VDP editor

User guide

PRISMA

Copyright and Trademarks

Copyright

Language

Original instructions are in English.

Trademarks

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EN

Data security

Introduction

Security is about safeguarding communication and data and keeping our online society and economy secure. It is critical for our customer's business and we take it seriously at Canon Production Printing. Security is incorporated in the early stages of our product development process. Our hardware and software products are developed according to industry security standard working methods, and equipped with the required features to protect our printing products and PRISMA workflow and application software against cyber security threats.

Policy / Guidelines / Rules

Canon's Secure Development Life Cycle (SDLC) process is an agile based development process that also models itself comparing with the National Institute of Standards and Technology (NIST) and Open Web Application Security Project (aka OWASP).

It uses the practice of sprints to take advantage of the continuous delivery and flexibility that an agile process enables.

Our back office support program (development of service tools and online services) is ISO/IEC 27001:2013 certified.

Regulation notices

For more detailed information on the security of our products, services and solutions please refer to your local Canon representative or to *https://cpp.canon/security* .

Source code

Introduction

The listed open source components are governed by different licenses. Some of the licenses contain regulations regarding the provision of the pertaining source code.

Policy / Guidelines / Rules

If you would like to obtain a machine-readable copy of the source code of an open source component, which is made available under applicable license terms, you may request such copy of the source code by sending an e-mail to **opensource@cpp.canon** indicating the following:

1. Name and version of the Canon Production Printing software you licensed.
2. Name and version of open source software modules contained in the above identified Canon Production Printing software of which you legitimately would like to obtain the source code.

We will provide you with a find place where you can obtain a machine-readable copy of the source code or we will deliver a complete machine-readable copy of the corresponding source code of the respective open source software component, as available and as is, on a medium of our choice which can be customarily used for software interchange. You may be required to pay the cost incurred for the source code distribution, however, the cost will in no event excess the cost incurred for physically performing the source code distribution.

Regulation notices

This offer is valid to anyone in receipt of this information.

Contents

Chapter 1
Introduction

Software version

This documentation describes the functionality of VDP editor v9.0.0.

Documentation

- The latest manuals are available on *http://downloads.cpp.canon*
- The help files are available online

Supported file formats

PDF is the preferred file format for VDP editor.

Next to PDF files, VDP editor can open a number of non-PDF file formats. These files are automatically converted to PDF when the files are opened. To convert files automatically, you need Microsoft Office 2010, or higher. Any file format accepted by Microsoft Office can be used.

VDP editor can open JPEG and TIFF files. These files are automatically converted to PDF when the files are opened.

List of concepts

Media size

The width and the height of the physical sheet.

Page size

The width and height of the digital image of a page.

Page content

All digital information of the page, e.g., text, images, frames, etc. The digital image contains all digital information.

Blank page

A blank page is an empty page created by the user and inserted in the PDF file. A blank page has no content but can have tab caption, [Bleed tabs], stamps and header and footer.

Blank sheet

A blank sheet is a sheet for which each sheet side contains a blank page.

Ghost page

This is an automatically created empty sheet side that can appear and disappear, depending on the page allocation. You cannot select a ghost page because you cannot perform any operation on it.

For example, for transparent sheets, you can specify media to be [1-sided]. This application allocates only one page to this sheet, leaving the other sheet side empty. The ghost page side is indicated with the following icon: ⛔

Color

Setting	Description
[Grayscale]	Grayscale images are also known as black-and-white images. Such images are composed exclusively of shades of gray, varying from black at the lowest intensity to white at the highest.
[RGB]	The RGB color model is an additive color model in which red, green, and blue are added together in various ways to reproduce a broad array of colors.
[CMYK]	The CMYK color model is a subtractive color model in which cyan, magenta, yellow and key black are used in various ways to reproduce a broad array of colors.

Sheet

One sheet contains one or more pages.

You map the pages of your document to physical sheets. For example, one A3 sheet can contains four A4 pages.

Change the display language

You can change the display language of VDP editor to your preferred language if PRISMAprepare is available on your computer.

1. Go to PRISMAprepare.
2. Click [Tools] - [General options].
3. Go to option [Language].
    1. Select the language you want to use from the drop-down list and click [OK].
    2. To apply the language, close all PRISMAprepare applications:
        - PRISMAprepare
        - PRISMAprepare administration
        - PRISMAprepare hotfolders (both the [Hot Folder Administration] and the [Hot Folder Monitoring Console])
        - VDP editor
    3. Then open the applications again.

    The selected display language is not applied to the [Floating License Server]. The [Floating License Server] remains in its original language.

Chapter 2
Configure the application

Configure the general options

General settings for the application

1. Click [Tools] - [General options].
2. [Open 'Save as' dialog for converted documents]
   This option enables the [Save as...] dialog for converted documents when saved for the first time. Documents are converted by the application when the original document is:
   - A non-page programmed PDF
   - A PDF with an ODW 3.6.x page program
   - A Microsoft Office document

   Use the [Save as...] functionality to keep the original PDF document.
3. [Recent files]
   Specify the number of files that appear in the [Open recent] list in the [File] menu.
   - [Clear List]
     Removes the files from the [Open recent] list in the [File] menu.
4. [Language]
   You can change the display language of VDP editor to your preferred language at any time.
   1. Select the language you want to use from the drop-down list and click [OK].
   2. To apply the language, close all PRISMAprepare applications:
      - PRISMAprepare
      - PRISMAprepare administration
      - PRISMAprepare hotfolders (both the [Hot Folder Administration] and the [Hot Folder Monitoring Console])
      - VDP editor
   3. Then open the applications again.

