suit.

'Restore the default list of schemes' 	Click **Restore the current default schemes** to load the default scheme list. The sequence of entries keeps the same. If the comments of the default schemes differ to the default comments, they will be saved. During this action you will therefore be asked by the program if you are sure you want to load the default scheme list. Confirm with **Apply** to load the default scheme list, or click **Cancel** to keep the list unchanged.
'Comment current scheme' 	When you move the mouse pointer across the elements of the open scheme list in the **Impositioning** window, a small, blue "bubble-help" box will be displayed for each scheme in turn. In addition to information about page sequence, layout and scheme type, the box also contains a comment about the type of post-processing. You can edit this comment in the text field **Comment** or, if the scheme is user-defined, regenerate it. Click **Comment current scheme** to link the comment with the selected scheme.
'Copy current scheme' 	By entering a new name in **New name** you are able to copy a selected scheme to the new scheme. Thus the newly created scheme gets the same properties (layout, type etc.) as the original, except for the name.

4.1.1.3 Define User Scheme

If none of the standard imposition schemes is suitable for your print job, you can define a custom scheme. To do this, select **user defined** or **command line** in the list of schemes and click the 'Define page sequence' button:

The following dialog opens. The title bar indicates, for which n-up setting and for which layout the scheme will be created:.

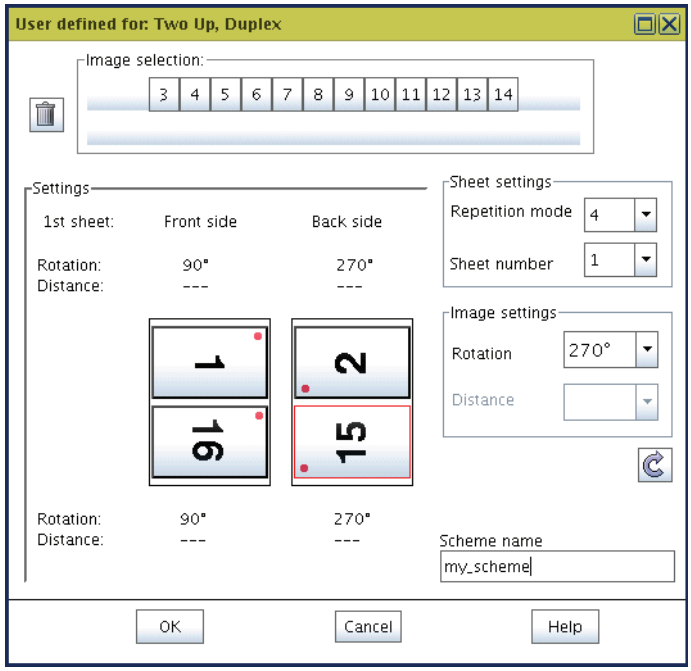


Figure 23 Window 'Impose' – 'Define user scheme'

Preparation:

First decide how the pages are to be sequenced in the file you want to impose.

Example:

Document with 32 pages. The pages are to be printed in two up, duplex mode in the following sequence:

Print sheet	Front page	Back page
1	1, 17	18, 2
2	3, 19	20, 4
3	5, 21	22, 6
4	7, 23	24, 8
5	9, 25	26, 10
6	11, 27	28, 12
7	13, 29	30, 14
8	15, 31	32, 16

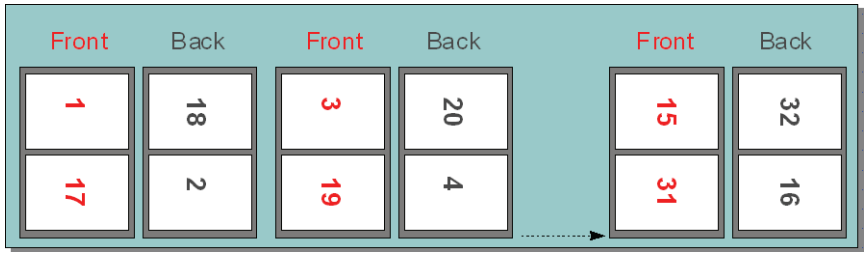


Figure 24 Example file with 32 pages (Two Up, Duplex)

Next, decide on the **repetition mode** – i.e. the number of physical pages (front and back pages) after which the pattern is to be repeated. (The "pattern" defines how the logical pages from the print file are arranged on the physical sheets.)

In the above example, the pattern is repeated after two physical pages. This is one print sheet, because the example application is duplex. The repetition mode is therefore 2.

The logical pages on the second and all following sheets are arranged according to the same pattern as on the first. The only difference between them is the page numbering. Each number is incremented by a positive or negative integer value (the distance value).

If you view the **first logical page** in the repetition group, you see that the first front page contains page **1**, the second contains page **3**, the third contains page **5**, ... etc.

There is a **distance** (spacing) value of **2** between each page.

Determine the distance values between all the logical pages in the group to be repeated. In the above example, the group contains two logical pages with the distance values 2, 2, 2, 2.

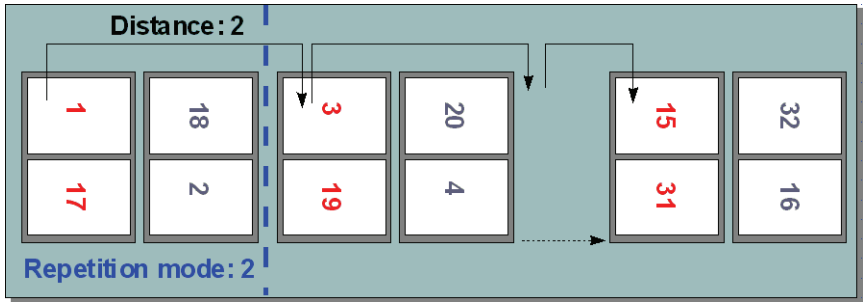


Figure 25 Calculation of 'distance' and 'repetition mode'

'Repetition mode' and **'Distance'** values are needed to edit the selected scheme in the Professional Document Composers.

Logical page selection

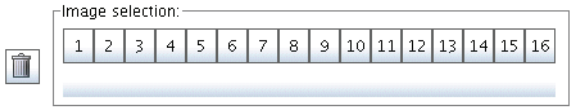


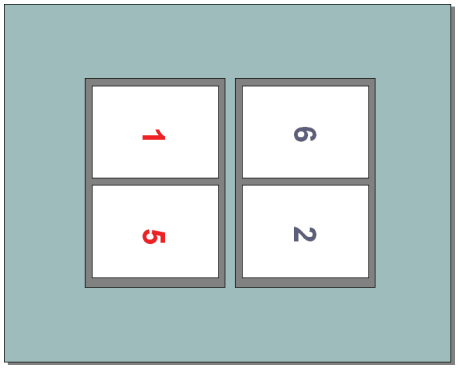
Figure 26 Window 'Impose' – 'Define user scheme' - 'Image selection'

Depending on what **repetition mode** you have set for **Physical sheet options**, the **Image selection** field lists enough logical pages (repetition mode * 4) for you to place them in the **Page options** field according to the required imposition scheme. If the repetition mode is 2, for example, 2 x 4 = 8 pages will be shown.

When creating your own scheme, you are in fact working with a type of template file which contains a number of pages equal to the repetition mode x 4.

Since a real print file will usually contain more pages than the template, you next have to transfer the page sequencing of the real file to the template file, i.e. the imposition scheme for the real print file must now be applied to a file with a number of pages equal to the repetition mode x 4. You need not perform this action for the entire print file – just for the pages in the repetition mode range:

Example:



Print file:	1, 17	18, 2
Template:	1, 5	6, 2

Figure 27 Impositioning model

The last page in the print file is page 32. Since this template file only contains eight pages, the real page 32 corresponds to template page 8; the real page 16 corresponds to template page 4.

To select a page for positioning, click it with the left mouse button.

Settings

This field shows the physical pages in the **repetition mode** group. If the group includes more than one front and one back page, you can select the sheet you want to display with the **Sheet number** option.

To position a page that you have selected in the **Image selection** field, click the left mouse button on the empty field in which you want to place the page. The selected page is displayed in this field and removed from the **Image selection** field.

To undo the placement of a page on a sheet, click the page with the left mouse button and then click the dust bin in the **Image selection** field. The page is moved back into the list and is again available for selecting.

To replace a selected page by another page from the **Image selection** field, click the required page in the **Image** selection field and then click the page you want to replace in **Settings**. The two pages are then exchanged.

During the placement of the logical pages, the system checks if the sequence is correct. A message will be displayed accordingly in the **Settings** section ("Right page sequence", "Wrong page sequence").

You can set an angle of rotation and distance value for each logical page that you position. The rotation is displayed above the logical page, the distance value below it.

'Repetition mode'	Use this option to set the repetition mode you have decided to use (see chapter "Preparation:" on page 37). The repetition mode specifies the number of physical pages to be printed before the pattern repeats itself (using the incremented **distance** values). For two-up mode, the maximum repetition mode is currently 4. If you require a more extensive range to describe your scheme, you must enter the scheme as a **command line**.
'Sheet number'	Use this option to select the number of the physical page you want to display. This page is then displayed in the **Settings** field and can be assigned logical pages.
'Rotation'	Use this option to specify the rotation of the logical page that is the focus in the **Settings** field. You cannot assign angles of rotation until you have completed your selection of logical pages, i.e. all fields in the repetition mode range must be assigned logical pages. The possible angles of rotation are 0°, 90°, 180° and 270°. Proceed as follows: Select the required page in the **Settings** field. Then choose the angle of rotation from the Rotation list. The angle is displayed above the page in the **Settings** field.
'Distance'	Use this option to assign a **distance.** The distance is the spacing between a given logical page in the repetition group and the corresponding logical page in the next group. You cannot assign distance values until you have completed your selection of logical pages, i.e. all fields in the repetition mode group must be assigned logical pages. If there is only one pair of distance values suitable for the selected page sequence this pair of values is displayed. If there are several possibilities, you can select the one you wish to use from a list. The correct prefix is assigned automatically – you need not set it yourself.
'Delete all settings' 	Use this option to delete the settings you have made for **Image selection**, **Rotation** and **Distance**.
'Scheme name'	Before you exit the window, you must assign a name to your new scheme. Enter the name in the text field.

Click **Cancel** to return to the previous window without saving your parameters, or **OK** to confirm your entries and return to the previous window. The new scheme appears as a new entry in the list of schemes.

4.1.1.4 Define Command line

The impositioning scheme can also be defined by entering a command line.
To do this, select **Command line** in the list of schemes and click **Define page sequence**:

This opens the **Define command line** window.

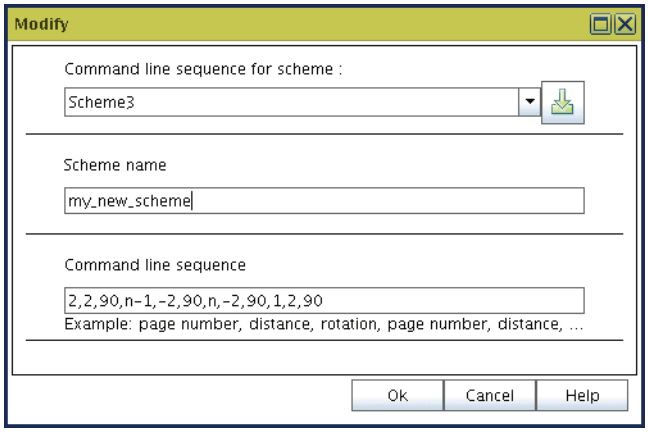


Figure 28 Window 'Impose' – 'Command line'

Example of a command string: **n, -2, 90, 1, 2, 90, 2, 2, 90, n-1, -2, 90**
The string consists of sets of triplets. Each triplet contains the following definitions:

- The start page of the page sequence
- An absolute value for computing the following page(s) (distance)
- The rotation of the page (0°, 90°, 180° or 270°)

All entries are separated by commas. The page number can be either a relative or absolute number. The character "n" is always the final page number, and this number includes any blank pages which the Professional Document Composer appends to the end of the document.

The string in the above example contains four triplets:

n,-2,90, and **1,2,90,** and **2,2,90,** and **n-1,-2,90**

In two-up duplex mode, the string would be interpreted as follows:

n: The last document page is printed on the front of the first sheet.
-2: This page number is then decreased by 2 --> n-2.
90: The page is rotated by 90°.

1: The first document page is printed on the front of the first sheet.
2: This page number is then incremented by 2 --> 3.
90: The page is rotated by 90°.

2: The second document page is printed on the back of the first sheet.
2: This page number is then incremented by 2 --> 4.
90: The page is rotated by 90°.

n-1: The penultimate document page is printed on the back of the first sheet.
-2: This page number is then decreased by 2 --> n-3.
90: The page is rotated by 90°.

The **first sheet** is now complete. On the front are document pages n and 1; on the back are document pages 2 and n-1.

The sequence is repeated on all subsequent sheets. In each cycle, the new page number is obtained by adding the distance (spacing) value to the page number obtained from the preceding cycle.

The **second sheet** would contain the following pages:

n-2: Document page n-2 is printed on the front of the second sheet.
-2: This page number is then decreased by 2 --> n-4.
90: The page is rotated by 90°.

3: Document page 3 is printed on the front of the second sheet.
2: This page number is then incremented by 2 --> 5.
90: The page is rotated by 90°.

4: Document page 4 is printed on the back of the second sheet.
2: This page number is then incremented by 2 --> 6.
90: The page is rotated by 90°.

n-3: Document page n-3 is printed on the back of the second sheet.
-2: This page number is then decreased by 2 --> n-5.
90: The page is rotated by 90°.

In summary: on the front of the second sheet are document pages n-2 and 3; on the back are pages 4 and n-3.

Relative page numbers

Relative page numbers can be specified in the string as follows:

n
n-integer
n/integer
n/integer+integer
n/integer-integer
integer*n
integer*n/integer
integer*n/integer+integer
integer*n/integer-integer

Number of triplets

Specify as many triplets as there are pages on the sheet. This number depends on the print mode and imposition scheme (1up, 2up, 3up, 4up or identical copy). The following numbers of triplets are recommended, but you can define a different number if you wish:

One-up or identical copy with simplex:	one triplet
One-up or identical copy with duplex/tumble:	two triplets
Two-up and simplex:	two triplets
Two-up and duplex/tumble:	four triplets
Three-up and simplex:	three triplets
Three-up and duplex/tumble:	six triplets
Four-up and simplex:	four triplets
Four-up and duplex/tumble:	eight triplets
Two-up&Identical copy and simplex	four triplets
Two-up&Identical copy and duplex/tumble	four triplets

'Command line sequence for scheme'	You can select a scheme, which is available for n-up type and layout you have chosen. Click the following button to transfer the page sequence of this scheme to the command line:  You can then individually modify this scheme and save it under a new name.
'Scheme name'	Assign a name for your new scheme. Enter the name in the text field.

'Command line sequence'	Enter the triplet needed for the new scheme (see description and examples above).

Click **Cancel** to return to the previous window without saving your parameters, or **OK** to confirm your entries and return to the previous window.

4.1.1.5 Layout

All standard schemes are firmly linked with one specific layout. The display merely indicates which setting has been made for the selected scheme. If this is a user-defined scheme, you can assign any desired layout to it here:

'From file'	Retrieves settings from the document.
'Simplex'	The sheet is only printed on one side.
'Duplex'	After being printed on the front side, the sheet is rotated about its left edge and is then also printed on the back.
'Tumble'	After being printed on the front side, the sheet is rotated about its upper edge and is then also printed on the back.

4.1.1.6 Show work flow

Click this button to view a graphical presentation of the scheme selected in the list of schemes. The diagram shows the stages in the production workflow with this scheme.:

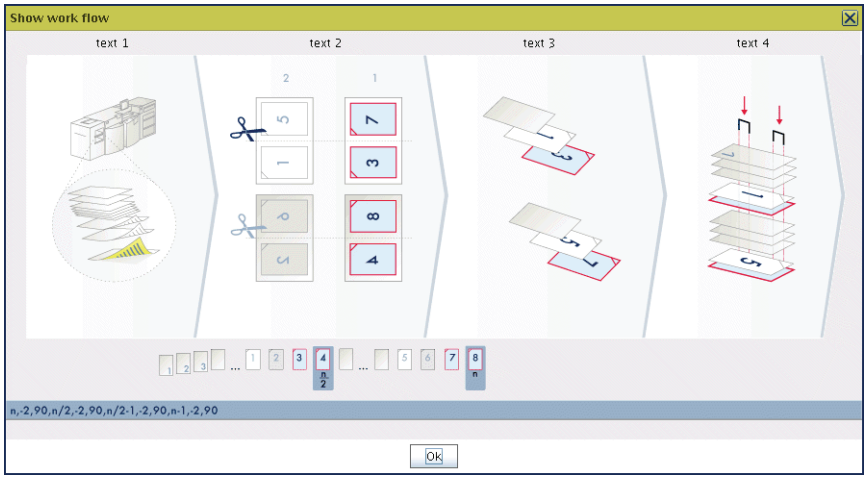


Figure 29 Window 'Impose' – 'work flow': Scheme1, two-up.

The figure shows the stages in offline post-processing: internal print output, stacking, cutting, merging of the stacks and stapling.

4.1.2 Target paper size

'Format'	In this field, define the physical target paper size on which the printed material is to be produced. You can choose between sizes: **A4**, **A3**, **A4 uncut**, **A3 uncut**, **B4**, **Letter**, **Legal**, **Ledger** and **Variable** (for user defined formats). With the default **from file**, the paper size is retrieved from the input file.
'Width' / 'Height'	The dimensions of the selected paper size are displayed in the fields X and Y. If you have selected a variable paper size, you have to enter the exact dimensions of the paper here. You can choose among the following units of measurement: **mm**, **cm**, **pel** and **inch**. The maximal paper size is 54 inches.

4.1.3 Number of Objects (for Identical Copies)

The following fields only become active if you select the layout **Identical copies** or **Two up & identical copies** in the **N-Up** list. Here you can define the number and position of the copies of logical pages.

'in X direction'	You need to define the number of images (or logical pages) you intend to have arranged on the physical page. In this field , enter the number of copies in the X-direction.
'in Y direction'	In this field , enter the number of copies in the Y-direction.

