# User Interface

In this chapter you will learn

- · where to find the VDP Editor in the Workflow,
- · how to open and close the VDP Editor,
- · how the user interface of the VDP Editor is displayed and
- how a created VDP project is displayed in the user interface of the Workflow.

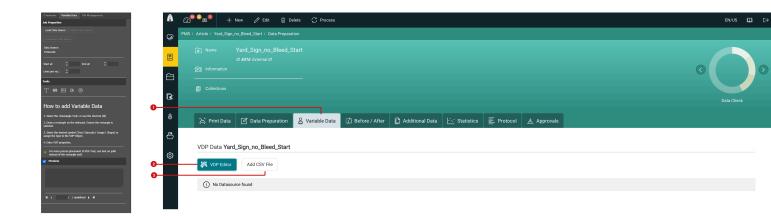
## 1. Introduction

Variable elements are applied to a Print Item in the Workflow, either via the **Variable Data** tab in the **Adobe Illustrator plug-in** or in the **Variable Data** tab of the Print Item view of an **Article** or a **Print Item** in an **Order** or **Production Job**.

Within the Workflow the VDP represents a browser-based application, which was initially made accessible to the user in version 1.12.0. There, the application was either accessible in the **Variable Data** tab of the **Print Item** view of an **Article** or a **Print Item** in an **Order** or **Production Job**.

The following description refers to the description of the interface in the **VDP Editor**, with which variable data or elements can be placed directly in the browser. Variable Data may as well as be enriched with data from a CSV file, without first opening the Print Item in Adobe Illustrator.

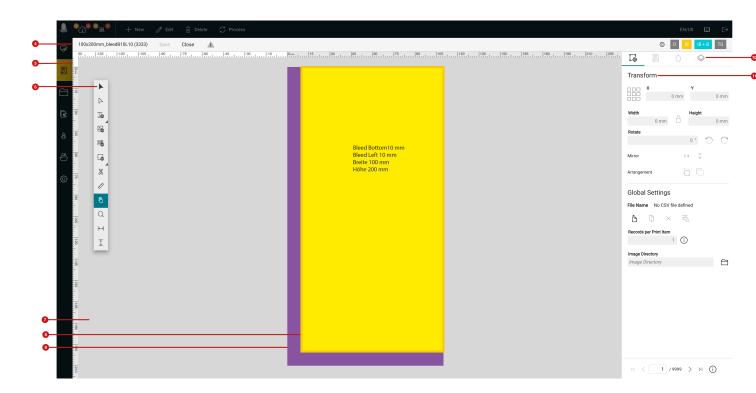
**Figure 1**: The *Variable Data* tab in *Adobe Illustrator* (left) and in the *Workflow* (right) which is the starting point for creating variable Data



To open the **VDP Editor**, proceed as follows.

- 1. Open a desired **Article** or a **Print Item** an *Order* resp. *Production Job*.
- 2. Activate the **Variable Data** [1] tab.
- 3. Open the VDP editor by clicking the **VDP Editor** button [2]. Optionally, you can upload the desired control file in the tab before by pressing the button **Add CSV file** [3]. If you do not deal with the file beforehand, you can of course add, delete or exchange a CSV file in the VDP Editor at any time.
- 4. After that the **VDP Editor** opens. This can take some time for somewhat larger images, since all required resources must be loaded first.

Figure 2: The standard view of the VDP Editor in the Browser



The **VDP Editor user interface** consists of the following elements:

- Menu bar [4] display of information and functions for saving, closing, displaying warnings, VDP Editor settings, as well as the possibility to dim the static part of a VDP job and to display the final format and cutting area.
- Ruler [5] Vertical and horizontal ruler in the length unit set in the system.
- Toolbar [6] tools needed to create or edit variable elements are provided.
- Artboard [7] canvas for placing objects or displaying the Print item including the *ImageBox* [8] final view format and the *Bleed* [9], where no variable elements should be located.
- Setting areas [11] functions and display of information, divided into four tabs is provided [10].