   The selected display language is not applied to the [Floating License Server]. The [Floating License Server] remains in its original language.
5. The [Enable overprint preview] option simulates overprints in the application. Use this option to get an estimation of how overprint behavior appears in the printed document.
   The overprint preview setting is not automatically available in the [Production] workspace. You have to select another workspace and then select the [Production] workspace to load the overprint preview setting in the [Production] workspace.
6. [Color spaces]
   Select the default color space for the application. The working spaces will be set automatically according to the selected color space. The color space embedded in a document can be different from the color space used by the application. In this case, the application uses the embedded color space of the document.
   A color space is an intermediate color space used to define and edit colors in Adobe applications. Each color model has an associated color space profile. Use this option to choose the default color space profiles.
   A color space profile acts as the source profile for newly created documents that use the associated color model. For example, if sRGB IEC61966-2.1 is the current RGB color space profile, each new RGB document that you create will use colors within the sRGB IEC61966-2.1 gamut. Color spaces also determine the appearance of colors in documents that do not use a color model.
7. Click [OK] to apply these settings to the application.

Customize the toolbar

The customizable toolbar allows you to add, move and remove buttons.

Do the following steps to customize the toolbar:

1. Click [View] - [Customize toolbar...].
2. Drag and drop the button on the toolbar to add buttons or drag a button from the toolbar to remove a button.
   - In the view option you can select different sizes and layouts for the buttons.
   - Use 'Revert to default layout' to get the default buttons and view option.
3. Click [OK].

Add colors to the color palette

The color palette offers users the possibility to store and manage colors within the application. The palette can contain colors from the [RGB], [CMYK] and [Grayscale] color space. It is not a complete library, but a means to quickly access the most-used colors and the colors from the document. The user can add, copy, edit and delete colors from the palette. Pantone Spot Colors libraries are automatically installed.

The available colors in the [Color palette] are shown in two tabs:

1. [My palette]
   These colors are defined by the user.
2. [Document palette]
   These colors are used in the current document for text and graphics. Colors of images are not available. Tab [Document palette] is only available when the color palette is opened via the [Edit colors] dialog.

The [Color palette] is available in the [Pages] and the [VDP] workspace.

Add or edit a color

1. Click: [Tools] - [Color palette...].
2. Click the [New] button to add a new color to the color palette.
3. Define a name for the color.
4. The [Color space] value can be:
   - [CMYK]
     Define the [CMYK] values for the color.
   - [RGB]
     Define the [RGB] values for the color.
   - [Spot color]
     You can define a custom [Spot color]. See the procedure "Create a spot color" below.
   - [Grayscale]
     Define the [Brightness]. With this setting, you can make the image lighter or darker.

   You can define the color manually or you can use the color picker.
   Click the icon of the color picker to activate or deactivate the color picker. You can pick the color of text and of graphical objects. The [Color space] of the selected object is used. The color picker cannot get the exact colors of an unsupported [Color space].
5. Click [OK].

Add a spot color

You can add spot colors to the color palette.

1. Define a name for the color.
2. Select the [Spot color] value.
3. Define a name for the spot color.
   The default name of the spot color is used when you select a spot color from the [Spot color library].

   NOTE
   Do not use ‘All’ or ‘None’ as the [Spot color name]. ‘All’ and ‘None’ are reserved names. The print results become unpredictable when you use these reserved names.

4. Default or custom spot color
   - Click [Spot color library...] if you want to use a default spot color.

Select a library from the drop-down list. Select the spot color from the list of colors. You can type - part of - a spot color name in the [Name] field and click the [Filter] button. A subset of the available spot colors is displayed. Click [OK] after you have selected a spot color.

The name of the default spot color is automatically used for the [Spot color name] option. It is recommended that you change the [Spot color name] if you can change the [Tint] of the spot color.

- [Custom spot color]
  Use the [Input mode] to define the [Color space] of the custom spot color. You can define the color manually or you can use the color picker. You can change the [Tint] of the custom spot color. You can also select a default spot color first. Then, you can customize the spot color using the input mode and the tint.

5. [Tint]
   You can create a tint or lighter percentage of a spot color.
6. Click [OK].

Manage the bar codes

1. In the [Production] workspace, click [Tools] - [Bar code catalog].
2. You can manage the bar codes:

Action	Description
Rename	1. Select a bar code and click [Rename]. 2. Rename the bar code and click [OK]. You can rename a bar code in the [Bar code catalog]. If the bar code is used in your document, the name of the bar code in the document is not changed. If you want to use the renamed bar code in the document, then you must assign the concerning bar code to the document.
Delete	1. Select a bar code and click [Delete]. You can delete a bar code from the [Bar code catalog]. If the bar code is used in your document, the bar code is not deleted from your document.