4.1.4 Space between origins

With **Identical copies** or **Two up & identical copies** you also need to define the spacing between the images on the physical page. You can enter this value manually or by actuating the Calculator button. You may enter the measurements in the following units: mm, cm, pel or inch. Use a period to separate the decimal positions. The spacing here always refer to the distance between the object origins of two objects. Different spacing cannot be defined within one object field. The selected X and Y values relate to all objects on a physical page.

'in X direction'	Spacing in the X-direction.
'in Y direction'	Spacing in the Y-direction.

Automatic calculation of spacing (X/Y) 	This function automatically calculates the spacing between the images, after their number has been defined in **'Number in directions'**. The following applies to the spacing of the object origin in the X-direction and the Y-direction: x-spacing = x-paper size / (number of copies in x-direction) y-spacing = y-paper size / (number of copies in y-direction) **Example**: Selected paper size: A3 (≅ 29.7 cm x 42.0 cm) Number of copies in x-direction: 2 Number of copies in y-direction: 3 x-spacing = 29.7 cm/2 = 14.85 cm y-spacing = 42.0 cm/3 = 14.00 cm
Show example 	Provides a general example of how the images are arranged on the physical page.

4.2 Signatures

A signature is a large sheet, which is folded several times to form a section of a book, magazine etc.

A signature usually contains between 4 and 96 logical pages (in some cases 128 pages), generally as a multiple of 4 logical pages, i.e. 4, 8, 16, 32 etc.The Composer lets you subdivide the printed document into any number of signatures of any length, and then lets you impose these with a scheme of your choice (**Signatures** tab).

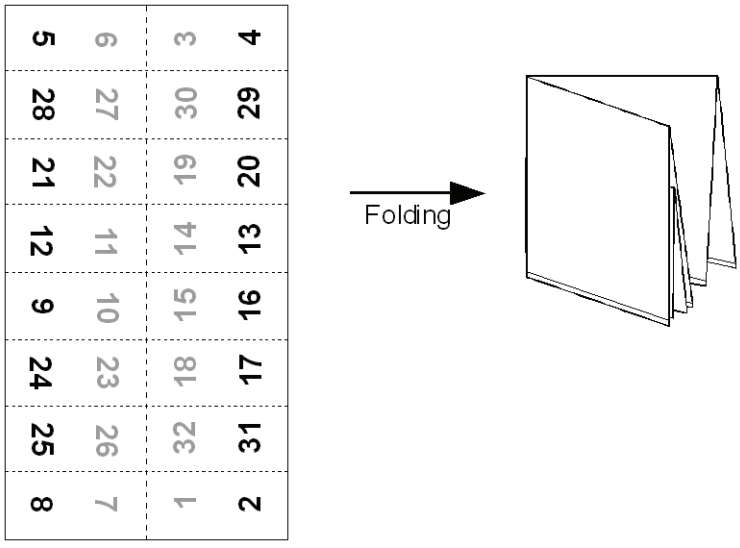


Figure 30 Signature sheet

Additional marks can be printed to check the sequence of sorted sections. Known as collating marks, these are printed with the rest of the data on the sheets. The gathering mark is always located on the gutter edge, i.e. exactly on the visible edge of the fold. The location of the gathering mark is shifted progressively lower on the page. You create those marks manually or automatically.

Title

Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 5
Sheet 6
Sheet 7

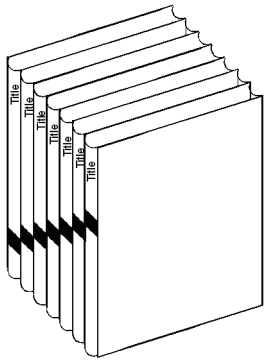


Figure 31 Sequential marks on seven signatures

4.2.1 Create Signatures (on the 'Signature' tab)

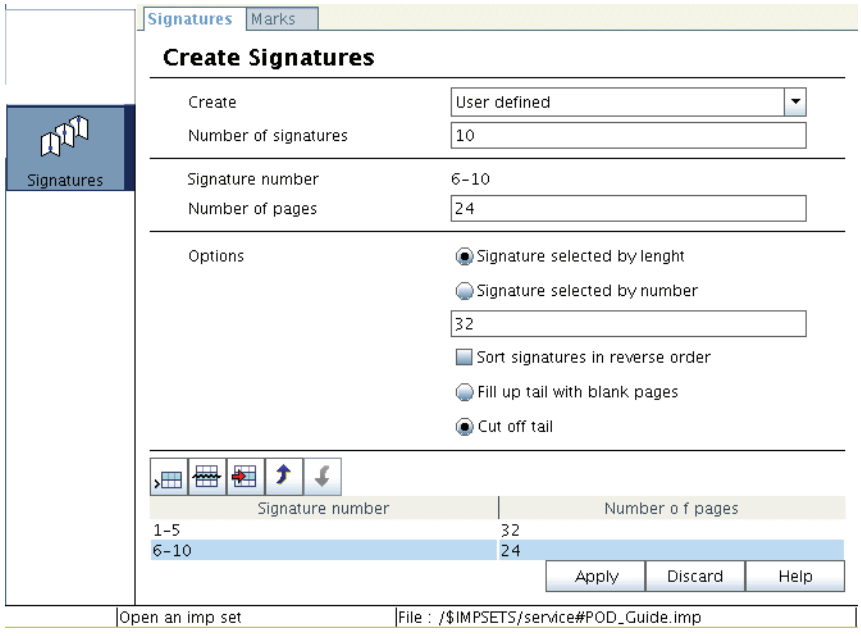


Figure 32 Window 'Signature'

In this menu you can select either the **User defined** mode, where all the signatures have to be defined manually or the automatic mode (**Create maximum number**), where the calculation is done by the PDC. In the first case the number of signatures must be known.

Create -> None

No signatures will be created, all options in this dialog are greyed out.

Create -> Max Numbers

'Number of Signatures'	No entry possible, automatic calculation.
'Signature number'	No entry possible, automatic calculation.
'Number of pages'	All signatures should have the length given here.

Create -> User defined

'Number of Signatures'	Define the total number of signatures calculated for the entire file.
'Signature number'	Assign the calculated number of pages to each section. You can choose among two different combinations for selecting the sections: Specify the section range (e.g., Section 1 through Section 3 – Pattern: 1-3) Specify the individual sections (e.g., Section 1, Section 5, Section 19 – Pattern: 1,5,19)
'Number of pages'	The signatures defined above contain the selected amount of pages

4.2.2 Options

'Signature selected by length'	Makes only sense with **User defined**: If a print file contains different signature types (e.g. 24 pages and 32 pages = different folding method) and the post processing cannot handle mixed types, the composer offers the posssibility to print the signatures separately depending on their length. Meaning that similar signatures are bundled and printed in separate jobs . Therefor you create two different parameter files. The first set contains all 24 page signatures (enter the value in the text field underneath), in the second set enter accordingly the 32 pages signatures. From these sets two different pint jobs are generated via the PJM. Now the paper post processing can be adjusted between these print jobs. Text field: If a fixed length is entered here, the print job will contain only the signatures with this exactly defined length, all others will be skipped (Post processing needs). To print another length, a different setting has to be entered and the job to be restarted.
'Signature selected by number'	You can also define the signatures to be printed via the signature **number**. In this case all signatures will be printed, no matter which length they have. No entry in the text field is required.
'Sort signatures in reverse order'	If you check this box, the result will be a reversed print order of the sections. The last section is printed first etc., and the first section is printed at the end.
'Fill up tail with blank pages'	Here you define,that the rest of the print file, that does not fit in your signature scheme should be filled with blank pages to a full signature length.
'Cut off tail'	The surplus pages are cut off.

4.2.3 List of settings

The settings only become effective, if you add them to the list of settings at the bottom of the window (see chapter'List of settings" on page<$pagenum>). Then click 'Apply' to finally accept the settings.

4.2.4 Type of Collating Marks (on the 'Mark' tab) - Manual

Select **manual** or **automatic** (see chapter "Type of Collating Marks (on the 'Mark' tab) - Automatic" on page 53). Manual generation allows you to select a stored IOCA mark and to position it. You have to specify all parameters like position, extent and offset of the mark.

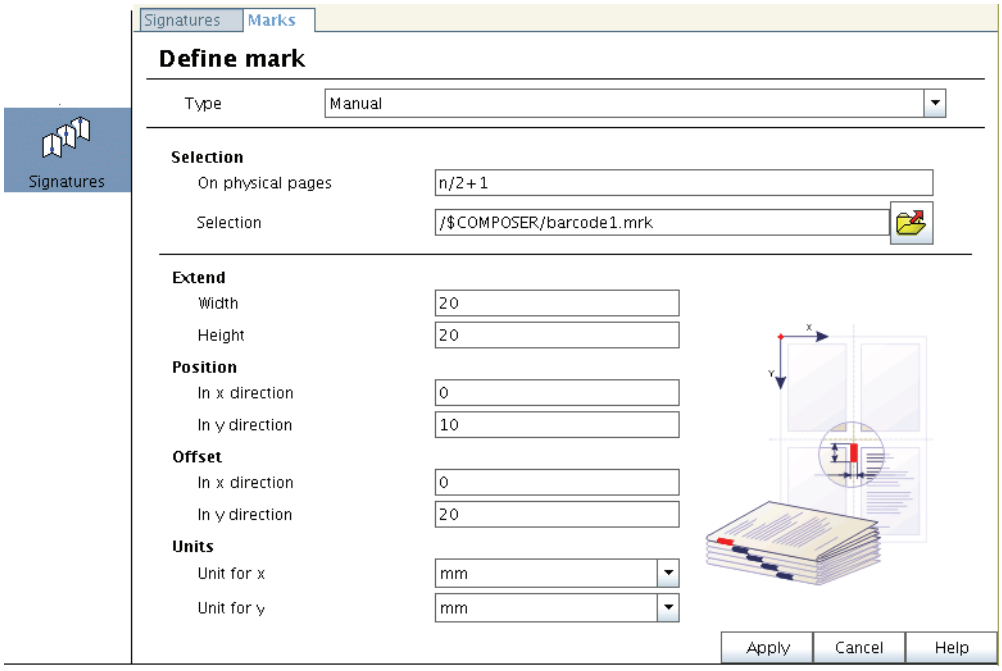


Figure 33 Window 'Signature' – 'Marks' -> Manual Generation

4.2.4.1 Selection

'On physical page'	Indicate on which physical page the gathering mark must be printed. The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + integer
'Selection'	To select the IOCA mark, click 'File Selection' (which opens a File Selection Box) or enter the fully qualified file name in the 'Selection' text field. Marks must have been previously created and saved with the Print Job Manager as resources in the **$COMPOSER** directory.

4.2.4.2 Extent (Width/Hight)

This area defines the size of the marks in width and hight. The mark is trimmed to correspond to the specified values relative to the origin (left upper corner).

4.2.4.3 Position' (X/Y)

The position, relative to the image origin, where the marks must be printed.

4.2.4.4 Offset (X/Y)

Here you determine the offset between one mark and the next, when the gathering mark must be printed with some degree of offset in each successive section.

4.2.4.5 Units

Select **mm**, **cm**, **inch** or **pel** for the x and y direction.

4.2.5 Type of Collating Marks (on the 'Mark' tab) - Automatic

Automatic generation calculates the signature marks. Here the physical page pointing outward is automatically found and the mark is positioned in the middle between the folding of logical pages. The default mark is s mm wide and 1 cm long. If the mark sequence does not work out that way, the marks are shortened accordingly.

4.2.5.1 Folding type

Standard

The mark is positioned in the middle between the folding of logical pages. The position of the mark of the first signature depends on the rotation of the logical pages, because the first mark is always positioned 1 cm from the edge of the logical page.

The default mark is 2 mm wide and 1 cm long. If the mark sequence does not work out that way, because of a big number of signatures and a short folding edge, the marks are repositioned again from the origin:

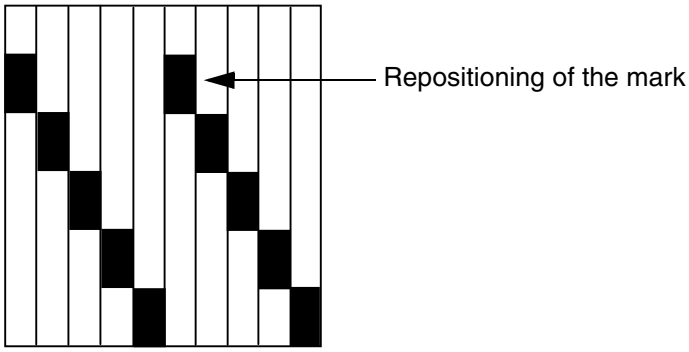


Figure 34 Repositioning the mark from the origin

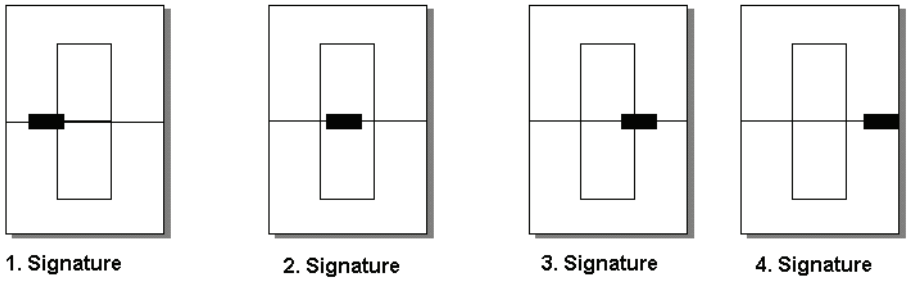


Figure 35 Positioning of signature marks

Example: Signature marks two up

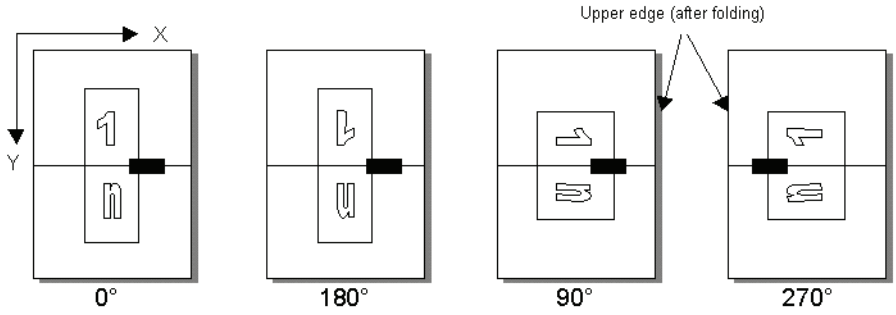


Figure 36 Mark within the first signature with different rotation of logical pages

If folding is not possible due to the chosen impositioning, the composer will give an error, if automatic marks are selected.

Example: Positioning of a four up mark

The arrow shows the starting position of the first mark and the direction of the following marks. The star points out the last mark of the sequence.

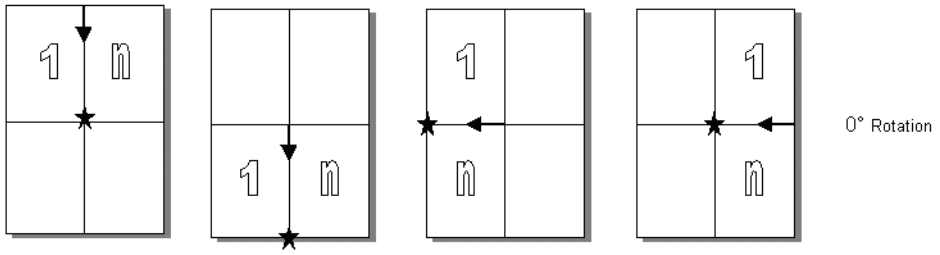


Figure 37 Mark positioning at 0° rotation

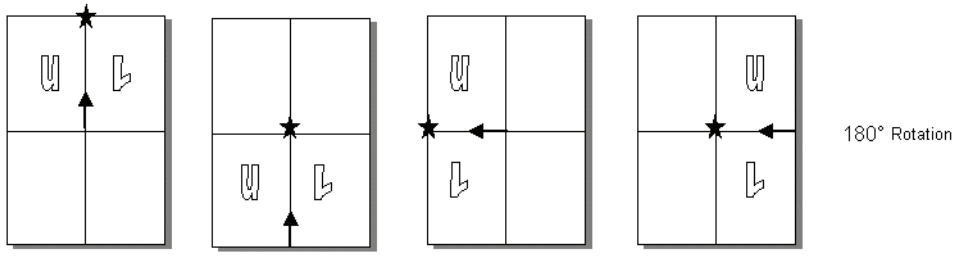


Figure 38 Mark positioning at 180 rotation

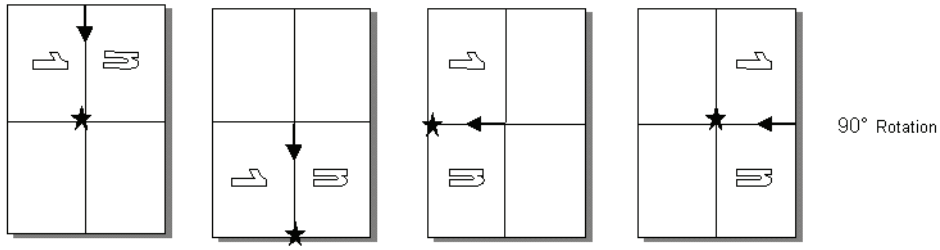


Figure 39 Mark positioning at 90° rotation

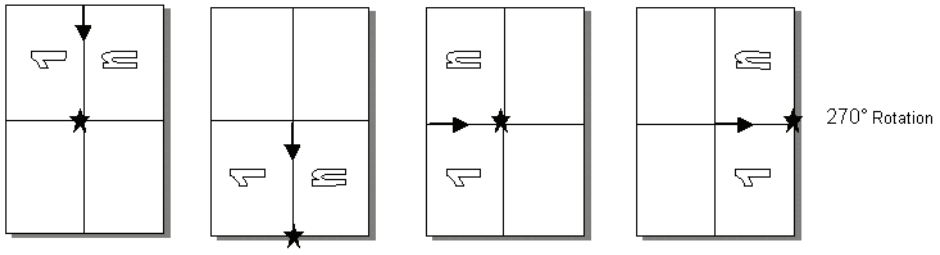


Figure 40 Mark positioning at 270° rotation

Example: Mark positioning with "Two Up & Identical copies"

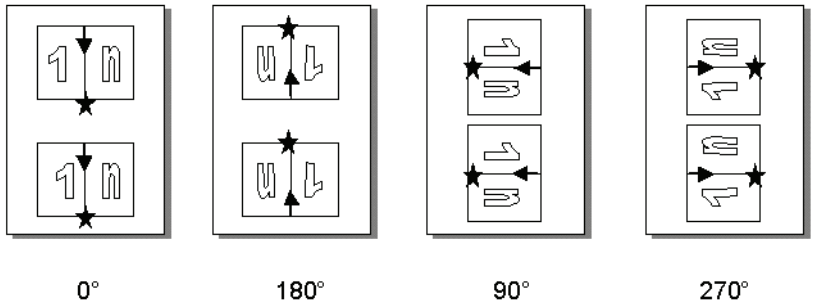
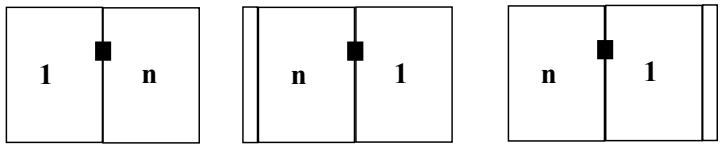


Figure 41 Positioning of marks with "Two Up & Identical copies"

Caution: The mark will be positioned for all copies exactly between the 2 "Two Up" pages without considering user defined shifts (see Positioning).