# 2. Elements of the User Interface

The user interface of the VDP Editor is based on the given structure, which the user already knows from the Impose Editor or the general user interface in the Workflow. In addition to the **menu bar** and **toolbar**, there is an **Artboard** as well as predefined **setting areas** for parameterizing the variable elements. The following description explains these at a glance. How to attach and configure a specific variable element is described in the respective articles - Serial Numbers, Variable Barcodes & QR Codes, Variable Objects and Variable Images. Notes to be observed when creating or editing variable elements can be read in the article Creating and Editing variable objects and editing variable objects.

### 2.1. Menu bar

Figure 3: The menu bar of the VDP EDITOR





The menu bar of the VDP Editor contains the following information or functions from left to right:

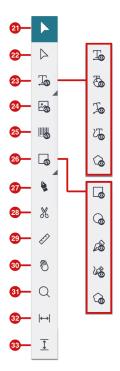
- **Print Item or Article name [12]** name of the underlying Print Item, which is enriched with variable elements. The Print Item or Article name may differ from the actual file name.
- Save [13] function to save the VDP specification which contains the position, the shape as well as the content of the variable elements.
- Close [14] function to close the VDP Editor without saving the VDP specification.
- Warning triangle [15] display of warnings and errors that occur in the environment of the VDP Editor. Warning and error messages are used to validate VDP jobs so that the user is informed at an early stage where problems occur and which facts in the output can lead to errors.
- **VDP Editor Settings** [16] options that affect the handling of the VDP Editor in order to ensure a smoother Workflow.
- Dim static content [17] By pressing this button, all static elements, according to the selected percentage in the VDP settings, will be dimmed. Thereby, faster visibility of variable elements is given. If dimming is enabled, the icon will be displayed in green.
- ImageBox [18] Once the icon is yellow, the size of the ImageBox is displayed in the VDP Editor. Thereby, the user is able to inspect if variable elements have been created above or too close to the TrimBox ([8] in Figure 2). If the icon is gray, the ImageBox is not displayed.
- ImageBox + Bleed [19] Once the icon is turquoise, the bleed area ([9] in Figure 2) is displayed in the VDP editor.

  This allows users to quickly see if there is enough bleed in the image, or if a crop should be created first with the help of a correction. If the icon is gray, the bleed area is not displayed.
- Transparency Grid [20] By pressing this button, transparent areas in the Print Item are displayed by a checkerboard pattern. Thereby, users can identify whether or not a variable element can be placed in the background and remain visible.

## 2.2. Tool bar

The **VDP Editor** contains some tools which can be used for creating variable elements. Some tools will already be known to users from the **Impose Editor** and the **PDF Editor**. Special tools for creating variable elements, marked with the </> symbol, as well as tools for editing paths are additionally available in the **toolbar** in the VDP Editor.

Figure 4: The tool bar of the VDP Editor in the browser with fold-out subtools



The following **tools** are available in the **VDP Editor**:

- Selection Tool [21] The tool is used to select objects by clicking on an object. The keyboard shortcut for the Selection tool is (V).
- **Direct Selection Tool [22]** The tool is used to select segments of an object or a path in order to modify them subsequently. Select the element to be modified with the Selection Tool (V) beforehand and edit it using the Direct Selection Tool. The keyboard shortcut for the direct selection tool is (A).
- VDP Text Tools [23] Use these tools to create a path or object and use it to create a placeholder with the
  default text "Sample Content" for a VDP text element. The position, content and appearance can subsequently
  be determined in the settings areas provided for this purpose. If you press the button for this tool longer, the
  drop-down menu opens, in which further VDP Text tools can be selected according to the case of application.
  These are:
  - <u>VDP Text Tool</u> Create a straight line on which the variable text is positioned. The keyboard shortcut for the VDP Text tool is <u>(T)</u>.
  - <u>VDP Text Ellipse Tool</u> Create an ellipse or circle on which the variable text will be positioned inside or outside.
  - <u>VDP Text Path tool</u> Create a path consisting of straight lines on which the variable text will be positioned. The respective corner points between the straight lines can be converted into a curve point afterwards.