3. Click [Close].

NOTE
When a Duplo device is configured, a default QR code is generated and will be applied to the print PDF, with the following properties:

1. The type cannot be changed – it is always “QR Code”.
2. You cannot edit it or delete it as long as the [Near-line finishing] setting is active.
3. The size has specific constraints (min x max).
4. The barcode’s text is set to the formula “`%Filename%`”. The placeholder is replaced with the correct value at print time.

Chapter 3
Generic options

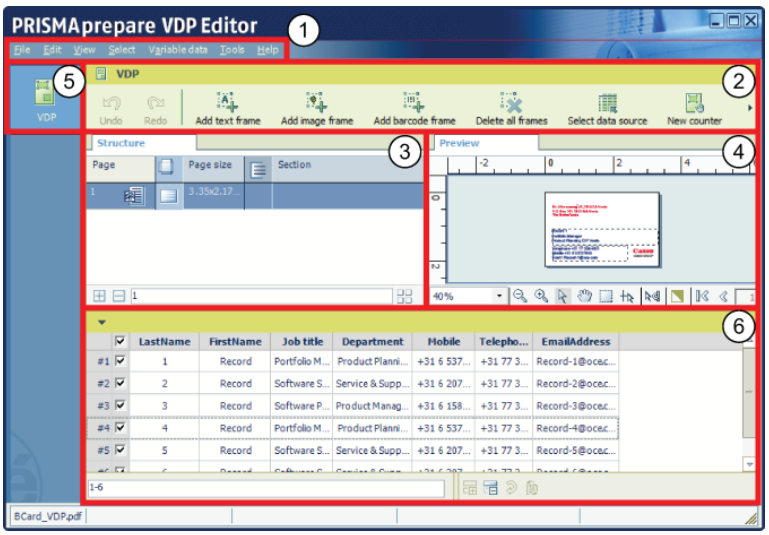
Introduction

The VDP editor offers basic functions to generate documents with variable data. The variable data is retrieved from an external data source.

The context menu

You can access the context menu when you right mouse-click a page. This allows quick access to the actions most often used. The context menu is available in the [Preview] and [Structure] view.

User interface



The user interface contains the following elements:

1. **The menu bar**
   Use the menu bar to select an action and open the Help file.
2. **The toolbar**
   Use the toolbar for quick access to most used actions.
3. **The [Structure]/[PDF layers] view**
   - The [Structure] view offers an overview of the structure of your document. You can navigate within your document and select pages. If the input file contains layered information, you can also manage layer visibility.
   - **The [Layers] view** (only visible when the PDF contains layers)
     The [Layers] view offers an overview of the structure of the layers of the document. You can select which of the layers to be visible or not.
4. **The [Preview] view**
   The preview view is a WYSIWYG preview that shows all settings that affect the appearance of your document. For example, frames containing text or images.
   The preview view offers a number of dedicated tools in the bottom of the view.
5. **The navigation bar**
   Use this navigation bar to switch between the available workspaces.
6. **Data source view**
   This area displays the variable data. The variable data is retrieved from an external data source.

The [Structure] view

The [Structure] view offers an overview of the pages of the document. You can drag and drop pages in the [Structure] view. Columns and *Icons* on page 22 give feedback about the sheets and page settings. Each workspace offers a different set of columns. Depending on the workspace, you can use a one or more of the following columns:

- The [Page] column shows the pages and blank sheets of your document. The [Page] column contains the logical page index.
- [Section]
  You can group sequential pages that belong together (for example chapters) in a section. A bar shows which pages are grouped into a section. You can divide a section into subsections. Up to 5 levels are possible here. The names of each [Section] level are displayed.
- [Page size]
  The sequential pages with the same page size, orientation and sheet fold.

Configure the [Structure] view

You can adjust the columns:

- Show or hide columns
  Click [View] - [Show columns] to define whether a column should be visible or not.
- Column order
  To change the order of the columns you can drag the column headers to a new position.
- Column width
  You can drag the separators in the column header to change the width of a column.
- Column caption
  You can show or hide the column caption when you double click on the column's header.

Footer

Tool	Description
	Click the [Collapse all groups] button to collapse all page groups that use the same media. This option is also available via [View] - [Collapse all groups].
	Click the [Expand all groups] button to expand all page groups that use the same media. This option is also available via [View] - [Expand all groups].
Enter page numbers	Enter page numbers or page ranges in the [Pages] field to select pages. The character n is used to define the last page. Character * defines all pages. For example: 1,5,9-n. Note that disabled pages and blank sheets cannot be selected via the pages field.
	[Thumbnail view] Click this icon to display the thumbnail of each page in the [Page] column.

Icons

Icons give feedback about the sheets and page settings in the [Structure] view.

Icons Page column	Description
	The page icon refers to a single page.
	This icon appears when you move a page.
	This icon refers to a disabled page. It appears when a page cannot be selected.
	If the page is a scanned page, this icon is displayed on top of the page icon. NOTE This icon is only visible in the [Pages] workspace.
	This icon is displayed on top of the page icon if the page is currently selected in the [Preview] view. NOTE This icon is only visible in the [Pages] workspace.
	This icon is displayed on top of the page icon if the page is marked in the [Preview] view.
	The icon refers to a blank page.
	This icon appears when you move a blank page.
	This icon refers to a disabled blank page. It appears if a blank page cannot be selected.
	The icon refers to a group of pages.
	This icon appears when you move a group of pages.