High Folio/Low Folio

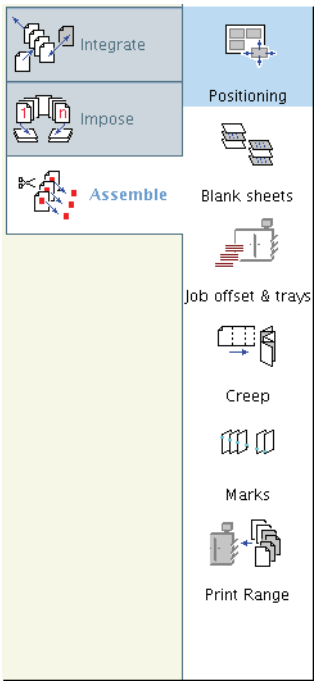
Sheets are often not folded symmetrically during postprocessing, resulting in high or low folios. Therefore the gathering mark must not be placed symmetrically on the sheet but has to be shifted according to the width of the folio:



Symmetrical Folio | Low Folio | High Folio

Insert the width of the high or low folio in the ’Extent’ field.

5 The Assemble Menu and Section



All functions in this menu refer to the physical pages of the document after the imposition-ing. Here you can for instance modify the page layout by changing the position of the logical pages (images), by inserting blank pages or by positioning marks on the sheets.

5.1 Positioning

Depending on which impositioning mode has been selected under 'Impositioning' the logical pages initially are automatically assigned a default positioning that is appropriately matched to the impositioning mode.

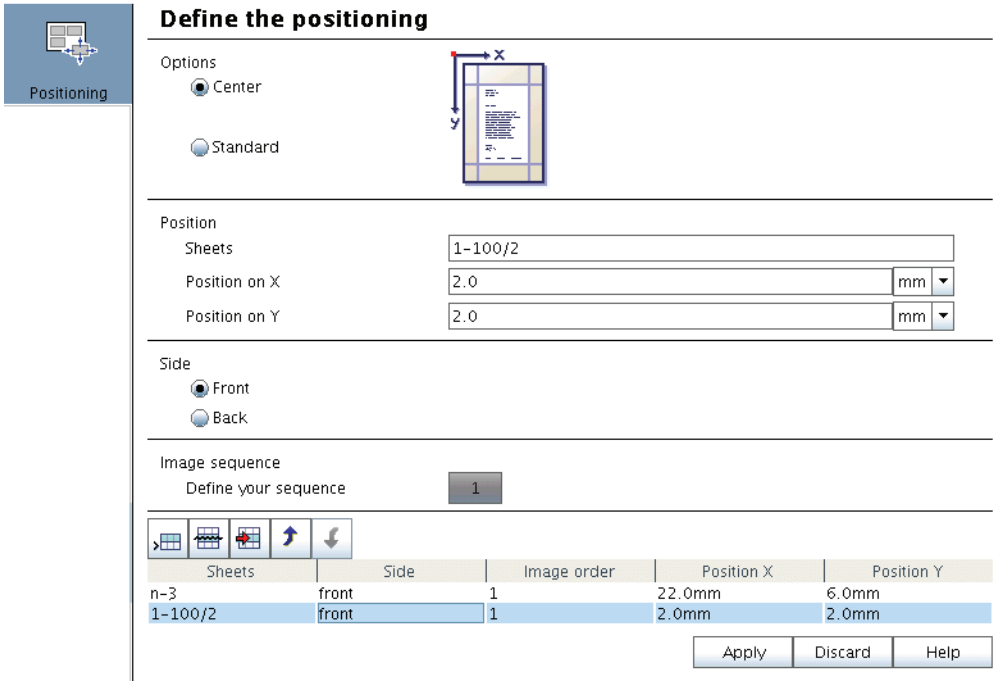


Figure 42 Window 'Positioning'

The following diagrams illustrate object positioning with the different impositioning methods:

One up-Example: A5 object on A3 target paper

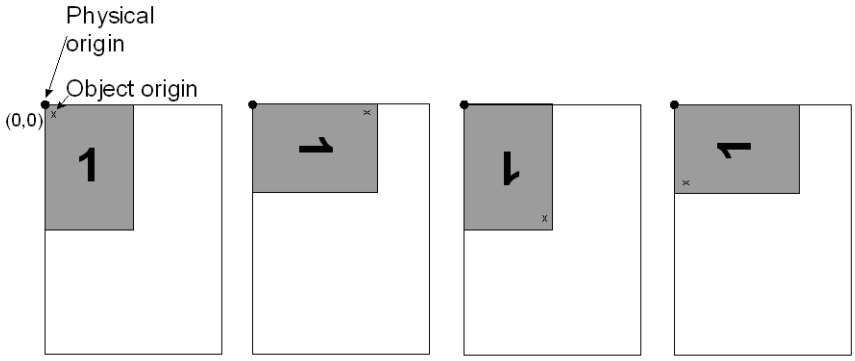


Figure 43 Positioning of an A5 object on A3 paper with different rotations

In 'One up' impositioning mode, the image is rotated about the front edge of the sheet if so specified, and then moved to the physical origin of the page (left upper corner).

Two up-Example: 2 A5 objects on A3 target paper

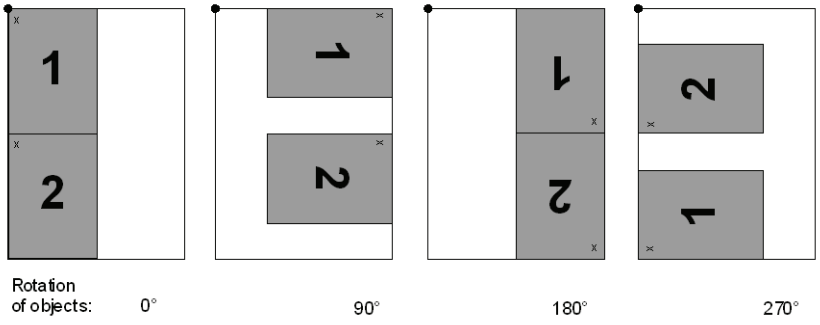


Figure 44 Positioning of 2 A5 object on A3 paper with different rotations

In 'Two up' mode, the sheet is halved parallel to the X edge of the sheet and the objects rotated within their respective half of the page.

Three up-Example: 3 29.7cm*14cm objects on A3 target paper

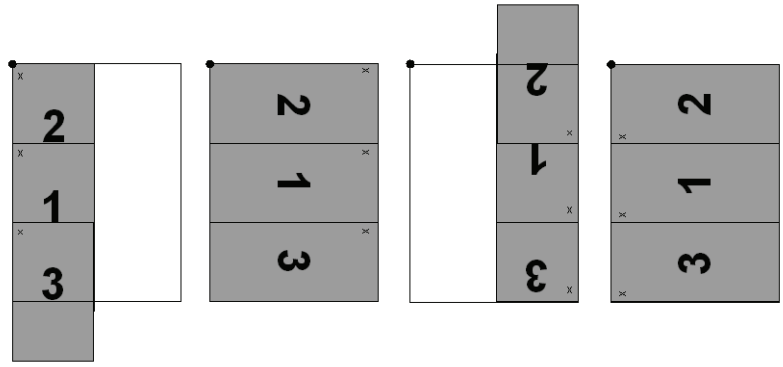


Figure 45 Positioning of three29.7cm × 14.0cm objects on A3 paper with different rotations

Object positioning in 'Three up' is analogous to positioning in 'Two up', but with the difference that the sheet is now divided into thirds (1 third = 1 object).

Four up-Example: 4 A6 objects on A3 target paper

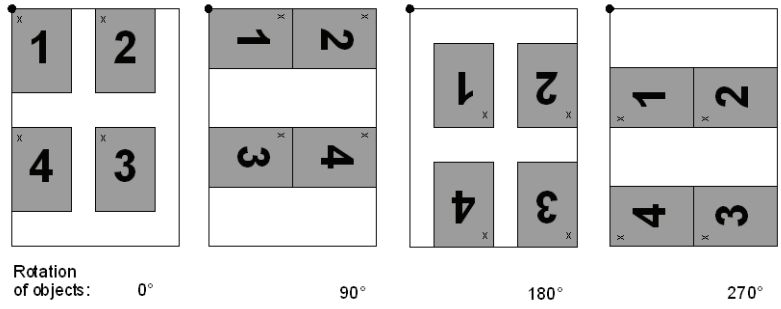


Figure 46 Positioning of 4 A5 objects on A3 paper with different rotations

In 'Four up' mode, the sheet is divided into 4 quadrants and the objects are then placed on the quadrants following a clockwise order.

Identical Copies- Example: 2 A5 objects on A3 target paper

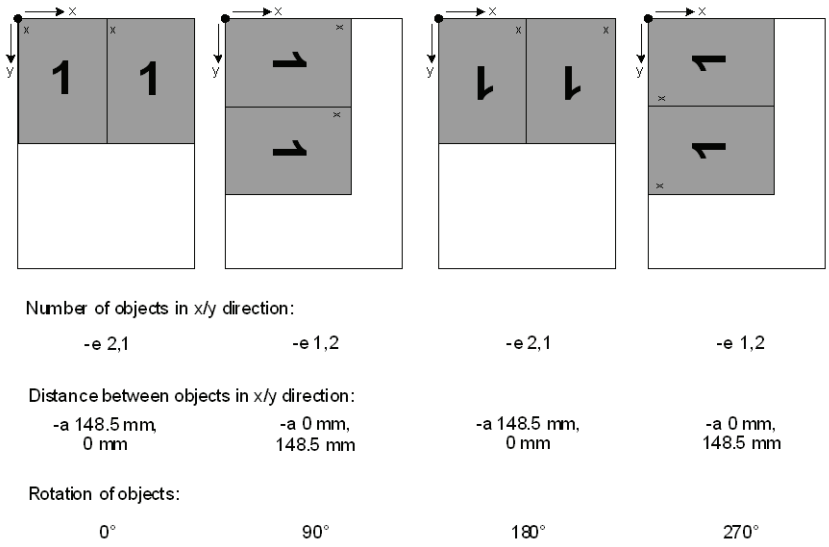


Figure 47 Positioning of 2 A5 objects on A3 paper with various rotations

In 'Identical copies', the number and positioning of the objects on the sheet is derived from the corresponding parameters for the number and spacing of objects as defined under "Define objects on the page for Identical Copy".

The entire object field is always moved to the physical origin (left upper corner) of the page.

In duplex and tumble printing, the objects placed on the back of the sheet are aligned exactly with the objects on the front (i.e. the registration of the front and back images is the same).

Two up&Identical Copy-Example: 2 A6 objects on A3 target paper

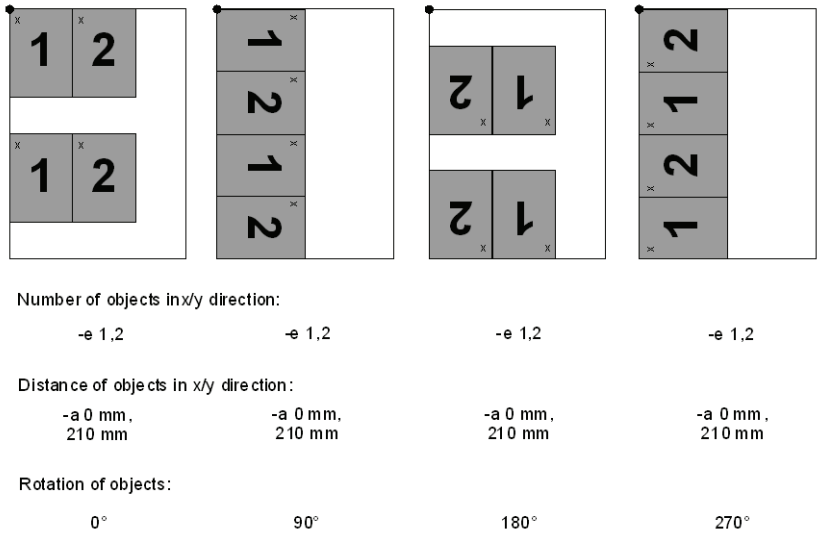


Figure 48 Positioning of 2 A6 objects on A3 paper with different rotations

'Two up & Identical copy' is a combination of 'Two up' and 'Identical copy' modes, i.e. it contains all the 'Two up' schemes, but – as in 'Identical Copy' mode – objects can be copied on a physical page as many times as desired. The number and spacing are defined as in 'Identical Copy'. Here too, the entire object field is moved to the physical origin (left upper corner) of the page.

Positioning when 'Center' is active

One up-Example: 1 A5 object on A3 target paper

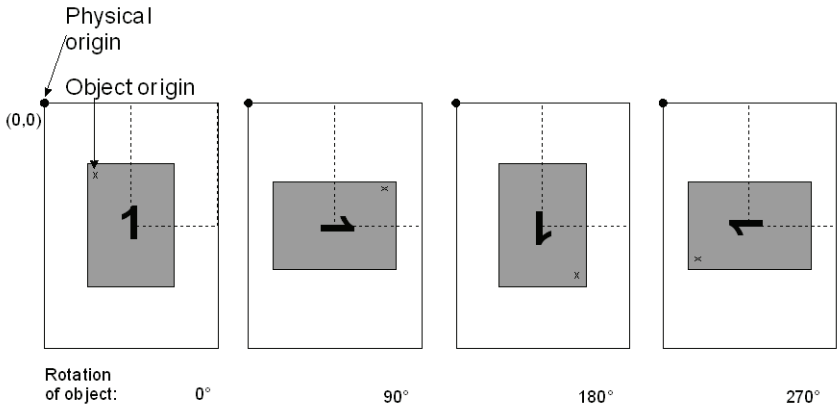


Figure 49 Positioning with "One Up" and 'centred print'

Two Up-Example: 2 A5 objects on A3 paper

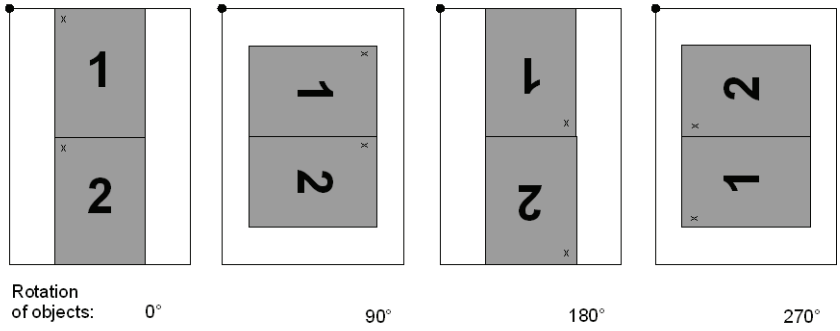


Figure 50 Positioning with "Two Up" and 'centred print'

Three Up-Example: 3 (10.5cm ¥ 20.0cm)-Objects on A3 target paper

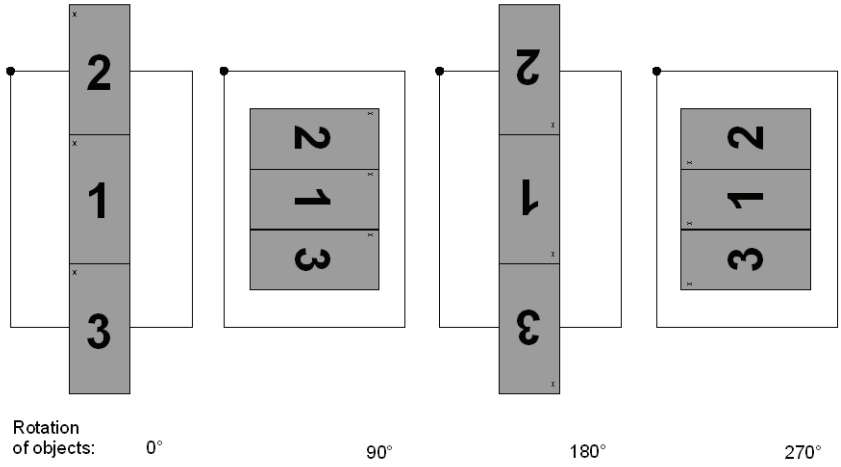


Figure 51 Positioning at "Three Up" with 'centred print'

Four Up-Example: 4 A6 objects on A3 target paper

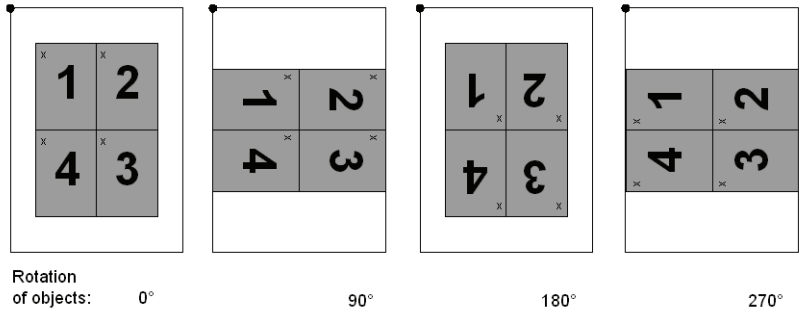


Figure 52 Positioning at "Four Up" with 'centred print'

Identical Copies-Example: 2 A5 objects on A3 target paper

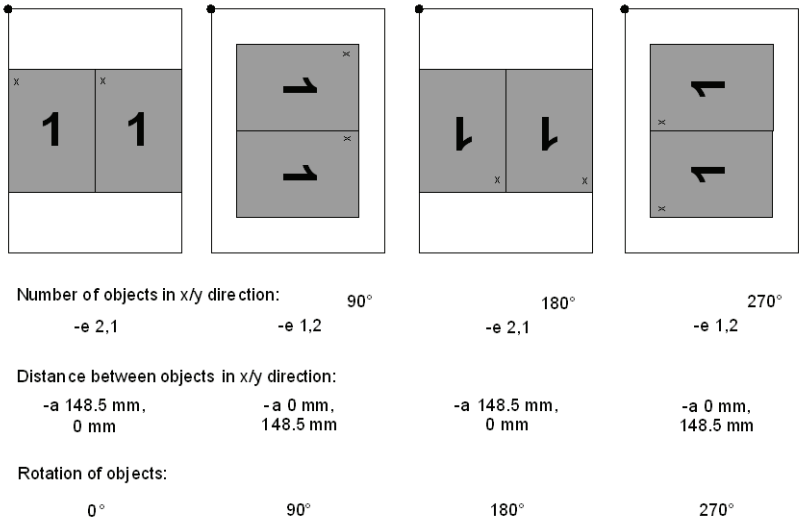


Figure 53 Positioning with "Identical copies" and 'centred print'

In duplex and tumble mode, the objects placed on the back of the sheet are aligned exactly with the objects on the front (i.e. the registration of the front and back images is the same).

