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## Variegator

Variegator is layout software for designing and merging variable data documents. Variegator outputs a PDF file, making it easy to use with most other workflow and RIP software. You may have Variegator or you may have Variegator Label Studio. Variegator focuses on variable data, while Label Studio also includes label imposition features. This manual covers both products.

## Variegator Features

## 1. Variable elements

Variegator supports the following types of variable elements -

- variable text
- variable barcode
- variable image


## 2. Static elements

Variegator supports the following types of static elements -

- line
- rectangle
- rounded rectangle
- ellipse
- polygon
- text
- image
- barcode


## 3. Element Manipulation

An extensive collection of tools are provided to manipulate elements, including move, rotate, scale, arrange order, group and ungroup, align and distribute.
4. Document Formats

Variegator supports one or two page variable data documents.

## 5. Document Color Modes

Variegator documents can be created in CMYK or RGB colorspace. Color swatches can also be defined as spot color or process color. If a document is created under the color mode $C M Y K$, then all colors must be defined in CMYK colorspace. The document can contain RGB, or CMYK images, either static or variable. However all other element types (i.e. vector, fonts) which will have their colors defined in Variegator can only have their colors in CMYK colorspace. The same with documents created in RGB color mode - the colors must be defined in RGB colorspace. However the RGB document can contain images in CMYK or RGB colorspace.

## 6. Database Format

Variegator supports comma-separated values, or CSV files.

## Organization of this Manual

This manual is organized into 4 main chapters -

- Basic Operations
- Reference
- Appendices

In the chapter Basic Operations, you will learn how to perform basic operations like creating Variegator documents, drawing, moving and resizing elements, manipulating multiple elements, and outputting jobs.

In the chapter Reference, you will learn all the functions in Variegator, including the Main Menu items, all the buttons in the Control Bar and Tool Bar, using the Property Panels, and the Status Bar.

In the chapter Appendices, you will find useful information on barcode support, and hot keys that let you quickly get things done in Variegator.

## Conventions

## Important Information

$\square$

Important information will be placed in a box like the one above. These boxes usually contain a summary of what you need to do to perform a certain action. If you are a lazy or minimalist documentation reader, these boxes are for you!

## Menu Options

Throughout the menu, we will use the following convention to denote application menu options -
<menu> : <option> or <menu> : <sub-menu> : <option>
where -
<menu> is the name of the menu
<sub-menu> is the name of the sub-menu
<option> is the name of the option

There can be more than one level of sub-menus.

For example, the New option in the File menu will be written as -

File : New

To access this option, you need to click on the File menu so it expands to reveal the options, then click on the option New.

## Starting Variegator

To start Variegator, double click on the Variegator icon on your desktop, or launch the Variegator application from the Xitron program group in the start menu.

## Variegator Navigation

The Variegator dialog is divided into several parts, as indicated in the diagram below.


| Main Menu | This is the main menu for Variegator. |
| :---: | :---: |
| Control Bar | Use the Control Bar to manage documents and elements on the current document. |
| Tool Bar | The Tool Bar allows the user to add elements to the current document, to perform various functions such as rotate, scale, scroll, zoom, copy properties (eyedropper), and change fill and stroke colors. |
| Property Panel | Use the Property Panel to configure variable and static elements placed on the document. |
| Status Bar | The Status Bar shows the current page and record numbers, as well as the name of the connected database, if there is one. Users can also scroll to the next or previous page, or scroll to the first, previous, next, or last records. |
| Work Area | The Work Area displays the current document. Users can zoom in or out, and scroll to view different areas of the document. All layout work is done within this area. |
| Rulers | The horizontal and vertical rulers show the current position of the cursor. |

## Basic Operations

## A. Creating, Changing, Saving and Opening Variegator Documents

## 1. Create a Variegator Document

> To create a new Variegator document, select File : New, or type Ctrl+N.

To create a new Variegator document, select the option File : New, or type Ctrl+N. The Document Setup dialog will be prompted. Configure your new Variegator document in the Document Setup dialog.


Preset
Page properties can be saved as a preset. Re-use the preset to create a document you will do repeatedly. Selecting a preset from this menu will set all page properties according to the preset. To save the current page properties as a preset, press the Save button to the right of the menu. You will be prompted to enter a name for the preset.