Icons Page column	Description
	This icon refers to a group of pages. It appears when a group of pages consists completely of pages that cannot be selected.
 	With these icons, you can expand or collapse a group of pages.

Icons Page size column 	Description
	This icon refers to portrait pages of A4-like size.
	This icon refers to landscape pages of A4-like size.
	This icon refers to portrait pages of A3-like size.
	This icon refers to landscape pages of A3-like size.
 	These icons refer to pages with fold settings.

Icons Section column 	Description
	This icon refers to a section.

Icons Section column	Description
	This icon refers to one or more collapsed sections.

Undo and redo commands

Every command in this application can be undone or redone until you save the document.

Command	Description
[Undo]	Click [Edit] - [Undo] to undo the previous command. You can undo commands until there are no more commands to undo, or until you save the document.
[Redo]	Click [Edit] - [Redo] to redo the previous undone command. You can redo commands until there are no more commands to redo, or until you save the document.
[Revert to last saved]	Click [File] - [Revert to last saved] to discard the changes to the document and return to the last saved version.

[Open] and [Open as clean...]

[Open]

When you open a non-page programmed document in VDP editor, then the application adds page programming to the document. For example, a default media size is assigned and any PDF bookmarks are converted into sections. Furthermore, the settings in the [Clean document options] dialog are applied to the document. When you save the document, the document is considered to be page programmed.

[Open as clean...]

Select this option to remove all page programming from a previously page programmed document. Note that the application immediately starts adding page programming to the document again. For example, a default media size is assigned and any PDF bookmarks are converted into sections. Furthermore, the settings in the [Clean document options] dialog are applied to the document. When you save the document, the document is considered to be page programmed.

Repeated selection

You can make repeated selections in your document. A repeated selection consists of two or more pages that will be repeated in the document. The repeated selections are marked with horizontal separation lines in the [Structure] view.

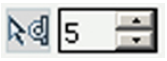
When you select and configure a page in a repeated selection, the same page is selected and configured in all repeated selections.

Pages that are excluded from the repeated selections are grayed.

NOTE
The repeated selections are removed when you execute operations: [Size], [Shift], [Scale], [Mask], [Edit image], [Edit colors].

Enable repeated selection

1. Select the page where you want to start the repeated selections. The repeated selections continue to the last page of the document.
   When you select a page range, the repeated selections are active within the page range. The last group of pages can contain less pages than defined in the pages spinbox.
   Cover pages are excluded from a repeated selection.
2. Click the 'Repeated selection' tool in the footer of the [Preview] view.
   A spinbox appears.



3. Define the number of pages for the repeated selection in the spinbox.
   The minimum number of pages is 2. The maximum number of pages is 999.
4. Select and configure the pages in the repeated selection.
   When you select and configure a page in a repeated selection, the same page is selected and configured in all repeated selections.

Change the number of pages in the repeated selection

- Change the number of pages in the pages spinbox. Press 'Enter'.
- Insert or delete pages within a repeated selection. The pages spinbox is updated.

Remove repeated selection

1. Click the 'Repeated selection' tool in the footer of the [Preview] view.
   The repeated selections are removed. The icon of the 'Repeated selection' tool is disabled and the pages spinbox disappears.

Import a file from a TWAIN scanner

You can scan and import paper documents with any scanner that supports the TWAIN interface. The application automatically detects which color and B&W TWAIN scanners are available. The original interface of the scanner is used. The interface can be different for each scanner.

The scanned pages are imported as an external PDF file. You can:

- Use the external PDF file as a new document.
- Use the [Insert pages] command to insert one or more external PDF file(s) into your document.
- Use the [Replace pages] command to replace a set of consecutive pages from your document with an external PDF file.

You can clean-up the scanned pages. Click the [Clean-up] button to access the scan clean-up operations.

1. Click [File] - [Import file from TWAIN scanner...].
2. Select a TWAIN scanner and click [Select].
   The original interface of the scanner is used. The interface can be different for each scanner.
3. If required, set any settings of the scanner.
4. Scan the file.
   The file is imported as an external PDF file.

Correct pages

During the 'Correct pages' phase, you determine the layout of your document. The content and layout of the pages within your document are correct at the end of this phase.

Rotate pages based on the orientation of the first page of the document

You can create a document with a single page orientation. All pages receive the orientation of the first page of the document. When your document contains mixed page sizes, all pages will be rotated regardless of their page size. This is a rotation on document level.

For example

The first page is a landscape page. When you apply this option, then all portrait pages will be rotated to become landscape pages.

1. Click [Pages] - [Rotate to align].
2. Select to rotate to the left or to the right.

Mark or unmark pages

You can mark or unmark pages. You can process the marked pages separately from other pages of the document, for example:

- Print only the marked pages, or do not print the marked pages.
- Use inserts for the marked pages when you print your document.
- Use a different tray for the marked pages when you print your document.