Two up&Identical Copy-Example: 2 A6 objects on A3 target paper

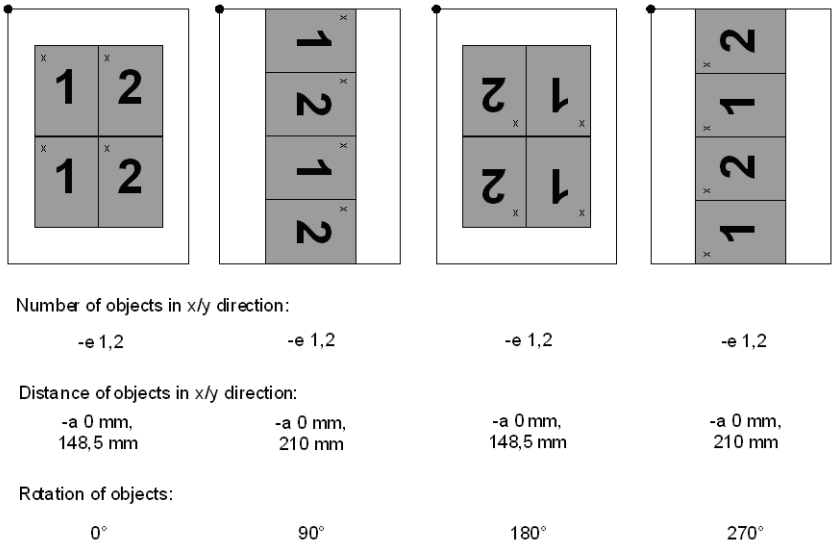


Figure 54 Positioning with "Two Up & Identical copies" and 'centred print'

If you start out with the default positioning variants described above (**Options** -> **Center/ Standard**) you can additionally shift the images in the X- and Y-directions. Generally such a move is not required to achieve exact registration of front and back images, if the actual target paper size is the same as the paper size selected during impositioning, and if the printer generates no differences in printing the front and back sides.

You always need to move the object when the printer setting generates a shift, or when the actual paper size doesn't match with the paper size defined during impositioning.

You can shift each object (with the exception of **Identical Copy** or **Two up & Identical Copies** objects) in the X- and Y-directions independently of all other images.

In **Identical Copy** or **Two up & Identical copies** you can only move the entire object field as a whole on a physical page.

Click **Apply** to confirm all settings in the 'List of image positions' and return to the Composer main window; or click **Discard** to disregard all changes and return to the Composer main window.

5.1.1 Options

'Center'	If you activate the option, the images are arranged centred to the physical page and their position does not relate to the origin of the physical page.
'Standard'	The orientation of the image relates to the origin of the physical page in the upper left corner in portrait mode.

5.1.2 Position

'Sheets'	Here you select the physical pages where you need to give images additional shift values. You can choose among different ways of defining the pages: - Specifying the page range (e.g., page 1 to last page - Pattern: 1-n) - Specifying individual pages (e.g., page 1, page 5, page 19, second-last page - Pattern: 1,5,19,n-1) - Specifying the page range and an interval. For example, you have defined the range from page 1 to page 20, but image positions must be corrected on every second physical page (Pattern: 1-20:2 - page 1 to page 20, colon identifies the interval). The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + integer
'Position on X / Y'	The values in these fields determine the distance on the x and y axis – measured in mm, cm, pel or inch – by which the image must be moved.

5.1.3 Side

'Front'	By selecting 'Front' (front side) in tumble or duplex layout, you can set separate shifts for the front sides. **Example**: Shift corrections must be made on all front sides. **Pages: 1-n Side: front**
'Back'	By selecting 'Back' (back side) in tumble or duplex layout, you can set separate shifts for the back sides. **Example**: Shifts must be added on every second back side of the entire print file (pages 1, 3, 5, 7, ...) **Pages: 1-n:2 Side: back**

5.1.4 Image sequence

'Define your sequence'	Once you have used 'Side' and 'Sheets' to determine the physical page of the image that requires a shift, you must select the image itself by entering the image number.

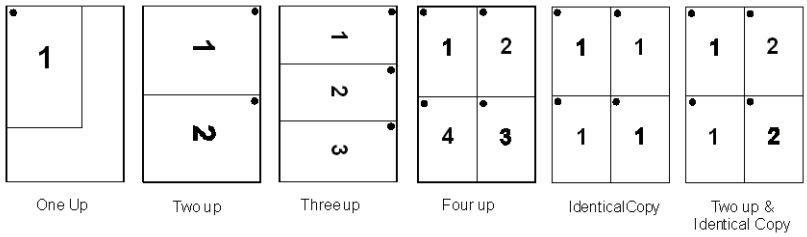


Figure 55 Image numbering for different impositioning schemes

Examples:

The input file is impositioned Two up. The bottom image (image 2) must be shifted on the last front side:
Sheets: **n Side: Front image: 2**

The right bottom image (image 3) must be shifted on all back sides in a Four up file: **Sheets: 1-n Side: Back image: 3**

5.1.5 List of settings

To have the shift settings accepted, you must transfer them to the 'List of image positions' (see chapter "List of settings" on page 8). Then click **Apply** to finally accept the settings.

5.2 Blank Sheets

In certain applications (e.g., blank sheets between the cover and inside sheets of a book or booklet, or divider sheets in a cut-sheet publication), you might want to insert blank sheets into an existing print file. With cut sheet printers that have several paper input trays, you can use the Composer to control the paper feed so that the paper for these blank sheets is drawn from a different tray. This enables you to use heavier-weight stock or even pre-printed paper.

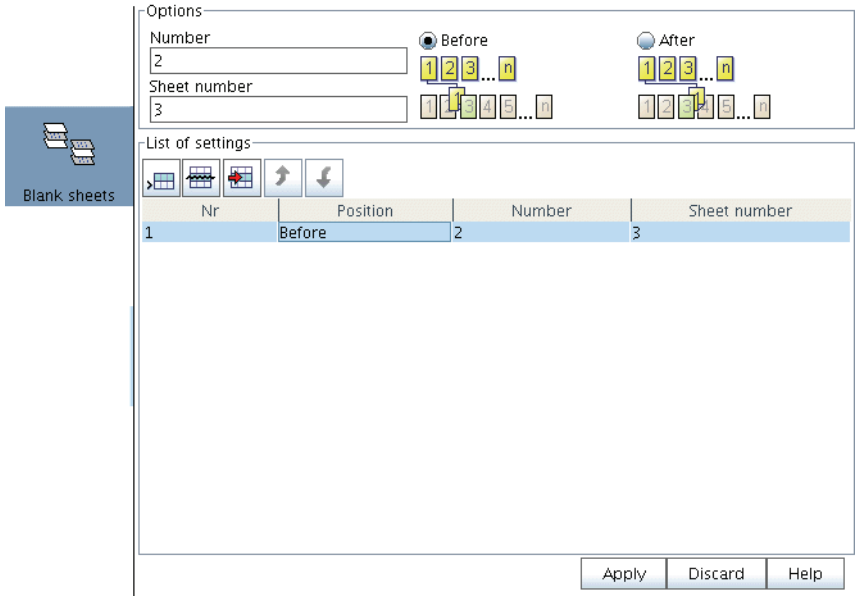


Figure 56 Window 'Blank Sheets'

Note: The insertion of blank sheets increases the total number of printed pages of the print file. Functions performed afterwards, such as 'Input Trays' and 'Marks', will then work with the "new" print file with the larger number of physical pages.

Example: A blank sheet is inserted before sheet 1. This increases the number of physical pages by 1:

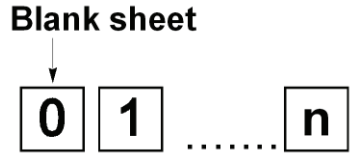


Figure 57 Blank Sheets - Insert a blank sheet before page 1

Use the 'Input trays' function to withdraw the second sheet from Tray C:

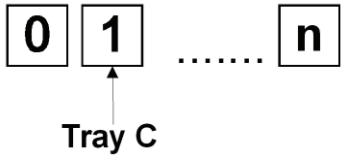


Figure 58 In and output trays - Inputtray C for the second sheet

5.2.1 Options

'Number'	Defines the number of paper sheets to be inserted into the already impositioned document.
'Before' / 'After'	Blank sheets can be inserted ('before') or ('after') a specified sheet.
'Sheet Number'	This function allows the exact selection of the sheet before or after which the blank sheets are to be inserted. You can choose among these selections: Absolute specification of the paper sheet (e.g., before sheet 14 - Pattern: before 14) Relative specification of the second-last paper sheet (e.g., after the second-last sheet –Pattern: after n-1) The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + integer n + 1 (with insert 'After')

5.2.2 List of settings

To confirm these settings, you must enter them in the 'List of selected blank pages' (see chapter "List of settings" on page 8). Then click **Apply** to finally accept the settings.

5.3 Job offset & trays

' This function is useful only with cut sheet printers. By selecting different paper feed trays or output trays you can integrate different paper weights, different paper colors or pre-printed sheets into the print material or you can output certain sheets separately.

Note: If the PDC is called via the PJM, the input and output trays of the currently selected printer are presented in this window.
If you start the PDC as standalone application, only the trays of an default printer are shown.

The paper input can be controlled either directly by the selection of **tray numbers** or by the selection of **media names** (only with printers capable of media names).

Printers supporting media names can therefore be controlled independently from the physical trays by the selection of the description of the paper types you want to use for printing.

In addition to specifying the trays, you can also assign a **job offset** (cut sheet printer) or EOT marks (fanfold printer) to the paper sheets.

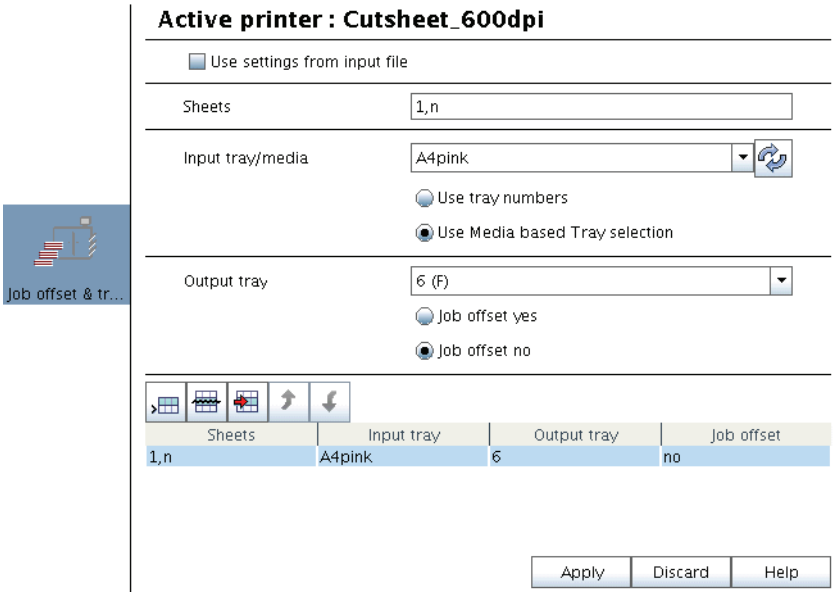


Figure 59 Window 'Job offset and trays

Note: If no settings are performed under **Job offset & trays**, then the existing Tray and Job Offset parameters of the input files are retained. If, however, a tray and Job offset setting is defined for at least one sheet, all sheets not specifically listed in the 'List of Settings' are assigned the entry "Tray A without job offset".

Example:

The 'List of selected trays and job offsets' contains the following entries:

Sheets	Input tray	Output tray	Job offset
1	A4pink	C	no
n	2	B	yes

The paper sheets 2 through the second-last sheet n-1 are not on the list and will therefore be taken by default from tray 1 without job offset.

Any list entries that relate to the same sheet numbers overwrite each other. The last entry overwrites the first.

Example:

Sheets	Input tray	Output tray	Job offset
1-n	1	A	No
n	2	B	Yes

Sheets 1 through n-1 are taken from tray 1 without job offset, the last sheet from tray 2 with job offset.

Click **Apply** to confirm all settings and return to the Composer main window; or click **Discard** to disregard all changes and return to the Composer main window.

Functions of the window

'Use settings form input file'	The setting are taken from the input file. No further settings are possible in this window.
'Sheets'	In this input field you specify sheets for which a specific input tray is to be selected. A valid entry can consist of individual sheets and ranges. - Individual sheets (e.g., sheets 1, 20 and the last sheet - Pattern: 1,20,n) - Ranges (e.g., all sheets - Pattern: 1-n) - Range with interval increments (e.g., each 3rd sheet - Pattern 1-n:3) The following expressions are valid: n n - integer n / integer n / integer - integer n / integer + integer
'Input tray/media'	Here you select the paper feed tray or the preferred print media. You define the desired mode (tray numbers or media based tray selection) using the corresponding radio buttons. **Use Tray numbers** The drop down list 'Input tray/media' shows the tray number of the printer which is currently selected in the PJM. You can select one of these trays. **Use Media based Tray selection** The drop down list 'Input tray/media' now shows all printer medias available in the database of the PRISMAproduction system. (see the PRISMAproduction user manual on how to configure user defined print media). The list indicates the name of the print media. All other attributes (e.g. color, weight or size) are shown as a tooltip for every entry. **Read from database**  If you open a PDC parameter file (*.imp), the original media list will also be restored for 'Input tray/media'. Reading the currently defined media from the database using the button 'Read from database' deletes outdated entries from the list and replaces them by newly defined media definitions.

'Output tray'	**Output tray** Here the output tray is selected (cut sheet printers). The presented trays depend on the printer which is currently selected in the PJM. **Job Offset** The default setting **no** deactivates the job offset, while the setting **yes** inserts a job offset command **before** the sheets selected in the 'sheets' text field. This command is then transmitted via the interface to the post-processing device, where it is used as a 'binding' command.

5.3.1 List of settings

To confirm these settings, you must enter them in the 'List of selected blank pages' (see chapter "List of settings" on page 8). Then click **Apply** to finally accept the settings.

5.4 Creep

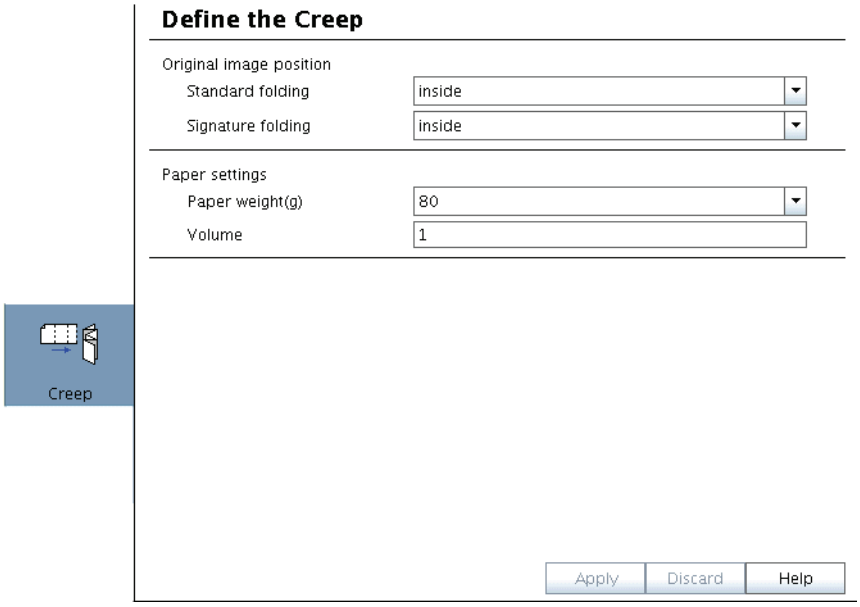


Figure 60 Window 'Creep'

This option is only relevant if the printing area for folded and interleaved sheets must be corrected to offset the paper thickness and make sure all sheets in the booklet retain the same external margin after trimming.

The 'Creep‘ function is available only in combination with the following impositioning types:

- Two up
- Two up & Identical copies
- Four up

All other Composer impositioning modes are unsuited for generating folded booklets or books, and can therefore not be combined with 'Creep'.

5.4.1 Original image position

5.4.1.1 Standard Folding

Standard folding must be activated for booklets with a single fold (or for book sections), i.e. when the sheets are cut first, then interleaved, and finally are **all folded as a unit around one edge** (see diagram below).