- <u>VDP Text Curve Tool</u> Create a path consisting of curves, on which the variable text will be positioned. The respective curve points between the curve segments can be converted into a corner point afterwards.
- <u>VDP Text Polygon Tool</u> Create a polygon on which the variable text will be positioned. The number of corners as well as the star shape can be determined while drawing.
- VDP Image Tool [24] The tool allows you by click and drag to draw a rectangle that will serve as a placeholder for the variable image element. The keyboard shortcut for the VDP Image Tool is (1).
- **VDP Barcode Tool [25]** The tool allows you by click and drag to draw the placeholder for a barcode or QR code. The keyboard shortcut for the *VDP Image Tool* is (B).
- VDP Object Creation Tools [26] This tool can be used to create additional graphically variable objects. Their area as well as line color can be variably colored. Keep the button for this tool pressed longer to open the drop-down menu. Therein, further VDP object-creating tools can be selected according to the application. These are:
  - <u>VDP Rectangle Tool</u> Draw a rectangle by clicking and dragging. The keyboard shortcut for the *VDP Rectangle Tool* is (R).
  - VDP Ellipse Tool Create an ellipse or circle.
  - <u>VDP Path Tool</u> Create a path consisting of straight lines. The respective corner points between the straight lines can still be converted into a curve point afterwards.
  - <u>VDP Bezier Curve Tool</u> Create a path consisting of curves. The respective curve points between the curve segments can be converted into a corner point afterwards.
  - <u>VDP Polygon Tool</u> Create a polygon. The number of corners as well as the star shape can be determined while drawing.
- Edit Path Tool [27] This tool allows to modify paths retrospectively by adding or deleting path points, as well as changing tangent points. The keyboard shortcut for the Edit Path Tool is (P).
- Scissors Tool [28] This tool allows to slice paths retrospectively, for example to make two semicircles out of one circle. The keyboard shortcut for the Scissor Tool is (C).
- Measure Tool [29] This tool allows by clicking on the Print Item to set the start point of the measurement. With another click the end point is set. When moving the mouse pointer, the current measurement distance and the measurement angle are displayed. The keyboard shortcut for the Measure Tool is (M).
- Hand Tool [30] This tool allows you to move the Print Item in the window by clicking and moving the mouse. This is especially needed in conjunction with zooming. The keyboard shortcut for the *Hand Tool* is (G).
- Zoom tool [31] This tool turns the mouse pointer into a magnifying glass and contains the symbol "+" in the magnifying glass. The keyboard shortcut for the Zoom Tool is (Z).
- Fit to Page Width [32] This automatically zooms to the width of the subject. Note that selecting the tool automatically zooms to the width. The keyboard shortcut for Fit to Page Width is (W).
- Fit to Page Height [33] This automatically zooms to the height of the subject. Note that selecting the tool automatically zooms to the height. The keyboard shortcut for Fit to Page Height is (H).



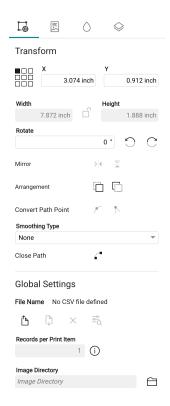
### Advices for tool use

For advices on using the individual tools, consult the article **Creating and modifying variable objects**.

## 2.3. "Transform & General Settings" tab

In the **Transform & General Settings** tab - depending on the selected object - functions with slightly different options are offered. The tab is divided into two setting areas - *Transform and General Settings*.

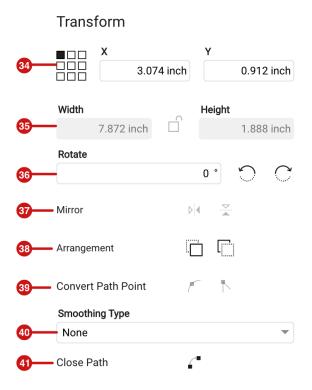
Figure 5: The Transform & General Settings tab after selecting a VDP Text Path element



### Transform

The **Transform** setting area defines the position and shape for the selected object. The individual options are active or inactive depending on the selected tool.