Mark or unmark pages

1. In the preview view, right-click the pages that you want to mark or unmark.
2. To mark the pages, click [Mark] - [On].
   To unmark the pages, click [Mark] - [Off].

Mark pages as VDP pages

1. In the preview view, right-click a page.
2. Click [Mark] - [Mark VDP].
   All pages that contain [VDP frames] are marked. [VDP frames] are frames of type [Text frame], [Image frame] and [Bar code frame].

Chapter 4
The [VDP] workspace

The toolbar

Button	Description
	**Undo** The previous command is undone.
	**Redo** The previous undone command is redone.
	[Add text frame] Add text, numbers, dates, etc from a data source to variable data documents.
	[Add image frame] Add images from a data source to variable data documents.
	[Add bar code frame] Add barcodes to variable data documents. You can generate barcodes from: • Variable data retrieved from an external data source. You can use static text in combination with the variable data. • A counter in combination with static text and the print date and print time.
	[Delete all frames] Delete all [VDP frames] from the document.
	[Select data source] Select a data source. The data source contains the variable data for the document.
	[New counter] You can create documents with variable data without using a data source. You can simply use a counter in combination with static text and the print date and print time. You can use the counter in text frames and barcode frames.
	[Import VDP] You can import the VDP data from an XML file.
	[Export VDP] You can export the VDP data to an XML file.
	**Color palette** The color palette offers you the possibility to store and manage colors within the application. You can use the colors for the frames and their text.

The tools in the preview view

The preview view is a WYSIWYG preview that shows all settings that affect the appearance of your document. For example staples, tab captions, page numbers, and so on.

You can use a number of tools in the [Preview] view.

Tool	Description
Zoom selection	Type the zoom factor. Or click [View] - [Zoom].
	**[Zoom in]** or **[Zoom out]** Or click [Tools] - [Zoom out]/[Zoom in].
	**[Select page]** Or click [Tools] - [Select pages].
	**[Drag]** Use this tool to drag the page in the [Preview] view. Or click [Tools] - [Drag].
	**[Select area with rectangle]** You can draw a selection rectangle using your mouse. The selected area is visible by a dotted line around the selected area. To reset a selection, click your mouse inside the [Preview] view. Or click [Tools] - [Select area with rectangle]. NOTE Press <Shift> on the keyboard and select with the mouse to select and invert an area with one action.
	**[Select area inside guidelines]** You can select an area that is marked by guidelines and page-borders by clicking inside this area. The selected area is visible by a dotted line around the selected area. To reset a selection, click your mouse inside the [Preview] view. Or click [Tools] - [Select area inside guidelines].
	**[Repeated selection]** Click the [Repeated selection] tool to define repeated selections. A spinbox appears. You can define the number of pages for the repeated selections with the spinbox.
	**[Invert selected area]** Click the [Invert selected area] button to select the page content outside the initially selected area. For example, you select a Company logo. Then click the [Invert selected area] button. Now, the page content without the Company logo is selected.

Tool	Description
	**[First page]**
	**[Previous page]**
Current page	Shows the current page number.
	**[Next page]**
	**[Last page]**
	**[First variable data document]** Select the first row in the data source file.
	**[Previous variable data document]** Select the previous row in the data source file.
Current row	Shows the number of the currently selected row. The content of the currently selected row is displayed in the frames.
	**[Next variable data document]** Select the next row in the data source file.
	**[Last variable data document]** Select the last row in the data source file.
	**[Show the content outside of the page]** Select this option if you want to show the content outside of the page. In this view the bleed margin is indicated by a dotted line around the page. Or click [View] - [Show content outside of page].

Select a data source

The data source contains the variable data for the document.

The supported data source types are: *.accdb, *.mdb, *.xlsx, *.xls and *.csv. Password-protected data sources of the types *.xlsx, *.xls and *.csv are not supported. If special characters are used in a *.csv file, you must define the encoding of the file to display the characters correctly. You must create a schema.ini file at the same location as the *.csv file. The schema.ini file must contain:

1. Name of the data source file.
   For example: sourceFile.csv
2. If a schema.ini file is used to define the encoding, the text delimiter must be defined in the file as well.
   For example: Format=Delimited(,)
3. The encoding of the data source file. The encoding can be: ANSI, UTF-8 or Unicode.
   For example: CharacterSet=ANSI

When you have selected a data source, you can define the frames for the variable data. If you select another data source after the frames are defined, the frames remain valid when:

1. The new data source type is identical to the used data source type.
2. The new data source contains the same fields as used in the frames.
3. The field types in the new data source are identical to the field types in the used data source.

Select a data source

1. Click [Variable data] - [Select data source].
   A [Browse] dialog will appear.
2. Browse to the data source file.
3. Select the data source file and click [Open].
4. If the data source type is *.csv, you must define the [Text delimiter] and/or the [Text separator].
5. Click [OK].

Configure the formats of the data source fields

The data source view shows the rows and fields of the selected data source file. You can set default formats for the fields available in the data source file. The default format does not change the format of fields that are already used in existing frames.