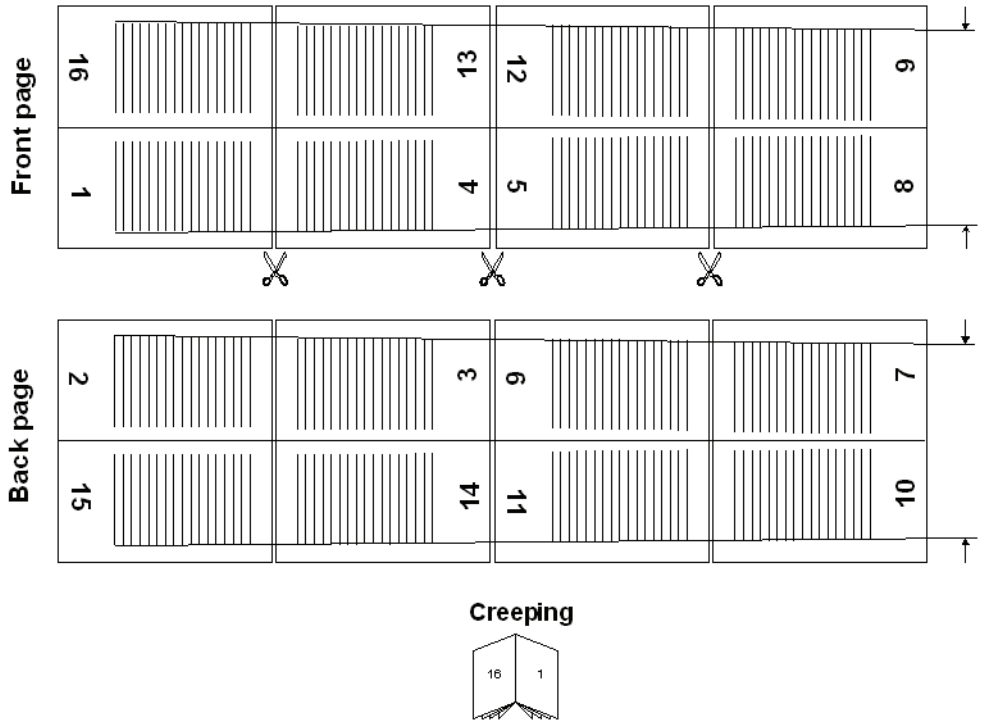


Figure 61 Positioning of the pages with creeping in the production of a folded booklet

If you select **inside**, the images located on the inner sheet after folding are assigned their original positioning:

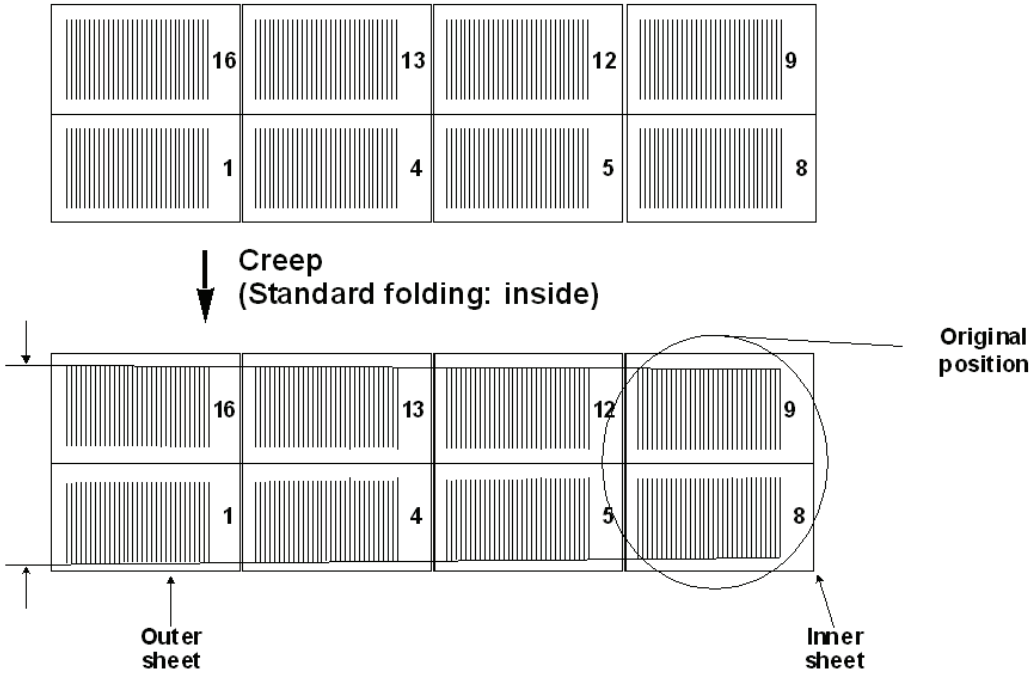


Figure 62 Creep with Standard folding 'inside'

If you select **outside**, the images on the outermost sheet of the folded booklet occupy their original positions (i.e. before 'Creep' was activated):

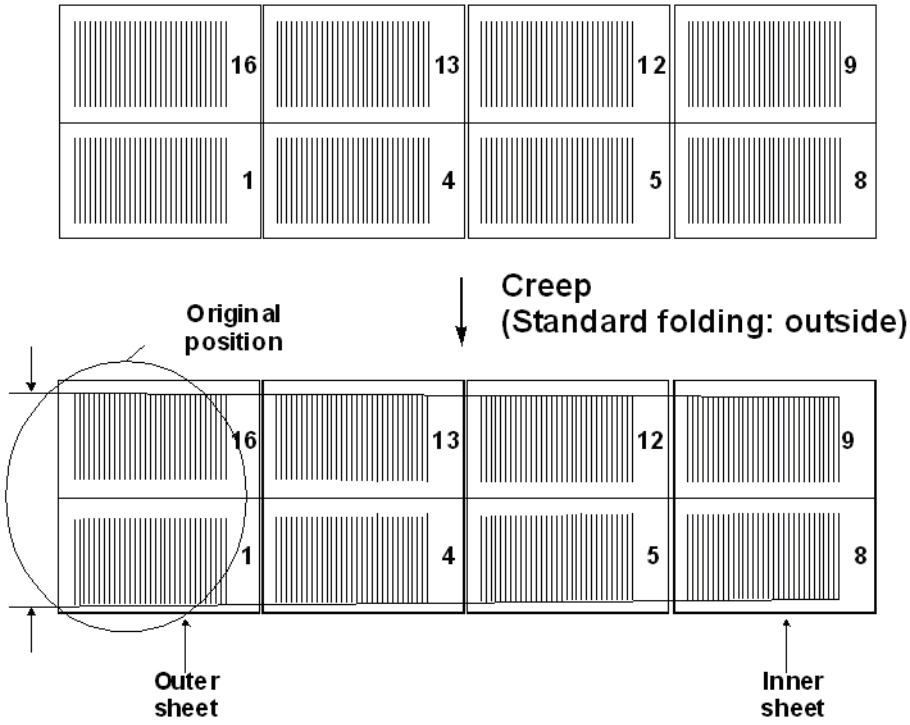


Figure 63 Creep with Standard folding 'outside'

5.4.1.2 Signature Folding

You can only activate 'Signature folding' in conjunction with Four up and Signatures. When printing signatures, you must usually make corrections to the printing area in two directions.

Example:Signature with 32 pages:

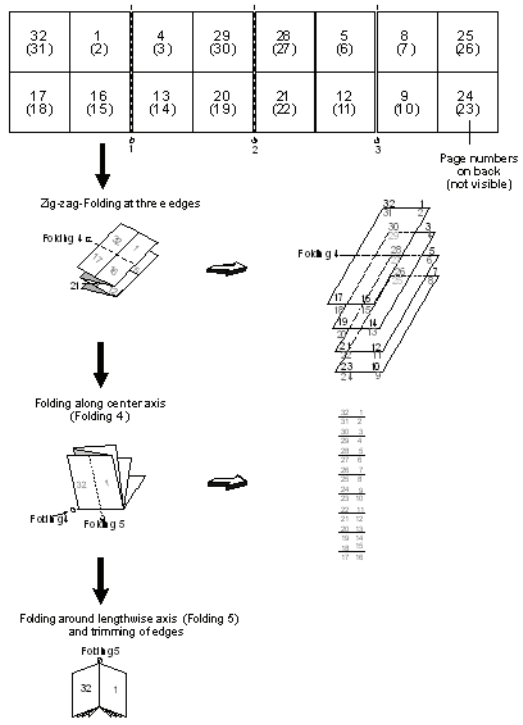


Figure 64 Folding of a signature sheet

The last two folds are the ones that determine the printing area correction, as they involve the folding of a stack of individual sheets around an axis. You perform the printing area correction for the last fold by activating 'Standard folding'. For the printing area correction with the second-last fold (Fold 4) you additionally need to select 'Signature folding'.

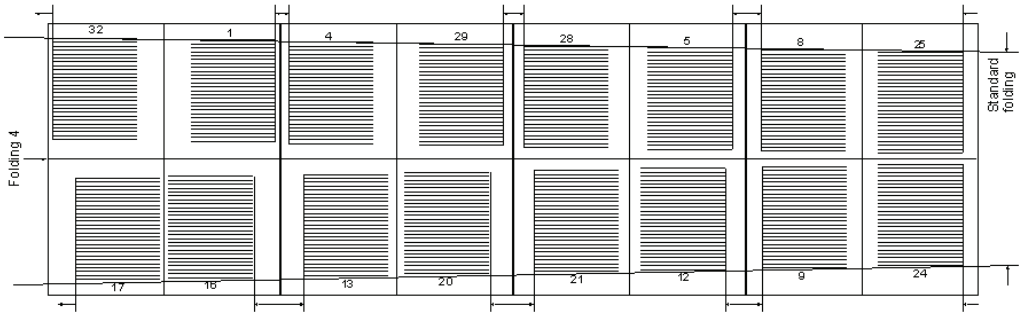


Figure 65 Example for page positioning with 'Signature folding'

5.4.2 Paper settings

5.4.2.1 Paper weight (g)

The paper thickness determines the extent of the printing area correction. You must therefore be sure to specify the paper weight (in grams). The larger the value you enter, the larger will be the correcting shift from one sheet to the next.

5.4.2.2 Volume

Additionally to the weight the paper volume is considered for the creeping. The default setting is 1, with rising values the creeping increases.

5.5 Marks

Apart from the signature marks, you can also define and position marks, which relate to the physical pages (i.e. cut marks, page numbering, etc). Like the overlays, which relate to logical pages, single page marks (select the **Marks** tab) or multipage mapping files (select the **File mapping** tab) can be processed. In contrast to **Overlays** (**Integrate** section), the **Marks** (**Assemble** section) are positioned on the physical pages.

A possible application would be to create a consecutive numbering of the print sheets.

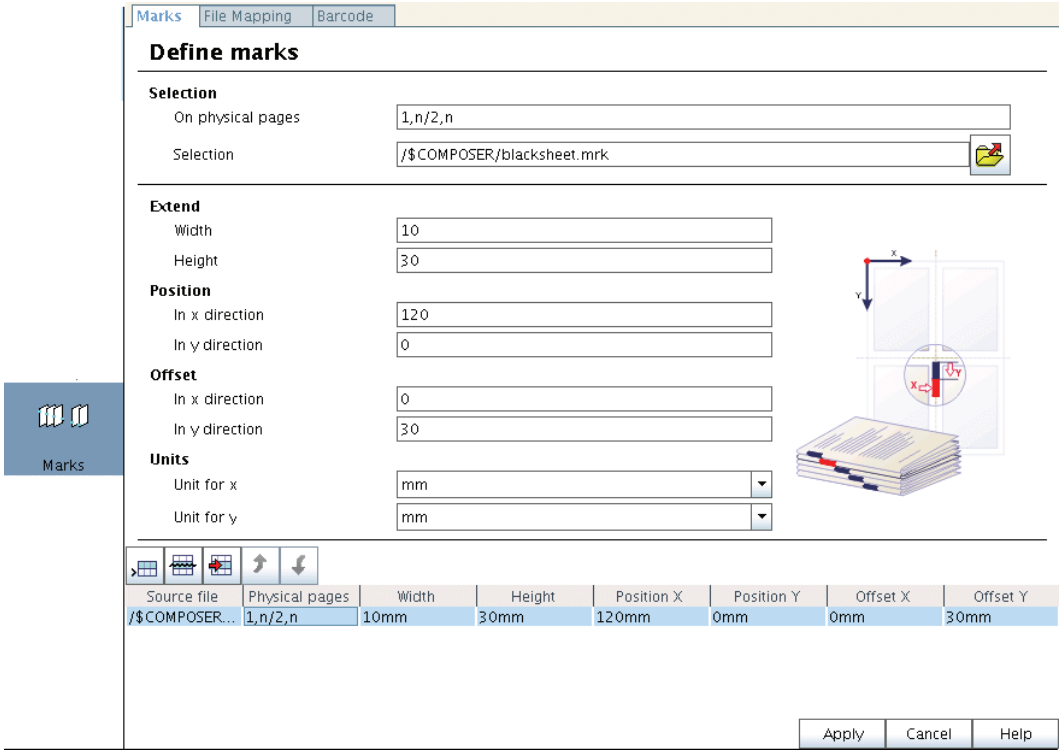


Figure 66 Window 'Marks' - Marks on a single page

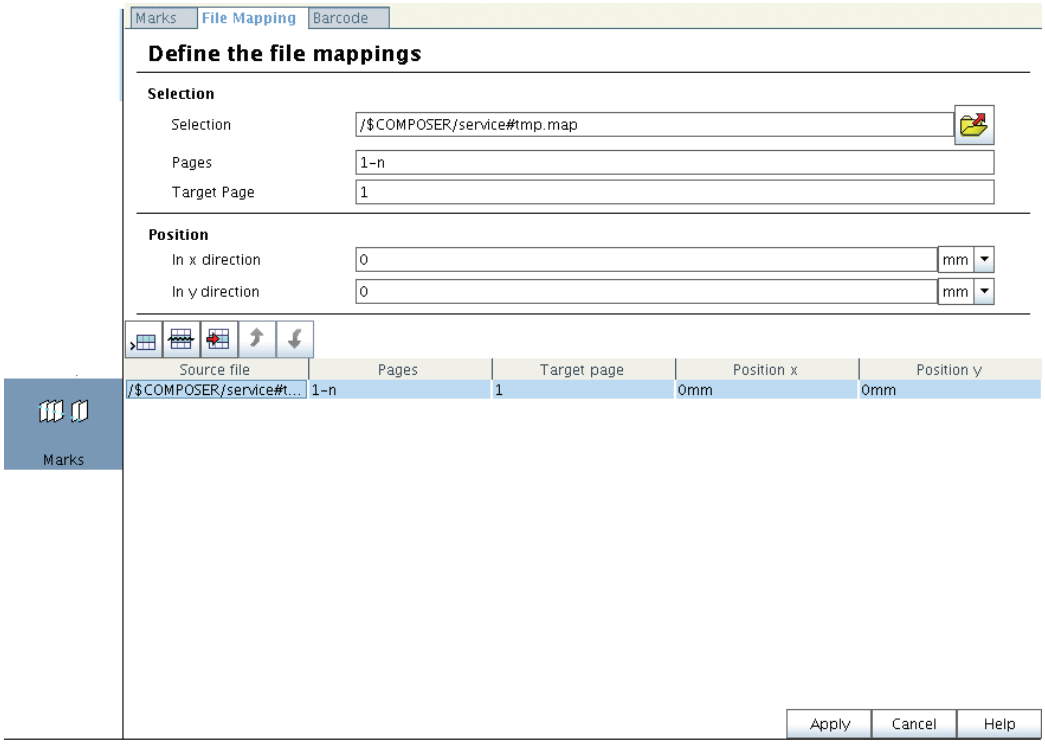


Figure 67 Window ’Maeks’ - ’Filemapping’

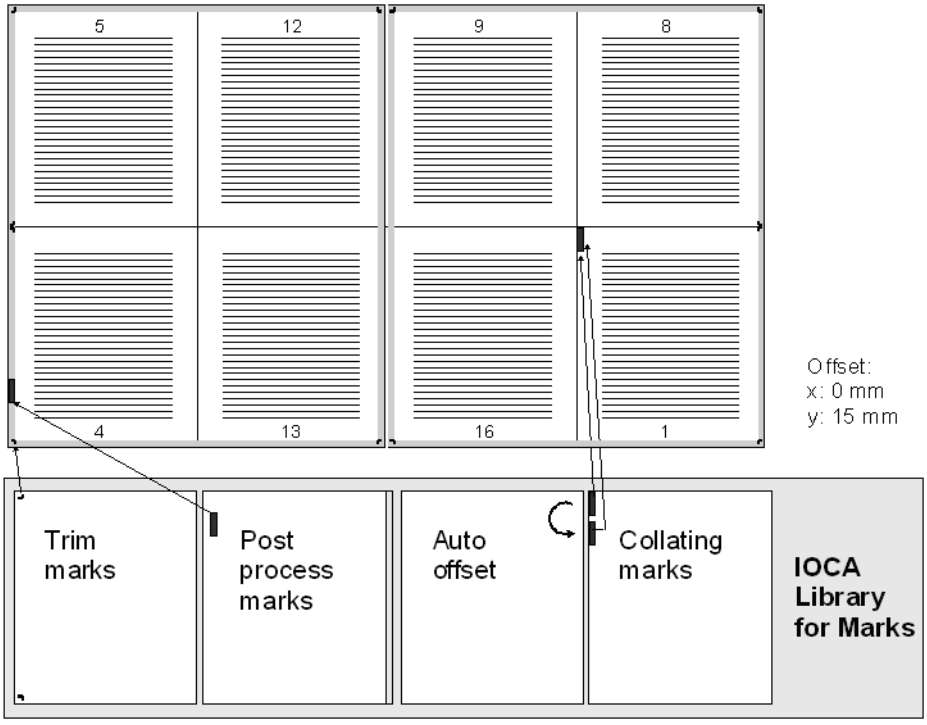


Figure 68 Inserting marks in the print file

5.5.1 Define marks

'On physical pages'	Specify the physical page(s) on which you want to print the marks. **Examples:** On single sheets: - on the first and last sheet: **1,n** - on the sheet before the last: **n-1** On sheets within a range: - not on the last 60 sheets: **1-n-60** - on every second sheet, i. e., in duplex or tumble printing on all front sides: **1-n:2** The following expressions are valid: n n – integer n / integer n / integer - integer n / integer + integer
'Selection'	To select the mark in IOCA format, either click the folder button or enter the fully qualified file name in the 'Selection' text field. Marks can only be selected in the Composer, if they have been created before and have been stored as a resource in the **$COMPOSER** directory in the Print Job Manager (Suffix **.mrk** for single and **.map** for multiple page files).
'Extent' (Width/Hight)	Values for width and hight determine the absolute size of the mark.
'Position' (X/Y)	Once the mark has been created in this way, it can be placed in any desired position on the physical page. You specify the position of the mark's origin in terms of the X- and Y-coordinates.
'Offset' (X/Y)	Here you specify the offset from one mark to the next. Offset specifications are effective only if you have specified a range of target pages (with interval increments if applicable). **Examples**: On physical pages: **1-n:10** Offset **X = 0 cm; Y = 0.5 cm** The mark appears on every tenth page, always with a 0.5 cm offset in the Y-direction. On physical pages: **1-20** Offset **X = -3 mm; Y = 1 mm** The mark appears on each page between 1 and 20, offset by -3 mm in the X-direction and by 1mm in the Y-direction.
'Units' (X/Y)	Set the units for the X and Y direction. You can select **mm**, **cm**, **pel** or **inch**.