Figure 6: Setting options in Transform with selected VDP Text Path Tool



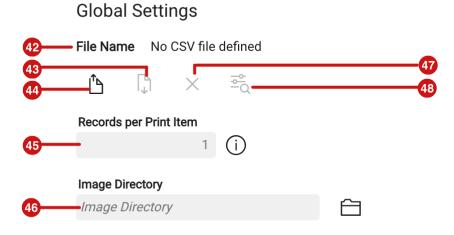
The following options are available for the selected objects:

- Origin and X or Y [34] The *Origin* is used to select the starting point of the transformation or the point from where the transformation takes place. The *X* and *Y* coordinates indicate the position of the selected starting point.
- Width and Height [35] The Width and Height of the object can be edited only when the VDP Image Tool, VDP Barcode Tool and VDP Object Creating Tools are selected.
- Rotate [36] The rotation of an object can be chosen freely. Rotate can only be applied when the VDP Image tool, VDP Barcode tool or the VDP Object Creation Tools are selected.
- Mirror [37] Mirroring of an object can be done horizontally or vertically. It is only possible to apply the Mirror when the VDP Image Tool, VDP Barcode Tool or the VDP Object Creation ToolS are selected.
- Arrangement [38] On the currently used layer, the selected object is moved to the foreground or the background.
- Convert Path Point [39] Using the direct selection tool, an anchor point of a path can be selected and converted into a curve point or corner point by clicking on the respective icon.
- Smoothing Type [40] By selecting a Smoothing Type, the shape of a curve point can be changed. Five different options are available None, Symetric, Catmull-rom, Continuous and Geometric.
- Close Path [41] This option automatically closes an open path by connecting the end points and start points.

### **Global Settings**

In the **Global Settings** area Global Settings are defined for the variable data. The settings can be used for all tools or objects.

Figure 7: The setting possibilites in the settings area Global Settings



The following options are available in the settings area:

- File Name [42]- This displays the file name of the currently loaded control file CSV.
- Upload/Replace CSV file [44] This allows a CSV file to be uploaded or an existing CSV file to be replaced.
- Download [43] This allows the currently uploaded CSV files to be downloaded (but not deleted).
- Delete CSV file [47] This allows the currently uploaded CSV files to be downloaded (but not deleted).
- Show CSV file [48] This displays the CSV file in a list view thereby, a check of the contents is possible.
- Records per Print Item [45] Defines how many data sets or lines of the control file are used on a Print Item.

  This option is required when several Print Items, which are imposed next to each other, are available as one Print Item. The variable elements should be used continuously on this Print Item.
- Image Directory [46] This specifies the directory to the images that are addressed via the control file. Make
  sure that the server or path to the images has already been created in the Workflow under Administration > File
  Management.

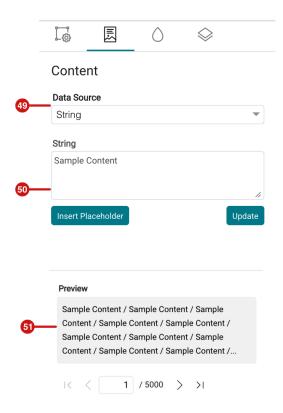
### 2.4. "Content" tab

The **Content** tab is used to determine which content is to be used for the variable element. The tab is only accessible when a variable element was created with one of the available tools and the created element is selected.

However, the structure of the tab always follows the same logic. The following three areas are available.

- 1. **Data Source** [49] Select from which source or based on which rule the content should be created. The following data sources are available:
  - String The content can be freely defined in the text field. Placeholders entries of a CSV file, serial number or a date - can be used.
  - <u>Date</u> The content is defined by a date. Additional settings allow to create a date dynamically depending on parameters or to choose different date formats.
  - <u>Serial Number</u> The content of the variable element is generated based on a serial number definition. The serial number can be freely configured.
  - <u>Column Index</u> The content is derived from the CSV control file. By selecting a *Column Index*, it is determined which column in the CSV file should be used for the individual record. Furthermore, it can be defined with which row to start or if content should be trimmed.
  - <u>Column Title</u> The content comes from the CSV control file. By selecting a *Column Title* it is determined which column in the CSV file should be used for the individual record. In addition, it is possible to define with which row to start or whether content should be trimmed.
- 2. **Definition area [50]** Depending on the selected data source, options are offered in this area, with which the user can compile or select the contents.
- 3. **Preview [51]** In this area a preview of the content that the user creates using the selected options, is offered for the current or the next records.