1. Right-click a field in the data source view.
2. Based on the field type, you can select:
   - [Default image folder]
     Browse to the folder that contains the images that you want to use. If you select a folder that does not contain images, a red cross is displayed in the frame in the preview view.
   - [Default date/time format]
     Configure the format for the time and date.
   - [Default number format]
     - [Integer digits]
       You can define a minimum number of digits to express the numbers from the selected field(s). Leading zeros are used to pad the number. If the defined number of digits is too small to express the number, the actual number from the field is used.
     - [Decimal digits]
       You can define the number of digits displayed behind the [Decimal separator].
     - You can define the [Decimal separator] and the [Thousands separator].
3. Click [OK].

Create a counter

You can create documents with variable data without using a data source. You can simply use a counter in combination with static text and the print date and print time. You can use the counter in text frames and barcode frames.

1. Click [Variable data] - [New counter].
2. In the [Start at] box, enter the number you want to start with.
3. In the [Increment] box, enter the incremental value for the counter.
4. Enter the number of rows.
   This setting defines the number of variable data documents that will be created using this counter.
5. Configure the format of the counter.
   Enter the number of digits and specify the padding character. You cannot use a TAB as padding character. The preview displays how the counter is formatted.
6. Click [OK].

Manage the variable data

Select the variable data

You can create documents with variable data. The variable data is retrieved from an external data source. The data source view shows the rows and fields of the selected data source file. The fields of each row contain variable data. By default, all rows are selected. You can unselect the rows that you do not want to print. The variable data from the selected rows is printed.

1. Enable the checkbox in front of a row to select the row. Disable the checkbox to unselect the row.
   Enter row numbers or row ranges in the text field in the footer of the data source view to select rows. The character n is used to define the last row. Character * defines all rows. For example: 1,5,9-n.
   The variable data from the selected rows is printed.

Additional actions	Description
Hide unselected rows	• Click the [Hide unselected rows] option to hide the unselected rows in the data source view. This option is available in the footer of the data source view.
Show all rows	• Click the [Show all rows from the data source] option to show all rows from the data source. This option is available in the footer of the data source view.

Set the header row

You can set one of the rows in the data source as header row. The values in the header row are used as column headers. The data in the rows above the header row is not used when the variable data document is printed. The rows above the header row are hidden from the data source view.

1. Right-click a row in the data source view.
2. Select the [Set as header row] option from the context menu.
   The row is set as custom header row.

Additional actions	Description
Reset the header row	• Select the [Reset header row] option from the footer of the data source view. The original header row from the data source file is used. All rows in the data source are available in the data source view.
Sort the columns	• Click on a column header to sort the fields in the column. You can sort ascending and descending.
Use the original order of the fields in the data source file	• Click the [Revert to original order] option to use the order of the fields in the data source file. This option is available in the footer of the data source view.

Manage the frames

Add text, image or bar code frames

You can create documents with variable data. The variable data is retrieved from an external data source.

- **Text frames**
  For each text frame, you can use static text in combination with the variable data. You can use the variable data in multiple frames. The settings of each frame are valid for all rows in the data source. A frame can be positioned partially outside the page. For example, to use variable data on [Bleed tabs].
  You can add multiple text frames to the same page.
- **Bar code frames**
  You can create multiple bar codes each containing different information and you can create page ranges. You can assign a bar code to each page range. In this way, you can process each page range differently on your finishers.
  You can also add multiple bar codes to the same page when you use multiple finishers. Each finisher requires its own bar code to automate the post-printing actions. For example: you use a perfect binder and a 3-side trimmer to create books.
  You can generate bar codes from:
  - Variable data retrieved from an external data source. You can use static text in combination with the variable data.
  - A counter in combination with static text and the print date and print time.

  The settings of the bar code frame are valid for all rows of the data source or the counter. The bar code is never clipped to fit the bar code frame.
- **Image frames**
  Create an image frame to display variable images retrieved from an external data source.
  You can add multiple image frames to the same page.

Content of this topic

The specific settings for each type of frame are described in the chapters "Content" and "Bar code settings":

- Content for the text, image and bar code frames
- Bar code settings for the bar code frames

Then, the generic settings are described, for example, the size and position of a frame.

Add a frame

You can define the frame when you have selected a data source or created a counter.

1. Select the [Select area with rectangle] tool.
   You can draw a selection rectangle using your mouse. The selected area is visible by a dotted line around the selected area.
2. Click [Variable data]. Add a text, image, or barcode frame.
   Define the frame settings, see the chapters in this topic for the descriptions of the settings.
3. Click [OK].
   The frame is added to the document on top of the page content. The frame is added on top of any existing frames.

If you select another data source after the frames are defined, the frames remain valid when:

1. The new data source type is identical to the used data source type.
2. The new data source contains the same fields as used in the frames.
3. The field types in the new data source are identical to the field types in the used data source.