5.5.2 Define the file mappings

'Selection'	To select the mark in IOCA format, either click the folder button or enter the fully qualified file name in the 'Selection' text field. Marks can only be selected in the Composer, if they have been created before and have been stored as a resource in the **$COMPOSER** directory in the Print Job Manager (Suffix **.mrk** for single and **.map** for multiple page files).
'Pages'	If you want to specify a part of the mapping file, select a range here. The following expressions are valid: n n – integer n / integer n / integer - integer n / integer + integer
'Target Page'	Using multiple page mapping files you may select a sheet to start your mapping from. Additionally the selection of a step width is possible: - on physical page 8: **8** - in the middle of the print file: **n/2** - starting from the fourth last on every second page: **n-4:2** The following expressions are valid: n n – integer n / integer n / integer - integer n / integer + integer

5.5.3 List of settings

To confirm these settings, you must enter them in the 'List of selected blank pages' (see chapter "List of settings" on page 8). Then click **Apply** to finally accept the settings.

5.6 Marks: Barcode-Function

In the **Marks** dialog you are also able to define barcodes and to position them on any sheet in the print file.

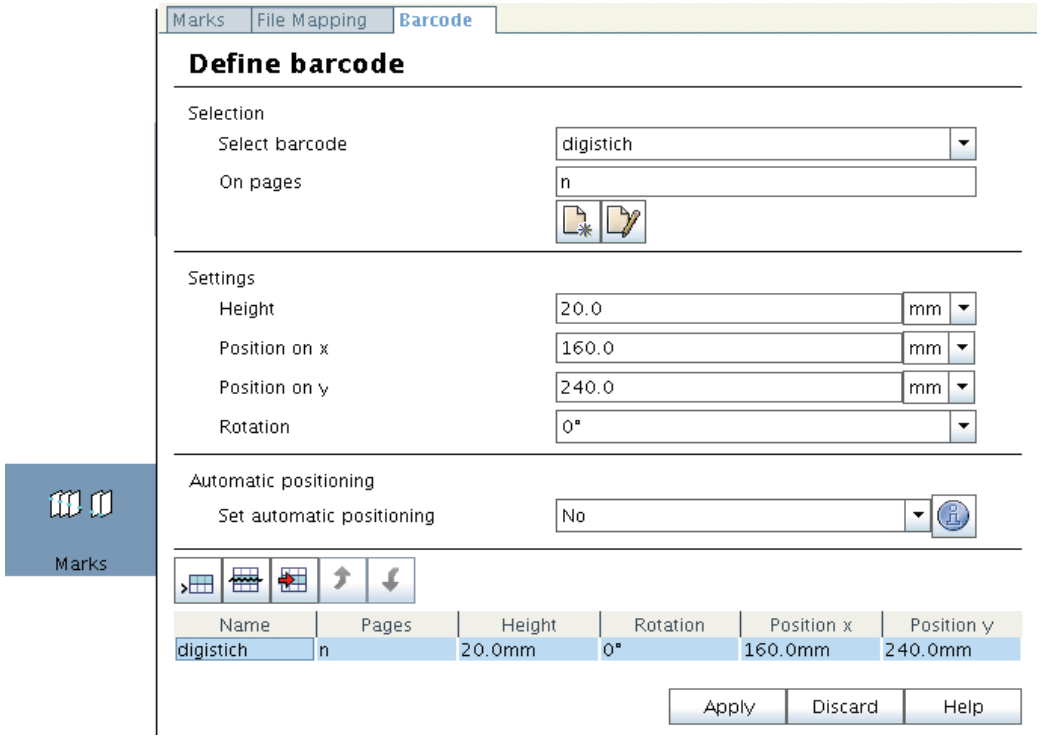


Figure 69 The barcode tab in the 'Marks' dialog

Today you find barcodes in nearly all industrial, commercial and medical fields. Depending on the requirements different codes are being used. Within the PDC you can now use the following Codes:

- EAN-8
- Code 39
- Interleaved 2-of-5
- Data Matrix (Océ)

'EAN-8'

Formerly 'European Article Number', today trademark of the Identification and Barcode System administered by the International Article Numbering Association (EAN). EAN is a wordwide standard allowing to perform unique identifications. With this number articles, logistic units and adresses of partner can be labelled uniquly.

The EAN-8 barcode is 8 characters long and contains only numerals - no letters and other characters are accepted. 7 characters are reserved for the data, the last is a control digit, which results from a testcalculation over the contents of the barcode. This control digit is used by the barcode scanner to verify that the correct barcode is used.

Example of an EAN-8 barcode (Data: '0123456', automatically generated control digit: '5'):

'Code 39'

Code 39 is a alphanumeric barcode, which represents digits from 0 to 9, 26 capital letters (A-Z) and 6 special characters (-.$/+% and blancs). Up to 50 characters can be displayed.

Every character consists of 9 elements (5 bars and 4 gaps), 3 of them wide and 6 narrow.

Code 39 has no additinal control digit.

Code 39 example representing the word 'CODE 39':

'Interleaved 2-of-5'

Interleaved 2-of-5 is a numeric barcode, where the coded data must consist of an even number of digits. Up to 50 characters can be displayed.

'Interleaved' means that one digit is coded in the bars of the barcode and the successing digit is coded in the gaps of the barcode. Therefore the coded digits interleave. Each digit consists of 5 elements (5 bars or 5 gaps), 2 of them wide and 3 narrow.

'Data Matrix (Océ)'

Barcodes like EAN 8 , Code 39 and Interleaved 2-of-5 are linear codes. Because of the linear orientation, barcodes are very much limited in respect of the length of information. Furthermore, the linear orientation has to be considered when scanning the barcode. The code therefore cannot be read in any position.

The Data Matrix Code codes the data horizontally and vertically. Therefore the position of the code is not important for reading. The matrix structure also allows to represent much more data.

Data Matrix Code example

5.6.1 Selection

5.6.1.1 Select Barcode

You can select all barcodes created in the window 'Barcode Settings' as well as the pre-defined codes.

5.6.1.2 On Pages

In this field you define the pages on which the barcode is to be printed. You can insert the barcode either on single pages or on a range of pages.

Inserting on single pages:

on pages 1 and n:	1, n
on the page before the last page:	n-1

Inserting on multiple pages within a range:

on the entire file - except the last two pages:	1-n-2
on every second page:	1-n:2

The following expressions are valid:

n
n - integer
n / integer
n / integer - integer
n / integer + integer

5.6.1.3 User defined

If you set **user defined** and click the icon:  , you can enter all required values for a new barcode in a dialog box (see chapter "Define/Modify Barcode" on page 93).

5.6.1.4 Modify the barcode list

If you click the icon  , you can modify the list of user- and predefined barcodes.

5.6.1.5 Predefined Barcodes

The predesigned barcodes 'digistich' and 'revDigistitch' are already installed on the system. These barcodes correspond to position and hight settings of the barcodes 'Barcode1.mrk' and 'Barcode2.mrk' distributed with the special release of the PDC V2.10.15 for the IBIS DS2000 application. They have the following preset parameter values:

digistitch

Number of digits 8
Module width 13 mils
Barcode Typ 2 of 5 Int
HRI Text no
WE:NE: 2.5:1
Field settings:

Fields	Content Type	Contents
1-2	Actual Sheet number	
3-4	Total sheets	
5-8	constant string	0000

revDigistitch

Number of digits 8
Module width 13 mils
Barcode Typ 2 of 5 Int
HRI Text no
WE:NE: 2.5:1
Field settings:

Fields	Content Type	Contents
1-2	Sheet number reverse	
3-4	Total sheets	
5-8	constant string	0000

If you move the mousepointer over a barcode entry in the list, a small help window opens with a short info on the type of the barcode. This makes it easier for you select the correct barcode from the list.

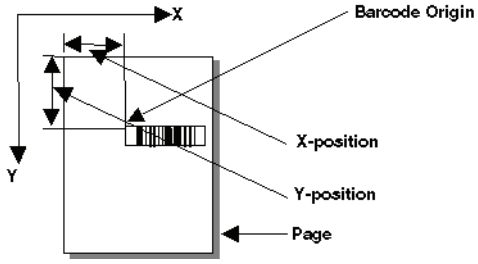
5.6.2 Settings

5.6.2.1 Hight

In this field you define the hight of the barcode Value from 6mm to 100mm are allowed. You can select 'mm', 'cm', 'pel' or 'inch'.

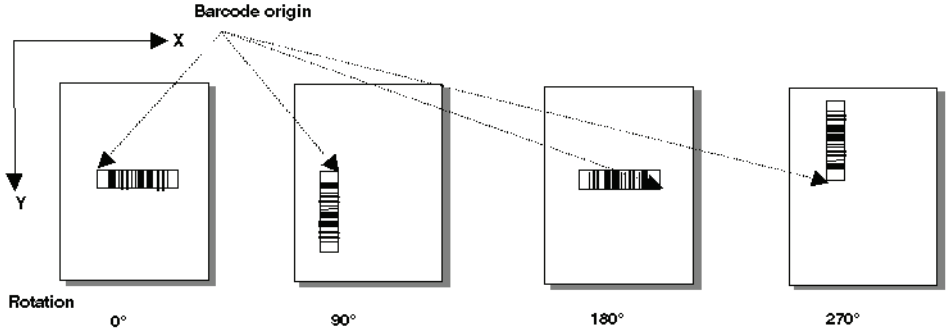
5.6.2.2 Position on X/Y

You can place the barcode on any position of the physical page. To do this you define the position of the barcode origin (the left upper corner) via the X and Y coordinates. You can choose 'mm', 'cm', 'pel' or 'inch'.



5.6.2.3 Rotation

Choose from the list either 0°, 90°, 180° or 270°.



5.6.3 Automatic Positioning

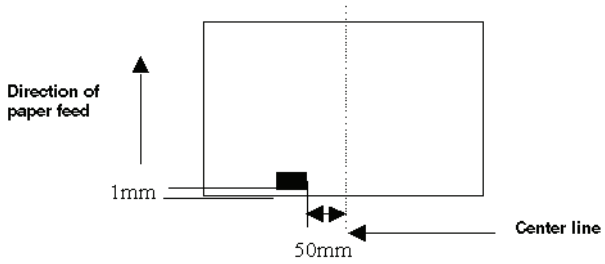
Apart from the possibility to define the position and hight of the barcode by yourself, you can also choose between two automatic settings 'Digistich1' and 'Digistich2'. The default entry in the listbox is 'No'.

Only if you choose 'No', you can make your settings, otherwise the fields in the 'Settings' section are greyed out. Dependend on the target papersize the settings are calculated automatically.

The predefined barcodes correspond to position and hight settings of the barcodes 'Barcode1.mrk' and 'Barcode2.mrk' distributed with the special release of the PDC V2.10.15 for the IBIS DS2000 application.

Barcode positioning for 'Digistich1':

Barcode positioning for 'Digistich2':



5.6.4 Define/Modify Barcode

Click this button, if you have selected 'user defined' in the field **Select barcode**, to open a window, which allows you to set all parameters for a user defined barcode and add it to the barcode list. If you have selected an already defined barcode, the same window opens to show the related settings. In this case you can modify the settings.

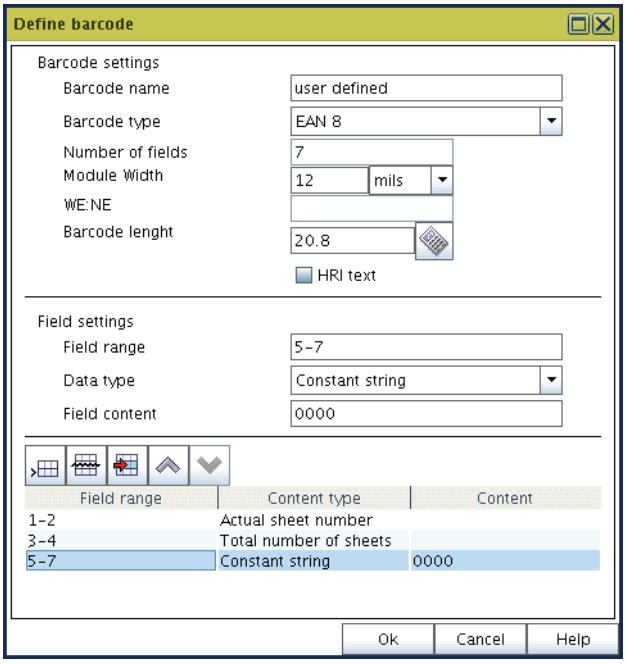


Figure 70 Window 'Define barcode'

5.6.4.1 Barcode Settings

Barcode Name

Before clicking 'OK' and returning to the main window, you have to assign a name to the new barcode in this edit field.

Barcode type

Select one of the three following barcode types:

- EAN 8

- Code 39
- Interleaved 2-of-5
- Data Matrix (Océ)

Number of fields

In this field enter the number of internal fields within the barcode. E.g. if you want to code the string 'test-123' as a barcode, it must be 8 fields long. The maximum number of fields depends on the barcode type:

Barcode type	Valid number of fields
Code 39	50 characters
EAN-8	Exactly 7 characters This barcode consists of 7 digits (data) and 1 automatically generated control digit (=digit 8)
Interleaved 2-of-5	50 characters
Data Matrix (Océ)	2000 characters

Module width

With the module width you can define the width of the most narrow barcode element. Barcode elements are represented either as bars within the barcode or gaps between the bars.

The module width can be indicated as **mils**, **mm**, **pel** or **inch**, whereas 1 inch equals 1000 mils.

Valid values for Code 39 and Interleaved 2-of-5 are between 7 mils and 100 mils. For EAN between 9 mils and 26 mils.

With Data Matrix (Océ) the valid range of values is between 6 mils and 254 mils.

If you do not give a value, the default settings of the printer will be used.

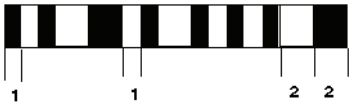
Wide-to-narrow (WE:NE)

This value defines the ratio of a wide barcode element to a narrow element for barcodes, which only contain elements of two different sizes (= two level barcodes). These are the barcode types Code 39 and Interleaved 2-of-5, not EAN-8.

The valid range of values is between (2:1) - (3:1), e.g. 2.25:1.

If you do not give a value, the default settings of the printer will be used.

Example: WE:NE = 2.00:1



Barcode length

Clicking this button calculates the length of the barcode dependent on the number of fields, the module width and the WE:NE ratio. The value is then inserted in the barcode length field. The calculated length refers to the left margin of the first bar to the right margin of the right bar.

HRI text

HRI means 'Human Readable Interpretation'. If you activate the box, the contents of the barcode will additionally be printed as a readable string (latin characters and arabic digits). Deactivated is the default setting.

HRI text is not available for Data Matrix (Océ).

5.6.4.2 Field settings

You can now divide the number defined in the 'Number of fields' field into groups, which can be filled with different contents.

Example:

The barcode should have 8 fields. The first two fields should each contain the actual sheet number, on which the barcode is to be printed. Fields 3-4 shoud contain the total number of sheets in the print file and the last 4 fields should represent the constant number '4711'.

To do this, you have to insert the following values into the text fields **Field range**, **Content** and **Content typ**:

Field range	Content type	Content
1-2	Actual sheet number	
3-4	Total number of sheets	
5-8	Constant String	4711

These values have to be transferred into the 'List of settings', otherwise the data will be lost. To modify this list, use the icons on the top of this list.

Field range

You have different possibilities to divide the barcode fields into groups:

- Indicate a range (e.g. field 1 to 2: 1-2)
- Indicate a single field (e.g. field 7: 7)

Data type

This selection field forms together with the **Field content** the contents of the barcode fields. You can select one of the following content types:

- **Constant string**: allows you to insert a constant string in the text field 'Content'.
- **Variable string**: allows you to define via the text field 'Content' variable fields (e.g. counter) in the barcode
- **Actual sheet nr**: Contains the number of the actual sheet, on which the barcode is printed. No entry in the text field 'Content' is possible.
- **Total number of sheets**: Contains the total number of sheets to be printed. No entry in the text field 'Content' is possible.
- **Sheet number reverse**: Contains a counter, which counts back beginning with the last (highest) number of sheets in the print file. No entry in the text field 'Content' is possible.