Figure 8: The three areas of the Content tab with selected Data Source String

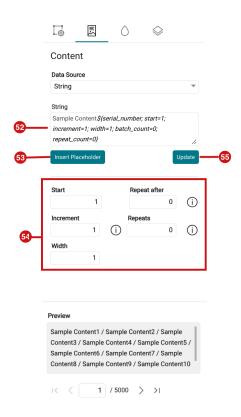


## Data Source "String"

When **String** was selected in **Data Source [49]** (Figure 8), any text can be entered in the *definition area* **[50]** resp. created with dynamically generated content based on placeholders **[53]**.

Once a string has been defined, the user must press **Update [55]** to display the final string on the Print Item.

Figure 9: The Content tab with selected Data Source String



You can enter any text in the input field. If you want to enrich the text with a placeholder, this can be done in two ways:

- Insert placeholder [53] clicking the button opens the Choose Placeholder dialog.
- @ inserting the @ sign opens the Choose Placeholder dialog.

Choose the placeholder you want to use in the *Choose Placeholder* dialog (*Figure 10*). Saving the dialog will insert the corresponding code for the placeholder in the text field [52] of the definition area. To parameterize the placeholder, you can either change the values in the code directly or place the cursor in the sub-variable in the text and enter the corresponding values in the parameterization area [54].

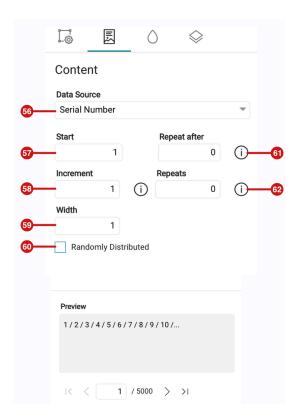
Figure 10: The Choose Placeholder dialog



### Data Source "Serial Number"

If the **Serial Number [56]** entry was selected in the **Data Source** option, it is possible to influence the serial number sequence as well as the **width** of the serial number.

Figure 11: The Content tab with selected Data Source Serial Number



The following options are available for defining a **Serial Number**:

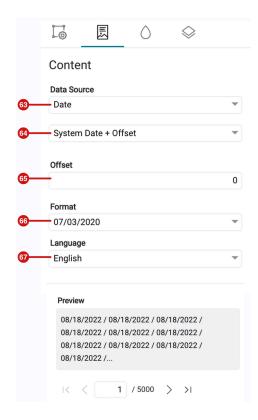
• Start [57] - Specify with which number the numbering should start.

- **Increment** [58] Specify what value the next number should get. The increment will be applied to all subsequent numbers.
- Width [59] Specify the minimum number of digits that the serial number should have. Thus, a serial number which is smaller than the number of the defined width, will have leading zeros.
- Randomly Distributed [60] Specify whether the Serial Number should be distributed in ascending or descending order or randomly. In any case, a serial number is used only once.
- Repeat after [61] Specify after how many records the Serial Number should start from the beginning. Example: Value = 5 leads to the following result: 1, 2, 3, 4, 5, 1, 2, 3, ...
- **Repeats [62]** Specify how many times a record should be repeated. Example: Value = 3 leads to the following result: 1, 1, 1, 2, 2, 3, 3, ...

#### Data Source "Date"

When **Date [63]** is selected in the **Data Source** option, it is possible to define a fixed date or a date based on the system date plus an offset. Furthermore, the to be generated format of the date can be determined.

Figure 12: The Content tab with selected Data Source Date



The following options are available for defining a **Date**:

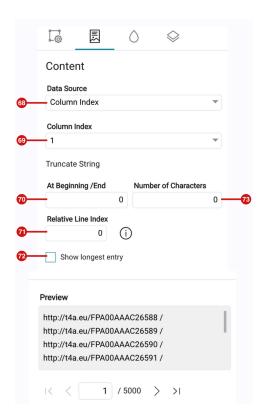
- Date [64] Select whether a Series, a Static Date or a date depending on the System Date + Offset is to be created.
- Offset [65] Select the offset which should be added to the system time. This option is available only when System Date + Offset is selected.
- Format [66] Select which format 10.04.2022, 10.04.22, 10 April 2022, Sun. 10 April 2022 ... should be used.
- Language [67] Select which language should be used for weekdays or month names June 12, 2022, Sun June 12, 2022 | June 12, 2022, Sun June 12, 2022 ... -

### Data Source "Column Index"

When **Column Index [68]** is selected in the **Data Source** option, it is possible to select the desired column from the CSV file on the one hand and crop the content of the text on the other. If several records of a CSV file have to be placed on one Print Item, the corresponding offset within the defined area can be specified.