Content

- Use variable images for image frames:

Setting	Description
[Field]	The drop-down list contains the available column headers of the selected data source. Select one or more column headers from the data source. For each selected row, the variable data is taken from each field of the selected column. The variable data is printed on the master document. You can use fields of type: • Image NOTE If you select a field type other than "Image", a red cross is displayed in the frame in the preview view. The image field must contain: • The name of the image. • The absolute path to the image or the path relative to the image folder. Images of type BMP, GIF, TIFF, TIF, JPEG, JPG, PNG and EPS are supported.
[Image folder]	Click the [Browse...] button. Browse to the image folder. You can define one image folder per image frame. NOTE If you select a folder that does not contain images, a red cross is displayed in the frame in the preview view.
[Transparency]	You can define the transparency of the image.

- Use the variable data or the counter in combination with static text for text frames and barcode frames:

Setting	Description
[Insert field]	The drop-down list contains the available column headers of the selected data source. Select one or more column headers from the data source. For each selected row, the variable data is taken from each field of the selected column. The variable data is printed on the master document. You can use fields of type: • String • Number • Date and time
[Insert row number]	You can add the number of each row in the data source to the variable data. • [Number format] Select the format for the row numbers. • [Insert total number of rows] Select this option to add the total number of rows of the data source to the row numbering. The row number is displayed as: <current row number>/<total number of rows>. • [Number of digits] You can define a fixed number of digits to express the row number. Leading zeros are used to pad the row number. If the defined number of digits is too small to express the number of rows, the actual number of rows is used.

Setting	Description
[Format number]	This button is available when you select a field of type "number". • [Integer digits] You can define a minimum number of digits to express the numbers from the selected field(s). Leading zeros are used to pad the number. If the defined number of digits is too small to express the number, the actual number from the field is used. • [Decimal digits] You can define the number of digits displayed behind the [Decimal separator]. • You can define the [Decimal separator] and the [Thousands separator].
[Format date/ time]	This button is available when you select a field of type "date/time". You can define the [Time format] and the [Date format].
[Insert "Print date/time"]	You can add the print date and print time as a stamp to the variable data. Click [Format date/time] define the [Time format] and the [Date format].
[Insert counter]	This button is available when one or more counters are available. 1. Select the counter that you want to use from the drop-down list and click OK. The counter is added to the text field. 2. You can configure the font and text attributes for each counter.
[Remove lines with empty fields]	A line of text in the frame can contain only one field from the data source. An empty line is displayed when the value in the data source is empty. Enable this option to remove the empty line from the variable data document. The lines below the empty line are moved up. If a line consists of more than one field, the line is removed only if all fields are empty. This option does not remove an empty line created by the operator. For example, the operator can add an empty line in the frame by pressing the "Enter" button. **Example** Business cards can display a fax number. Enable this option to remove the line containing the fax number when the concerning field has no value.
Text	The text in the text box is added to the frame. Click [Insert field] to insert one or more fields from the data source. You can also type text directly in the text box. You can configure the font and text attributes at character level for fixed text and for each field. The [VDP] workspace does not offer automatic font detection. You must determine yourself which font is used in the master document. The [VDP] workspace does not offer a color picker. You must determine yourself which color is used in the master document. You can define the transparency of the text.

Bar code settings

- **Readability of the bar code**
  Four settings ensure the readability of the barcode: Checksum for [1D bar code] or error correction for [2D bar code], minimum size of the barcode, quiet zone and resolution.
  - Quiet zone
    In barcode technology, a quiet zone is the blank margin on either side of a barcode that's used to tell the barcode reader where a barcode's symbology starts and stops. The purpose of a quiet zone is to prevent the reader from picking up information that does not pertain to

the barcode that is being scanned. The blank margin will not send a scanning signal, hence the name "quiet".
The horizontal and vertical margins form the non-printable area, or quiet zone, around the barcode. The default value is 3 mm. When the bar code is rotated, the minimum values for the quiet zone are rotated accordingly.
  - [1D bar code]
    A 1D barcode should have a quiet zone of at least 6 mm on each horizontal side and at least 1.6 mm on each vertical side.
  - [2D bar code]
    A 2D barcode should have a quiet zone of at least 2 mm on each side.
- [Resolution]
  The default value for the resolution is 300. Possible values: 300 or 600. An unsupported value is ignored and 300 is used instead.

Configure the bar code:

Setting	Description
[Type]	• [1D bar code] Linear or 1D bar codes use a series of variable-width lines and spaces to encode data. Linear bar codes hold just a few dozen characters, and generally get physically longer as more data is added. 1D bar codes are dependent on database connectivity to be meaningful. If you scan a UPC code, for instance, the characters in the bar code have to relate to an item in a pricing database to be useful. • [2D bar code] 2D bar codes use patterns of squares, hexagons, dots, and other shapes to encode data. They can be much smaller while holding more data (hundreds of characters) than 1D codes. Data is encoded based on both the vertical and horizontal arrangement of the pattern, thus it is read in two dimensions. A 2D bar code doesn't just encode alphanumeric information. These codes can also contain images, website addresses, voice, and other types of binary data. That means you can make use of the information whether you are connected to a database or not. A large amount of information can travel with an item labeled with a 2D bar code.
[Resolution]	The width of the bar code depends on the number of characters encoded and the type of bar code. A bar code can only be decoded if each bar and each space can be scanned. If the bars and spaces blur into each other then it makes it harder, if not impossible, to decode the bar code. The width of the bar code is measured in pixels. The resolution is the detail the bar code holds. A higher resolution means more bar code detail. Smaller bar codes must be printed at high resolution to be encoded accurately.