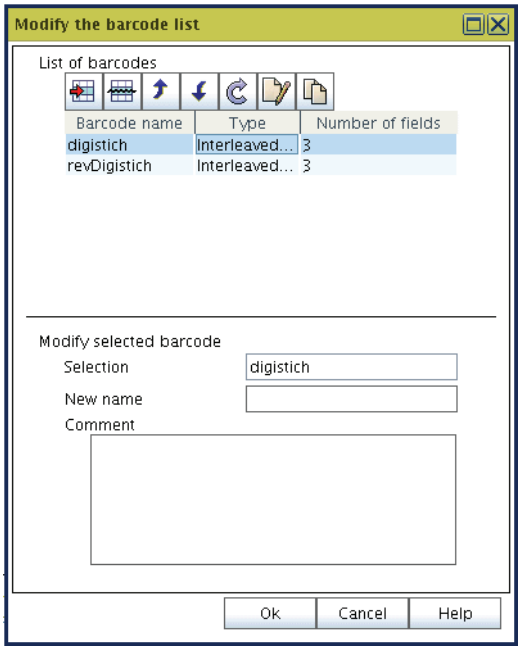
Field contents

Dependend on the **Data type** you have chosen, you can insert the following into this text field:

'Data type'	**Contents**
'Constant string'	The valid characters depend on the selected barcode type: – EAN-8 and Interleaved 2-of-5: 0123456789 – Code 39: 0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ -.$/+% and blanks – Data Matrix (Océ): – EBCDIC-Code: – 0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZ bcdefghijklmnopqrstuvwxyz – /!:.$,#<*%@()+;>=|?\&- and blanks
'Variable string'	Definition of a variable counter. Example 1: A barcode is to be printed on each page of a 100 pages file. Within the barcode it should be counted from 1 to 100. The following has to be inserted into the field: 1:1 (starting number:counter steps) The following expressions are valid: integer:integer Integer:-integer (count backwards) n:-integer (count backwards beginning from the last sheet number) Example 2: Field range: 1-2, Content: 1:1 => It is counted from 01, 02, ... to 99. If there are more barcodes to be printed, the next starts again with 01. In case of a counter overflow the counter will be reset to the start value and the counting starts again.
'Actual sheet number'	No entries possible
'Total number of sheets'	No entries possible
'Sheet number reverse'	No entries possible

After you have done all necessary entries and after you have transferred the field settings into the **List of settings**, click 'OK' to store the newly defined barcode and to return to the previous window. The new barcode will now appear in the barcode selection list as the first entry. If you choose 'Cancel' nothing will be stored and you return to the previous window.

5.6.5 Modify the barcode list



Window ’Marks’ - ’Barcode’ - ’Modify the barcode list’

The list of barcodes is not static and can be modified at will. I.e. you can add or delete entries, modify names and tooltip comments.

A click on the icon ’Modify scheme list’ opens the window above.

The actual list of barcode with barcode name, type and number of fields ist displayed.

Rename a barcode

Mark the entry of the barcode you want to rename by clicking on it. The actual name is displayed in the ’Selection’ field. Type in the new name in the ’New name’ field and click ’Rename current barcode’:

Delete selected List Item

To delete one or more elements from the list, mark the entries and click the Icon 'Delete current barcode':

Caution: Deleted barcodes cannot be restored!

Move selected List Item up/down

Use these buttons to move a selcted item or a group of items one step up or down. This allows you to organize the order of the list at will.

Restore the current default barcodes

Clicking this icon restores the list before the last modification.

Accept the Comment for this Scheme

If you move the cursor over an element in the list of barcodes in the barcode window, a small help window pops up displaying information o the barcode, the number of fields and a freeform comment (e.g. on the contents of the barcode). You can edit this comment in the text field in the 'Modify scheme list' window. Clicking the icon above links the comment to the selected barcode.

Copy the current barcode

You can also copy any barcode by editing a new name in the field 'Copy barcode to' and clicking the above icon. The newly generated barcode has identical properties (type, number of fields, contents, etc.), only it's name is different.

5.6.6 Rebuilding the Barcode Applications Barcode1.mrk and Barcode2.mrk

Both applications come from the special release of the PDC V2.10.15 for the IBIS DS2000 Digistich application.

Barcode1.mrk

1. Select the predifined barcode ’Digistich’ from the list.

’Digistich’ has the following preset parameter values:

Number of fields: 8
Module widzh: 13 mils
Barcode type: 2 of 5 Int
HRI Text: no
WE:NE: 2.5:1
Content:

From/to	Content type	Content
1-2	Actual sheet number	
3-4	Total number of sheets	
5-8	Contant String	0000

2. If you want to modify the default squence ’0000’ for the fields 5-8, open the window ’Barcode Settings’ to change this value. Close this window by clicking ’OK’. The modification will be applied to the barcode ’Digistich’
3. In the text field ’Pages’ insert the sequence ’2-n:2’ to ensure, that the barcode will always be printed on the back of each sheet.
4. Select ’Digistich1’ in the field ’Automatic Positioning’.
5. Insert these settings in the ’List of settings’ (’Add the new item’) and close the window with ’OK’.

Barcode2.mrk

Proceed as described for barcode2.mrk. Select ’Digistich2’ instead of ’Digistich1’ from the list ’Automatic Positioning’.

5.7 Print Range

This parameter enables you to set the page limits of the output file. Only pages within these limits are placed in the output file. 'Print range' accesses the already impositioned file.

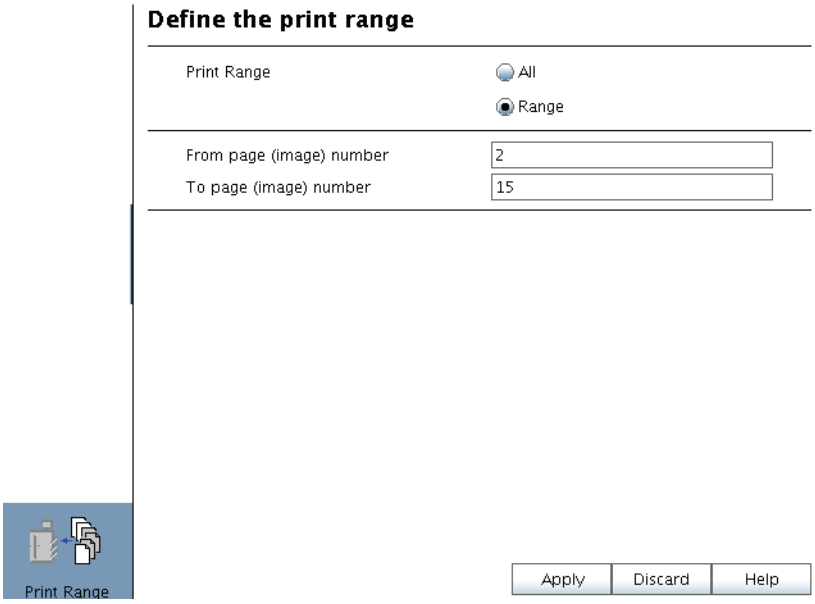
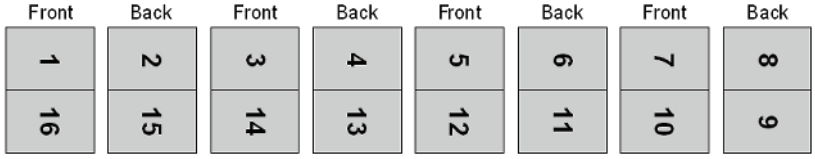


Figure 71 Window 'Print Range'

Example:



Imposed file

Print range: from 4 to 10: 3 sheets are printed:

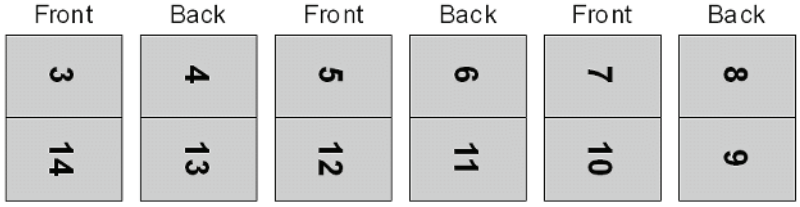


Figure 72 Printed sheets at example selection 'print range' (from 4 to 10)

Notes: Specify the logical page numbers in the fields 'From' and 'To'. If one such page is located on the back of a sheet, the file is printed with the front page that goes with it. Complete sheets (front and back side) are always generated.

If you combine **variable data** with **print range**, the PDC generates one output file with all issues (over all variable data sets).

Example:

Input file: 10 pages, 'Variable Data' file: 2 pages
Output file: 2 × 10 pages = 20 pages

These 20 pages are impositioned for example as a "One Up, scheme 2" (n,-1,0: reversed sequence, last to first page):

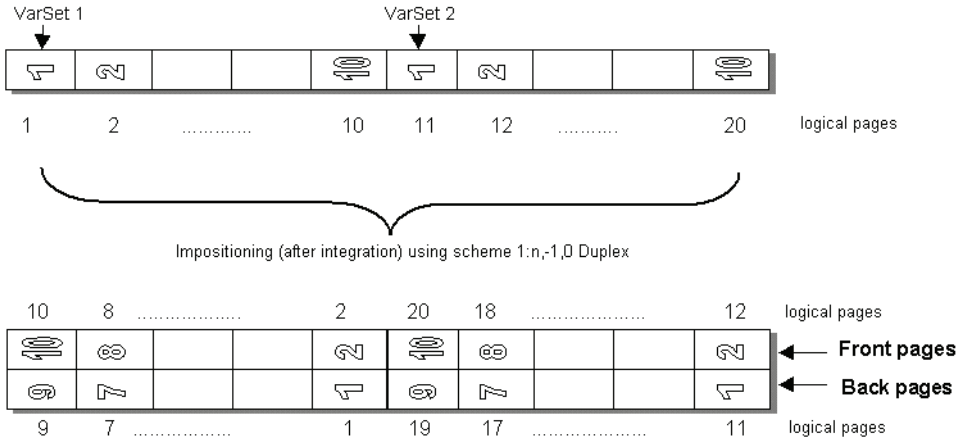


Figure 73 Print file before and after Impositioning "One Up, scheme 2": (n,-1,0), Duplex

Range values relate now the logical pages after integration (here the logical pages 1-20).

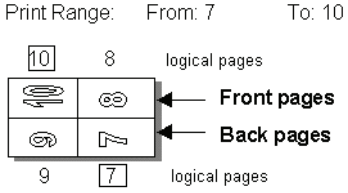


Figure 74 Printed sheets at a range from 7 to 10

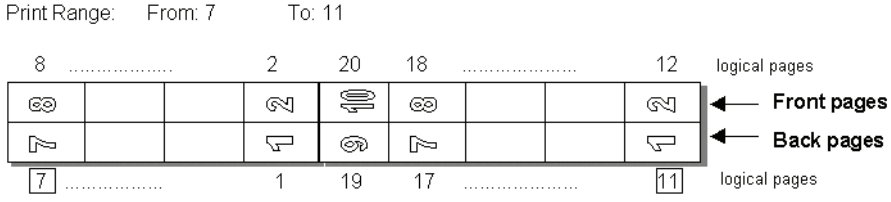
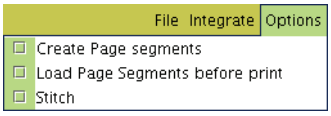


Figure 75 Printed sheets at a range 7 to 11

Functions of this window

'Print Range'	You can choose among the following functions: - 'All' (default setting) - prints the entire document - 'Range' – lets you define the print range.
'From page (image) number'	Start of the print range (this window is only activated after the 'Range' function has been selected in the 'Print' window).
'To page (image) number'	End of the print range (this window is only activated after the 'Range' function has been selected in the 'Print' window). The following expressions are valid: n n - integer

6 Options Menu



6.1 Create page segments

For the POD Printing system DS 8090 a new function "Enhanced Page Segment Support" was implemented. This allows the Load of more than 127 page segments (max. 32000). Such the print file is transferred as resource (page segments), which are stored inn the RAM of the printer itself. If the RAM is too small, the page segments will be stored on the printer hard disk.

Complex data may be printed without start stop problems. The only disadvantage is the waiting time in the beginning until the page segments are loaded at the printer.

This function may only be used with the Professional Document Composer. For the impositioning schemes "Identical copies" and "Two Up & Identical copies" and with variable data page segments will be produced anyway. For all other schemes ("One Up", "Two Up", "Three Up" und "Four Up") the option '**Create page segments**' is to be used.

The following prerequisites are necessary to use this function:

- PRISMA+POD from V2.00.xx
- Functional Code V2.04.xx
- SRA2 with 256 MB IO-Module

6.2 Load page segments before print

If this function is enabled, created page segments (as described above) will loaded into the printer before the first page is printed. This avoids start stop problems during the first copy of the print data.

6.3 Stitch

If this function is activated, the PDC writes a command for postprocessing into the output file. This command causes the DS 8445 printing system to stich the printed document (corner staple in the top-left corner).

7 Additional Functions

7.1 Repeated Processing of Print Data

In some cases you may wish to run a pre-composed document through the Professional Document Composer again. For example, in an initial operational step, logical pages may have been substituted and the print data thereby updated, but the file hasn't been impositioned yet. And you might wish to impose the updated file 'Two up' at a later date to create a booklet.

Composer supports this kind of phased operation by accepting – with few exceptions – Composer output files as input again.

If the Composer parameter set contains one or more of the following functions, the data output **cannot** be used again as composer input.

The Professional Document Composer aborts processing in runtime with return code 136.

Functions that may be used only **once** on the same data file include:

- Impositioning schemes, which differ from type 'from file'
- Signatures
- Variable data

All other functions can be used to process the same file successively as many times as desired.

7.2 Chaining Files

When you use the Professional Document Composer in conjunction with the POD-Module Print Job Manager, you can chain AFPDS files and then imposition them as a unit. If a book, for example, consists of several sections that exist as separate files, you can easily combine these sections and imposition the entire book as a single document.

Files are selected and chained in the Print Job Manager. For details, refer to the PRISMAproduction V3.0 POD-Module User's Guide.

7.3 Proof Print

Proof Print is another function of the Professional Document Composer which you can control from the Print Job Manager (see PRISMAproduction V3.0 POD-Module User's Guide).

This function assigns overlays containing a coordinate system to the pages of the selected print file. These overlays serve you as positioning aids when are moving logical pages.

7.4 Sheet Copies

You also have the option of selecting Sheet Copies to approximately simulate the workflow of offset printing. In this process, the system does not print collated copies. Instead, each individual sheet in turn is printed in a large print run.

Offline post-processors can then continue to print sheet by sheet and therefore post-process as usual. This too is a function of the Professional Document Composer that you must set in the Print Job Manager (see PRISMAproduction V3.0 POD-Module User's Guide). You can select up to 16,320 sheet copies.

7.5 Printing on two parallel webs with the DS 6060

The print file may be printed on the two webs of the DS 6000 (like "Identical copies" on 2 physical pages).

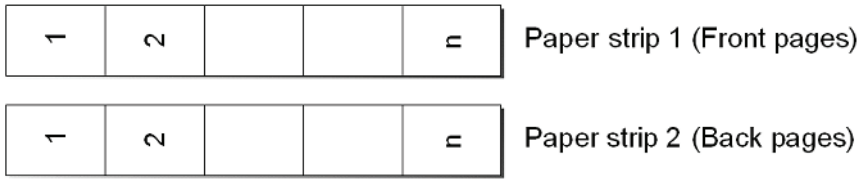


Figure 76 Printing on two webs

To prepare the print file accordingly the following steps in the POD-Module must be followed:

First of all the file contents must be duplicated to print everything twice (on each web. There are two ways to reach the goal here:

Put the print file twice in the 'List of files' in the Print Job Managers (PJM) and use the setting 'Compose job after chaining' (print files will be chained together).

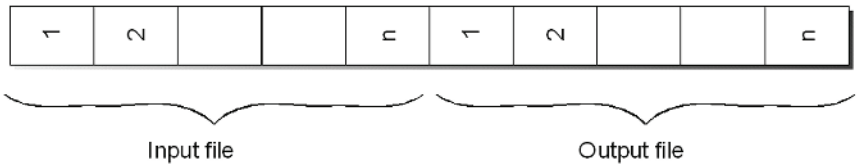
Caution: If the print files are not in IOCA-format, the same file will be converted twice, which will cause loss of performance!

Second possibility is the realization with the PDC itself. (Use **'Merge'**-function). Here the input file must be prepared as merge resource (extra-job) with the PJM. Thereafter the print file is put in the list of files only once and in the 'merge' option of the PDC the prepared resource is inserted before page 1 of the print file:

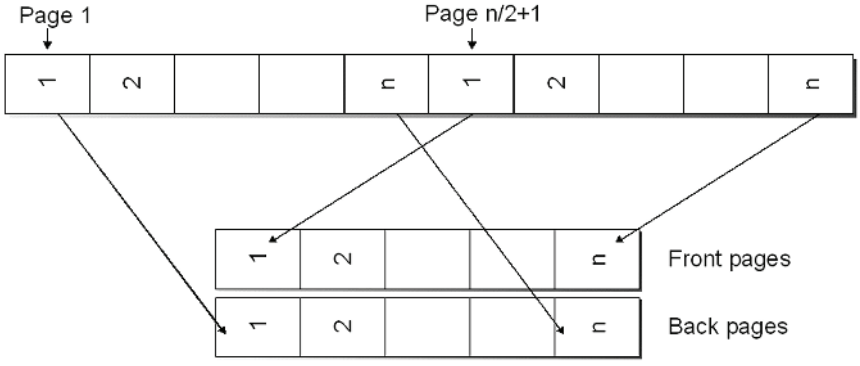
Operation type:	insert
Position:	before
Target pages:	1
Pages:	from file
Source file:	Resource file
Number:	1-n

Caution: Here the file itself is converted once only, but a separate job is to be prepared first (Generate resource).

Both solutions duplicate the print file (one after the other):



Now an impositioning scheme has to be defined in order to put each logical page on the front and back side of the sheet equally:



Therefore a user defined impositioning scheme has to be defined accordingly:

N-UP:	One Up
Scheme:	command line
Layout:	duplex

-> Define page sequence: 1,1,0,n/2+1,1,0

or

N-UP: One Up

Scheme: user defined

Layout: duplex

-> Define page sequence: Position image 1 on the front side and image 3 on the back.

7.6 OCT Interface

You can set the parameter „ft_extra“ within the OCT (Océ Custom Ticket). See also PRISMAproduction V3.02 POD-Module User Guide.

This parameter overwrites the resource filename, which is part of the PDC parameter for variable data.

Example (part of the OCT):

`ft_setname=/u/test/twoup.imp`
`ft_extra=-vdfile/$COMPOSER/kunde.var` (= Resource filename)

If the parameter file "`/u/test/twoup.imp`" contains a parameter for variable data, the parameter `ft_extra` overwrites the resource filename, which is part of the parameter for variable data. This enables you to print different variable data using just one parameter file.

8 Appendix

8.1 Command Line Interface

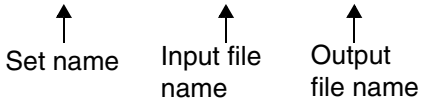
Besides the graphical user interface, the Professional Document Composer also provides a command-based interface, which you can use to activate previously defined parameter sets.