Note that **Column Index** can only be selected if a CSV file was previously uploaded in the **Transform & General Settings** tab.

Figure 13: The Content tab with selected Data Source Column Index



After selecting a **Column Index**, the following options are available:

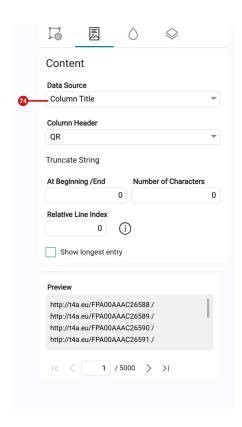
- Column Index [69] Select the desired column from the CSV file. Only as many numbers are available in the selection as columns were found in the underlying CSV file.
- At the Beginning/End [70] Specify how many digits of the content should not be displayed at the beginning. Thus, the value from the CSV file will be truncated by the specified number of letters from the beginning. If a minus value is entered, the content will be trimmed starting from the end.
- **Number of characters** [73] specify how many characters of the content should be displayed. Which characters are displayed depends on the selection in <u>At Beginning/End</u>. If the value there is 0, the entered number of characters will be displayed starting from the beginning of the content.
- Relative Line Index [71] Select which offset in the records should be used for the variable element. This option is only relevant if you have selected a value greater than 1 in the Records per design option in the <u>Transform & General Settings</u> tab. For example, if 3 Records per Print Item was selected, you must enter the value 0 for the first variable element, the value 1 for the second variable element, and the value 2 for the third variable element in Relative Line Index.
- Show longest entry [72] Force the longest entry in the CSV file to be displayed. Note however that the length is limited to the number of characters! Thus, shorter records that have many wide characters such as w, m, o, etc. may still not find space on the given path length.

#### "Column Title" tab

When **Column Title** [74] is selected in the **Data Source** option, it is possible to select the desired column from the CSV file on the one hand and crop the content of the text on the other. If several data records of a CSV file have to be placed on one Print Item, the corresponding offset within the defined area can be specified.

Note that **Column Title** can only be selected if a CSV file was previously uploaded in the **Transform & General Settings** tab.

Figure 14: The Content tab with selected Data Source Column Title

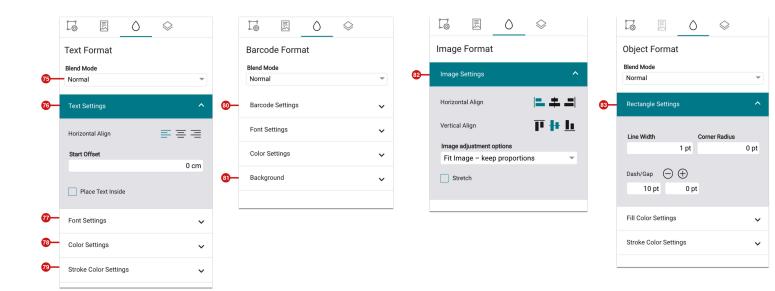


The available options are the same as for the selected Data Source *Column Index*. For more information, see the description beneath Figure 13.

## 2.5. "Format" tab

The options in the **Format** tab determine the appearance of the variable elements. The tab is only accessible if a variable element was created with one of the available tools and the created element is selected.