Setting	Description
Quiet zone Horizontal and vertical margin	In bar code technology, a quiet zone is the blank margin on either side of a bar code that's used to tell the bar code reader where a bar code's symbology starts and stops. The purpose of a quiet zone is to prevent the reader from picking up information that does not pertain to the bar code that is being scanned. The blank margin will not send a scanning signal, hence the name "quiet". • [1D bar code] A 1D bar code should have a quiet zone of at least 6 mm on each horizontal side and at least 1.6 mm on each vertical side. • [2D bar code] A 2D bar code should have a quiet zone of at least 2 mm on each side. When the bar code is rotated, the minimum values for the quiet zone are rotated accordingly.
[Rotation]	You can rotate the bar code. You cannot rotate the frame.
[Encoding]	The selected bar code type determines which bar code encodings are available to you.
[Check sum] or [Error correction]	• [1D bar code] Checksum information can be stored in the bar code to verify the bar code is correct. • [2D bar code] There are four error correction levels used for QR codes. Each level adds different amounts of "backup" data to the QR code. The selected level depends on how much damage the QR code is expected, and hence how much error correction may be required: • Level L - up to 7% damage • Level M - up to 15% damage • Level Q - up to 25% damage • Level H - up to 30% damage
[Human readable text]	Enable this option to add the text of the bar code directly under the bar code. Or disable this option to only show the bar code. This option is available for [1D bar code].
Color and background color	You can configure the color of the bar code and the background color of the frame.

Pages

You can create page ranges to specify bar codes with different information per page range. In this way, you can process each page range differently on your finishers. To create a page range, select value [Selected] for option [Pages]. Select the pages to which you want to add the frames:

Use multiple bar codes per sheet range where each bar code can contain different information. In this way, you can process each sheet range differently on offline finishers

- To select a page range: select a page in the structure view, press the <Shift> key, then select another page.
- To select non-sequential pages: select a page in the structure view, press the <Ctrl> key, then select several non-sequential pages.

Colors for the borders and the fill

1. Click [Edit] to select the border color of the frame.

2. You can define the line of the border.

Size and position of the frame

- You can define the width and height of the frame.
  You can also change the size of the frame with your mouse in the [Preview] view.
- [Horizontal shift] / [Vertical shift]
  You can define the exact position of the frame on the page(s).
  You cannot rotate the frame.

Scale and position

1. You can scale the image or barcode within the frame:
2. • [None]
   • [Fit to frame]
     The barcode is scaled up or down to fit the frame.
   • [Shrink to frame]
     The barcode is scaled down if the barcode is larger than the frame. The barcode is not scaled up.

   Option [Keep ratio] enabled: The barcode is scaled relative to its original size.
3. Use the arrows or the central dot to position the image or barcode in the frame.

Manage the frames

Action	Description
Edit a frame	1. Double-click the frame that you want to edit. 2. Edit the settings of the frame. 3. Click [OK].
Copy a frame	1. Right-click the frame that you want to copy. The context menu opens. 2. Click [Copy]. The new frame is added on top of the frame it was copied from. 3. Drag the frame to the correct location on the page.
Delete a selected frame	1. Right-click the frame that you want to delete. The context menu opens. 2. Click [Delete]. The selected frame is deleted from the document.
Delete all frames	1. Click [Variable data] - [Delete all frames]. The frames are deleted from the document.

Change the order of the frames

A frame is added to the document on top of the page content. A new frame is added on top of any existing frames. You can change the order of the frames which are on top of the page content. You can move one or more frames behind the page content. You can change the order of the frames which are behind the page content.

1. Right-click the frame that you want to bring to the front or send to the back. The context menu opens.
   - [Behind page content]
     Move the frame behind the page content. You can change the order of the frames which are behind the page content.
   - [Bring to front]
     The selected frame is placed on top of all frames.
   - [Send to back]
     The selected frame is placed at the bottom of all frames.
   - [Bring forward]
     The selected frame is moved one frame up.
   - [Send backward]
     The selected frame is moved one frame down.

Export the [VDP] data

You can export the [VDP] data to an XML file. The [VDP] data contains:
- The properties of the frames which use the variable data.
- The location of the data source file.

Import the [VDP] data to apply the same [VDP] layout to a document with other content. For example, to create a weekly bulletin.

1. Click [Variable data] - [Export VDP].
   The [Export VDP] dialog appears.
2. Browse to the location where you want to save the file.
3. Enter a file name and click [Open]. The XML file is saved to disk.

Import the [VDP] data

Import the [VDP] data to apply the same [VDP] layout to a document with other content. For example, to create a weekly bulletin. You can import the [VDP] data from an XML file. The [VDP] data contains:
- The properties of the frames which use the variable data.
- The location of the data source file.

1. Click [Variable data] - [Import VDP].
   The [Import VDP] dialog appears.
2. Browse to the location of the [VDP] data file.
3. Select the XML file.
4. Click [Open].
   The [VDP] data is imported and applied to the document.

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