As described in Chapter 2ff., parameter sets are generated within the graphical user interface, where they are stored under user-defined names.

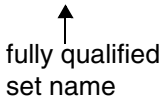
Note: Sets generated and saved with the graphical user interface are always given the suffix **'.imp'**, i. e., a file saved with the name 'set1' is stored by Composer as 'set1.imp'.

To call this set with a command line, you would enter:

a) `pdc -f set1.imp input file output file`



b) `pdc -fa /........./set1.imp input file output file`



A parameter set can only be started from the command line with '-f' if it is stored in the **'/u/prismapro/lib/composer/COMMAND/'** directory.

'Input file' and 'output file' must be fully qualified file names.

8.2 Return Codes

All return codes from 100 to 199 indicate specific errors. The return codes 100 to 109 have been reserved as general codes for PRISMAproduction and assigned to specific error conditions. They apply to PostScript Converter, PCL Converter, TIFF Converter and the Professional Document Composer.

Return codes 100 - 109: Internal errors

100	Core Dump!!!
101	Lapsed or invalid license!
102	Insufficient memory!
103	Error in the input or resource file (overlay, mark, insert file). The file is not available in the AFPDS format
104	Read error of the input file!
105	Write error of the output file!
106	Read error of the parameter file!

Error-ID 120:	Error in the 'Proof Print' parameter set: Incorrect value or syntax error
Error-ID 121:	Error in the parameter 'Define number of copy objects' in 'Identical copies' or 'Two-up & Identical copies': Incorrect value or syntax error
Error-ID 122:	Argument unknown. In the parameter set, an argument was detected that is unknown to the program.
Error-ID 123:	Incorrect value of an argument. In the parameter set, a value was detected that is not within the valid range or is syntactically wrong.
Error-ID 124:	Error in the parameter 'Centred print': Incorrect value or syntax error.
Error-ID 125:	Incorrect impositioning method (N-UP or -n) Permissible are: 0 (Identical copies), 1 (1up), 2 (2up), 3 (3up), 4 (4up) and 02 (2up&identical copies).
Error-ID 126:	Error in calculating the impositioning sequence. Negative page numbers were computed in evaluating the impositioning sequence (Scheme).

Error-ID 127: Error in the parameter 'Print range'. Syntax error, or the specified page range lies outside the input file.

Error-ID 128: Error when opening the output file. The file either doesn't exist, or is located in the wrong directory, or your access rights are insufficient.

Error-ID 129: Error in the parameter 'Scheme'.
A Incorrect value or a syntax error was detected in the impositioning sequence.

Error-ID 130: Error in the parameter 'Layout'

Error-ID 131: Error in the parameter 'Input Trays'
Wrong paper feed tray was output.

Error-ID 132: Error in the parameter 'Image Positioning - Front side'.

Error-ID 133: Error in the parameter 'Image Positioning - Back side'.

Error-ID 134: Error in the parameter 'Signatures'.

Error-ID 135: Error when opening the 'Variable Data file'. The file either doesn't exist, or is located in the wrong directory, or your access rights are insufficient.

Error-ID 136: The input file has already been impositioned previously with one or more of the following parameters:
Impositioning scheme ≠ -n 1;1,1,0
Signatures
Variable data
In these cases, impositioning cannot be repeated.

Error-ID 137: The temporary file '/u/prismapro/composer/tmp/pufferxxx' (xxx = integer) can't be opened.

Error-ID 138: Error when opening the overlays. The file either doesn't exist, or is located in the wrong directory, or your access rights are insufficient.

Error-ID 139: Error in the parameter 'Variable Data'. Syntax error, or Incorrect value.

Error-ID 140: The size of a mark lies outside the valid range (0.1mm ≤ X ≤ 30cm; 0.1mm ≤ y ≤ 40cm).

Error-ID 141: Error in the parameter 'Cropping'. Syntax error, or the defined cropping range exceeds the image size or is smaller than 1 cm.

Error-ID 142: Error in the parameter 'Spacing between object origins' (in 'Identical copies' or '2up&identical copies'). Syntax error, or the specified value lies outside the valid range: 0 - distance - 18.25 inches.

Error-ID 143: Error in the parameter 'delete pages'. Syntax error, or one specified page lies outside the input file.

Error-ID 144: Error in the parameter 'insert/replace pages'. Syntax error, or incorrect value.

Error-ID 145: Error when opening the 'Insert file 'The file either doesn't exist, or is located in the wrong directory, or your access rights are insufficient.

Error-ID 146: Error in the parameter 'insert blank sheets'. Syntax error, or incorrect value.

Error-ID 147: Error in the parameter 'insert (Signature) marks'. Syntax error, or incorrect value.

Error-ID 148: Error in the parameter 'target paper size'. Syntax error, or the specified paper size lies outside of the valid range (0 inch - size ≤ 18.25 inches)

Error-ID 149: The parameter 'Variable Data' cannot be combined with 'identical copies' or '2up&identical copies'.

Error-ID 150: Error in the parameter 'input trays'. Syntax error, or incorrect value.

Error-ID 151: Error in the parameter 'overlays'. Syntax error, or incorrect value.

Error-ID 152: The 'Creep' function must only be used with one the following impositioning methods:
2up
4up
2up&identical copies

Error-ID 153: 'Signature folding' of the Creep function is only permissible in conjunction with the settings 4up, Signatures and Duplex or Tumble layout.

Error-ID 154: Parameter 'Signature folding'. With the current distribution of the logical pages on the selected page sequence, no valid folding of the signature can be performed.

Error-ID 155: No automatic signature marks with "One Up", "Three Up" or "Identical copies".

Error-ID 156: No automatic signature marks with this impositioning scheme.

Error-ID 157: Error in parameter 'Overlays', selected page out of overlay file range.

Error-ID 158: Wrong value for sheet selection after 'signatures number'.

Error-ID 159: Error in parameter 'Signature', combination of sheet selection after 'Length' and 'Number' not valid.

Error-ID 160: Wrong parameter for option 'Highlight color'.

Error-ID 161: Error opening the resource file for 'Highlight color', file does not exist, is in the wrong directory or doesn't have the needed access rights

Error-ID 162: Error in the ’Insert Barcode’ parameter.
Syntax error or wrong value.

8.3 Available Default Impositioning Schemes

The Professional Document Composer ships with a number of predefined imposition schemes for various types of printer and finishing equipment. Most standard requirements can be met by these schemes. The predefined schemes also provide useful insights into how page sequences are defined for jobs, and will assist you when you come to define your own imposition schemes. The following default imposition schemes are provided for use with the graphical user interface:

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
one up 1	x				x				x		x		x	-n 1:2,2,0,1,2,0 -t dup
one up 2	x				x			X			x	x		-n 1:n,-1,0 -t dup
one up 3	x				x			X			x		x	-n 1:1,1,0 -t dup
one up 4	x				x				x		x	x		-n 1:n-1,-2,0,n,-2,0 -t dup
one up 5	x	x		x				X			x		x	-n 1:1,1,0 -t sim
one up 6	x	x		x					x		x	x		-n 1:n,-1,0 -t sim
two up 1	x				x			x			x		x	-n 2:1,2,90,n/2+1,2,90,n/2+2,2, 90,2,2,90 -t tum document division
two up 2	x				x			x			x	x		-n 2:n,-2,90,n/2,-2,90,n/2-1,-2, 90,n-1,-2,90 -t tum document division

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up 3	x				x	x			x		x		x	-n 2:2,2,90,n-1,-2,90,n,-2,90, 1,2,90 -t tum
two up 4	x				x		x	x			x	x		-n 2:n-1,-4,90,n,-4,90, n-3,-4,90,n-2,-4,90 -t tum
two up 5	x				x	x			x		x	x		-n 2:n/2+2,2,90,n/2-1,-2,90, n/2,-2,90,n/2+1,2,90 -t tum
two up 6	x				x		x	x			x		x	-n 2:1,4,90,2,4,90,3,4,90, 4,4,90 -t tum
two up 7	x				x		x		x		x	x		-n 2:n-3,-4,90,n-2,-4,90, n-1,-4,90,n,-4,90 -t tum
two up 8	x				x		x		x		x		x	-n 2:3,4,90,4,4,90,1,4,90, 2,4,90 -t tum
two up 9	x				x				x		x		x	-n 2:2,2,90,n/2+2,2,90, n/2+1,2,90,1,2,90 -t tum document division
two up 10	x				x				x		x	x		-n 2:n/2-1,-2,90,n-1,-2,90, n,-2,90,n/2,-2,90 -t tum document division
two up 11	x	x							x		x	x		-n 2:n/2,-1,90,n,-1,90 -t sim document division left stack on right stack

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up 12	x	x						x			x		x	-n 2:n/2+1,1,90,1,1,90 -t sim document division left stack on right stack
two up 13	x					x		x			x	x		-n 2:n/2,-2,90,n/2+1,2,90, n/2+2,2,90,n/2-1,-2,90 -t tum
two up 14	x					x		x			x		x	-n 2:n,-2,90,1,2,90,2,2,90, n-1,-2,90 -t tum
two up 15			x						x	x		x		-n 2:2,4,90,4,4,90,3,4,90, 1,4,90 -t tum left track on right track
two up 16			x						x		x	x		-n 2:n-2,-4,90,n,-4,90, n-1,-4,90,n-3,-4,90 -t tum left track on right track
two up 17			x						x		x	x		-n 2:n-1,-4,90,n-3,-4,90, n-2,-4,90,n,-4,90 -t tum left track on right track turn double sheets
two up 18			x						x	x		x		-n 2:3,4,90,1,4,90,2,4,90, 4,4,90 -t tum left track on right track turn double sheets
two up 19			x						x		x	x		-n 2:n,-4,90,n-2,-4,90, n-3,-4,90,n-1,-4,90 -t tum right track on left track

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up 20			x						x	x		x		-n 2:4,4,90,2,4,90,1,4,90, 3,4,90 -t tum right track on left track
two up 21			x						x		x	x		-n 2:n-3,-4,90,n-1,-4,90, n,-4,90,n-2,-4,90-t tum right track on left track turn double sheets
two up 22			x						x	x		x		-n 2:1,4,90,3,4,90,4,4,90, 2,4,90 -t tum right track on left track turn double sheets
three up 1			x		x				x		x	x		-n 3:2,2,90,n/3+2,2,90,2n/3+2,2, 90,1,2,90,n/3+1,2,90,2n/3+1,2,90 -t dup cut stack
three up 2			x		x				x					-n 3:2,0,180,3,0,180,4,0,180,1, 0,180,6,0,180,5,0,180 -t dup accordion fold

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
four up 1			x		x	x			x		x	x		-n 4:n/2+3,4,180,n/2-2,-4,180, n/2,-4,180,n/2+1,4,180, n/2-3,-4,180,n/2+4,4,180, n/2+2,4,180,n/2-1,-4,180 -t dup right track on left track
four up 2			x		x	x			x	x		x		-n 4:n-1,-4,180,2,4,180, 4,4,180,n-3,-4,180,1,4,180, n,-4,180,n-2,-4,180,3,4,180 -t dup right track on left track
four up 3			x		x	x			x		x	x		-n 4:n/2-1,-4,180,n/2+2,4,180, n/2+4,4,180,n/2-3,-4,180, n/2+1,4,180,n/2,-4,180, n/2-2,-4,180,n/2+3,4,180 -t dup right track on left track turn double sheets
four up 4			x		x	x			x	x		x		-n 4:n-2,-4,0,3,4,0,1,4,0, n,-4,0,4,4,0,n-3,-4,0, n-1,-4,0,2,4,0 -t dup right track on left track turn double sheets

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
four up 5			x		x	x			x		x	x		-n 4:n/2-3,-4,180,n/2+4,4,180, n/2+2,4,180,n/2-1,-4,180, n/2+3,4,180,n/2-2,-4,180, n/2,-4,180,n/2+1,4,180 -t dup left track on right track turn double sheets
four up 6			x		x	x			x	x		x		-n 4:n,-4,0,1,4,0,3,4,0, n-2,-4,0,2,4,0,n-1,-4,0, n-3,-4,0,4,4,0 -t dup right track on left track turn double sheets
four up 7			x		x	x			x		x	x		-n 4:n/2+1,4,180,n/2,-4,180, n/2-2,-4,180,n/2+3,4,180, n/2-1,-4,180,n/2+2,4,180, n/2+4,4,180,n/2-3,-4,180 -t dup
four up 8			x		x	x			x	x		x		-n 4:n-3,-4,180,4,4,180, 2,4,180,n-1,-4,180,3,4,180, n-2,-4,180,n,-4,180,1,4,180 -t dup left track on right track
four up 9	x					x			x		x		x	-n 4:2,2,0,n-1,-2,0, 3n/4-1,-2,0,n/4+2,2,0,n,-2,0, 1,2,0,n/4+1,2,0,3n/4,-2,0 -t dup document division left stack on right stack

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
four up 10	x				x	x			x		x	x		-n 4:3n/4+2,2,0,n/4-1,-2,0, n/2-1,-2,0,n/2+2,2,0,n/4,2,0, 3n/4+1,-2,0,n/2+1,2,0,n/2,-2,0 -t dup document division left stack on right stack
four up 11	x				x	x		x			x	x		-n 4:n/4,-2,0,3n/4+1,2,0, n/2+1,2,0,n/2,-2,0,3n/4+2,2,0, n/4-1,-2,0,n/2-1,-2,0, n/2+2,2,0 -t dup document division left stack on right stack
four up 12	x				x	x		x			x		x	-n 4:n,-2,0,1,2,0,n/4+1,2,0, 3n/4,-2,0,2,2,0,n-1,-2,0, 3n/4-1,-2,0,n/4+2,2,0 -t dup document division left stack on right stack
Identical copy 1	x				x			x			x		x	-n 0:1,1,90 -e 1,2 -a 0mm,148.5mm -t tum -p a:a4 -k <Directory> DIN A5 (portrait) on DIN A4
Identical copy 2	x				x			x			x	x		-n 0:n,-1,270 -e 1,2 -a 0mm,148.5mm -t tum -p a:a4 -k <directory> for page segm. DIN A5 (portrait) on DIN A4

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
Identical copy 3	x				x				x		x		x	-n 0:2,2,270,1,2,270 -e 1,2 -a 0mm,148.5mm -t tum -p a:a4 -k <directory> for page segm. DIN A5 (portrait) on DIN A4
Identical copy 4	x				x				x		x	x		-n 0:n-1,-2,90,n,-2,90 -e 1,2 -a 0mm,148.5mm -t tum -p a:a4 -k <directory> for page segm. DIN A5 (portrait) on DIN A4
Identical copy 5	x	x		x					x		x	x		-n 0:n,-1,90 -e 1,2 -a 0mm,148.5mm -t sim -p a:a4 -k <directory> for page segm. DIN A5 (portrait) on DIN A4
Identical copy 6	x	x		x				x			x		x	-n 0:1,1,90 -e 1,2 -a 0mm,148.5mm -t sim -p a:a4 -k <directory> for page segm. DIN A5 (portrait) on DIN A4
two up&identical copy1	x				x			x			x		x	-n 02:1,2,0,n/2+1,2,0,n/2+2,2, 0,2,2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 2	x				x			x			x	x		-n 02:n,-2,0,n/2,-2,0,n/2-1,-2, 0,n-1,-2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up&identical copy 3	x				x	x			x		x		x	-n 02:2,2,0,n-1,-2,0,n,-2,0, 1,2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 4	x				x		x	x			x	x		-n 02:n-1,-4,0,n,-4,0, n-3,-4,0,n-2,-4,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 5	x				x	x			x		x	x		-n 02:n/2+2,2,0,n/2-1,-2,0, n/2,-2,0,n/2+1,2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 6	x				x		x	x			x		x	-n 02:1,4,0,2,4,0,3,4,0, 4,4,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 7	x				x		x		x		x	x		-n 02:n-3,-4,0,n-2,-4,0, n-1,-4,0,n,-4,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 8	x				x		x		x		x		x	-n 02:3,4,0,4,4,0,1,4,0, 2,4,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up&identical copy 9	x				x				x		x		x	-n 02:2,2,0,n/2+2,2,0, n/2+1,2,0,1,2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 10	x				x				x		x	x		-n 02:n/2-1,-2,0,n-1,-2,0, n,-2,0,n/2,-2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 11	x	x		x					x		x	x		-n 02:n/2,-1,0,n,-1,0 –e 1,2, -a 0mm, 148.5mm -t sim –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 12	x	x		x				x			x		x	-n 02:n/2+1,1,0,1,1,0 –e 1,2, -a 0mm, 148.5mm -t sim –p a:a4 DIN A6 (portrait) on DIN A4.
two up&identical copy 13	x					x		x			x	x		-n 02:n/2,-2,0,n/2+1,2,0, n/2+2,2,0,n/2-1,-2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 14	x					x		x			x		x	-n 02:n,-2,0,1,2,0,2,2,0, n-1,-2,0 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 15			x						x	x		x		-n 2:2,4,180,4,4,180,3,4,180, 1,4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up&identical copy 16			x						x		x	x		-n 02:n-2,-4,180,n,-4,180, n-1,-4,180,n-3,-4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 17			x						x		x	x		-n 02:n-1,-4,180,n-3,-4,180, n-2,-4,180,n,-4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 18			x						x	x		x		-n 02:3,4,180,1,4,180,2,4,180, 4,4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 19			x						x		x	x		-n 02:n,-4,180,n-2,-4,180, n-3,-4,180,n-1,-4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 20			x						x	x		x		-n 02:4,4,180,2,4,180,1,4,180, 3,4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4
two up&identical copy 21			x						x		x	x		-n 02:n-3,-4,180,n-1,-4,180, n,-4,180,n-2,-4,180 –e 1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4

Imposition-ing Scheme	Cut sheet	FF single	FF twin	Single sided	Double sided	Booklet	Notepad	Off. finishing	Online finishing	Face down	Face up	Top binding	Bottom binding	Order of the page sequence plus rotation
two up&identical copy 22			x						x	x		x		-n 02:1,4,180,3,4,180,4,4,180, 2,4,180 –e1,2, -a 0mm, 148.5mm -t dup –p a:a4 DIN A6 (portrait) on DIN A4

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