Figure 15: The available settings area for Text, Barcode, Image and Object Format



Depending on which variable element is selected, different options, grouped in expandable settings areas, are provided for the format of the variable element. The following **setting areas** are present therein:

- Blend Mode [75] The Blend Mode (blend mode) defines how the content of the object is applied with the content of the background. For example, the blend mode Normal causes the background to be omitted, the blend mode Multiply causes the object to be overprinted and output. In addition, the options Negative Multiply, Interlace, Darken, Lighten, Difference, Exclude, Hue, Saturation, Luminance, Dodge Color, Color Re-expose, Hard Light and Soft Light are available.
- **Text Settings** [76] Allow to specify the *alignment*, *position* and *offset from the starting point* for the text on the path. *Left-aligned*, *centered* and *right-aligned* are available for the alignment.
- Font Settings [77] Set the font family, font style, font size, horizontal and vertical scaling, letter spacing and text fitting options. If you still want to add an outline to the text, there are still the options of the line width as well as the possibility to create a dashed line by entering the length for the stroke and for the gap.
- Color Settings [78] Static color values for color areas can be selected on the one hand. On the other hand, also
  the barcode based on CMYK values or Spot Colors can be selected. Furthermore, entries from the data source
  (CSV file) can be used to generate the colors.
- Stroke Color Settings [79] Static color values for strokes based on CMYK values or Spot Colors can be selected on the one hand. On the other hand, entries from the data source (CSV file) can be used to generate colors.
- **Barcode Settings [80]** Select already known settings from the *Impose Editor*, which can be defined for barcodes or QR codes. Depending on the type, different setting parameters can be used.
- Background [81] Select static color values on the one hand for barcodes based on CMYK values or spot colors.

  On the other hand, use entries from the data source (CSV file) to generate the colors.

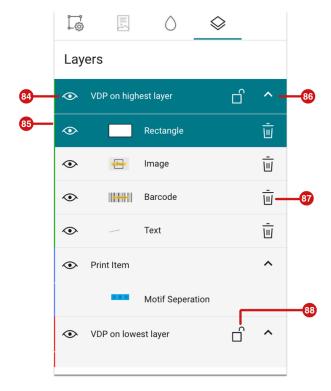
- Image Settings [82] Select the horizontal or vertical <u>alignment</u> left, center, right or top, center, bottom of the image in the placeholder frame on the one hand, as well as the <u>Image adjustment options</u> Fit image Keep proportions and Fill image Keep proportions. When the image is to be fully fitted into the available frame, activate the <u>Stretch</u> option below.
- Rectangle Settings [83] Define the *line thickness, corner radius* and the input of the length of *stroke* and *gap* for a dashed line. Use the **ellipse** and **path settings** for the values of the corresponding subset of functions.

## 2.6. "Layers" tab

The **Layers** tab offers the possibility to create variable elements on the *foremost* resp. *lowest* layer on the one hand and to *hide* or *show* variable elements, as well as to delete these elements on the other hand.

Determine the layer for variable element creation by selecting the layers **VDP** on highest layer resp. **VDP** on lowest layer. VDP elements placed on the layer are placed below. Moving objects from one layer to another is possible by moving the variable element.

Figure 16: The Layers tab with variable elements on the highest and lowest layer



After variable elements have been placed on the highest resp. lowest layer, the following functions are available:

- Show / Hide variable elements [86] The display of the underlying VDP elements can be suppressed by clicking on the arrow.
- Show / hide layer / VDP element [84] All objects of the layer or individual VDP elements can be hidden or then shown again by clicking on the symbol.
- Lock/unlock layer [88] Objects of the layer can be prevented from unwanted position changes during editing by locking the layer.
- **Select layer color [85]** By clicking on the colored strip, a selection color for the layer can be chosen. Selected objects are indicated by the selection rectangle in the selected layer color.
- **Delete VDP element [87]** Remove VDP elements from the subject by pressing the trash icon. The element is deleted from the Print Item without further warning. Revert erroneous deletion by pressing *cmd* + *Z* (macOS) resp. *strg* + *Z* (Windows).



## VDP elements not visible on the lowest layer

Note that VDP elements placed on the highest layer become visible only if the Print Item is a transparent, thus without a background area. Check the Print Item beforehand by activating the TR mode in the VDP Editor menu bar.



## Unlock locked layers after saving

Note that after opening the VDP Editor, all layers are unlocked, even when they were locked when saving.



### Hidden VDP elements are visible after saving

Note that hidden VDP objects are activated after saving the Print Item and are thus included in the output. If a VDP element shouldn't be visible in the output, the VDP element must be deleted before saving.

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