To delete document presets, select the option Advanced : Delete Document

## Presets.

| Page Size | Select the page size for your document from the Page Size menu. If the size you need is not in the menu, click the Setup (...) button to the right of the menu to prompt the Page Size Setup menu to create a new page size. |
| :---: | :---: |
| Width, Height | The width and height of the selected page size are displayed in the Width and Height boxes. |
| Orientation | Select whether the document is in landscape or portrait orientation. |
| Pages, Facing Pages | Select the number of pages in the document. This can be either 1 or 2 . If number of pages is 2, then the Facing pages option will be enabled. Check this box to mirror to left and right margins for page 1 and 2. |
| Top, Bottom, Left, Right Margins | These are the top, bottom, left, and right margins for the document. Clicking the button on the right side to set all margins to the Top margin. |
| Top, Bottom, Left, <br> Right Bleeds | These are the top, bottom, left, and right bleeds for the document. Clicking the button on the right side $\square$ to set all bleeds to the Top bleed. |

## 2. Change your Variegator Document Properties

To view or change Variegator document properties, select the option File: Document Properties.

After creating the Variegator document, if you need to change your document properties, make sure the document you want to change the properties for is the active document (ie the one you are viewing now), and select the option File :

Document Properties. The Document Setup dialog will be prompted and you can change your document properties in this dialog. Note that the document color mode cannot be changed. If you have previously set the wrong document color mode, you will need to create a new Variegator document and set the correct color mode.

Alternatively, you can go to the Pages panel. Double-click on the Pages panel tab. The Pages panel will be expanded.


All the document properties, except color mode, are available in the Pages panel. You can change your document properties there as well.

## 3. Save your Variegator document

```
To save your Variegator document, select the option File : Save or type Ctrl+S.
```

To save your Variegator document, select the option File : Save or type Ctrl+S. If this is the first time you save your document, you will be prompted to select the path to save the document, and to enter the name for your document.


If you have previously saved your document, this will save the document to the path previously selected under the name previously entered.

If you have previously saved your document, but would now like to save it to a new path, or under a new name, select the option File : Save As or type Ctrl+Shift+S. You will be prompted to select a new path and to enter a new name for the document.
4. Open an existing Variegator Document

To open an existing document, select the option File : Open or type Ctrl+O.


Select the Variegator document you want to open, and click Open. The Variegator document will then be opened for editing.

## B. Drawing and Setting the Size of Elements Accurately

Although it is possible to draw an element using the mouse and move it around on the document, this is not an accurate method. To position the element accurately, and to set it to the correct size, you can use the Transform panel.

The following example shows you how to draw a rectangle that is $100 \times 60 \mathrm{~mm}, 20 \mathrm{~mm}$ from the left edge, and 30 mm from the top edge of the document. You can follow similar steps to draw other types of elements.

1. Draw the rectangle using the Rectangle tool

To draw an element in accurate size, click on the document with the tool to create the element, instead of drag-anddrop.

Although it is possible to draw an element via drag-and-drop with the mouse, this is not an accurate method. Click on the Rectangle tool in the Tool Bar. The Rectangle tool is the one with the icon

Click the Rectangle tool on the document. The Rectangle Setup dialog appears.


Enter 100 mm for the Width, and 6omm for the Height.
The rectangle will be drawn at the location where you click on the document with the Rectangle tool.

## 2. Position the rectangle at specific location

Use the Transform panel to position an element accurately.

Although it is possible to set an element's size using the drag-and-drop action of the mouse, this is not an accurate method. To position the element accurately (and to set the size accurately), you can use the Transform panel. With the rectangle still selected, go to the Transform property panel.

| ALIGN |  | TRANSFORM |  |
| :---: | :---: | :---: | :---: |
|  | X : | 20 mm | A |
|  | $Y:$ | 30 mm |  |
|  | W: | 100 mm |  |
|  | H: | 60 mm |  |

Enter 20 mm for $\mathbf{X}$ and 3omm for $\mathbf{Y}$. The rectangle is now positioned correctly at 20 mm from left edge and 30 mm from the top edge. If you need to change the size of the rectangle, you can enter the width and height in the $\mathbf{W}$ and $\mathbf{H}$ boxes. The accuracy is up to 5 digits following the decimal point for mm , and up to 4 digits for inches.

## C. Moving, Rotating and Scaling Elements

## 1. Changing the Position of Elements by Drag-and-Drop

To move an element, you can simply drag it to the new position. For a more accurate method to move elements, you can use the Move dialog and the Transform panel. These 2 options are discussed in the next 2 sections.
2. Changing the Position of Elements with Offsets

> Select the option Elements : Transform : Move or type Ctrl+Shift+M to move elements accurately by offsets.

Changing the position of elements with offsets can be done in the Move dialog. There are a few ways to prompt the Move dialog.

- Select the elements and then select the option Elements : Transform : Move.
- Select the elements and then type Ctrl+Shift+M to prompt the Move dialog
- Select the elements and then right-click on one of the selected elements to prompt the Element Options menu, and then select the option Transform : Move option.

| Move |  |
| :--- | :--- |
| Horizontal: | 10 mm |
| Vertical: | 4.99999 mm |
| Distance: 11.18034 mm <br> Angle: -26.565 <br> Copy OK <br>   |  |

[^0]
## 3. Changing the Position of Elements by entering the New Position

Set the location to move the elements to in the Transform panel.

You can change the position of elements by entering the new coordinates to move the elements to with the Transform Property Panel.

| ALIGN |  | TRANSFORM |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | X: | 41.40398 mm |  | A |
|  | $Y:$ | 129.15894 mm |  |  |
|  | W: | 105.55629 mm |  |  |
|  | H: | 73.43046 mm |  |  |

## Reference Corners



Select the reference corner on the element for which the $X$ and $Y$ coordinates are read from or set to.
$\mathrm{X}, \mathrm{Y}$

These are the $X$ and $Y$ coordinates of the reference corner on the element from the top-left corner of the document. The origin ( 0 , o) of the coordinate system is at the top-left corner of the document. For example, if $X=27 \mathrm{~mm}$, and $\mathrm{Y}=53 \mathrm{~mm}$, then the point will be located 27 mm to the right from the left edge of the document, and 53 mm downward from the top edge of the document.

W, H
Set the width and height of the element. When changing the width and height, the selected reference point becomes the anchor. If the top-left corner is the reference point, and the width of a rectangle is changed from 20 mm to 30 mm , then the top-left corner of the rectangle is not moved, and the rectangle's width is increased towards the right. If however the reference corner is the top-right corner, then the top-right corner is not moved, but the width of the rectangle is increased towards the left.

## Example 1

In this example, the top-left corner of a rectangle is to be moved to 50 mm to the right from the left edge, and 100 mm down from the top edge of the document.

To move a rectangle so that the top-left corner of the rectangle is 50 mm to the right of the left edge of the document, and 100 mm down from the top edge of the document, select the rectangle and go to the Transform panel. Select the top-left corner as the reference corner. Enter 50mm as the X coordinate, and 100 mm as the Y coordinate. The final result is shown below.


## Example 2

In this example, the bottom-middle point of a rectangle is to be moved to 100 mm to the right from the left edge, and 175 down from the top edge of the document.

To move a rectangle so that the bottom-middle point of the rectangle is 100 mm to the right of the left edge of the document, and 175 mm down from the top edge of the document, select the rectangle and go to the Transform panel. Select the bottom-middle corner as the reference point. Enter 100 mm as the X coordinate, and 175 mm as the Y coordinate. The final result is shown below.


## 4. Rotating Elements

Rotate elements by selecting the option Elements : Transform : Rotate or use the Rotate tool.

Elements can be rotated at 90 degrees or multiples of 90 degrees, positive or negative. A positive rotation is counter-clockwise.
A negative rotation is clockwise.

Rotating elements can be done in the Rotate dialog. There are a few ways to prompt the Rotate dialog.

- Select the elements and then select the option Elements : Transform : Rotate.
- Select the element(s). Type the key $r$ to switch the current tool to the Rotate tool. Click on the document with the Rotate tool
- Select the elements and then right-click on one of the selected elements to prompt the Element Options menu, and then select the option Transform : Rotate.


Select the rotation angle from the Angle menu. A positive angle is a counter-clockwise rotation. A negative angle is a clockwise rotation. After selecting the rotation angle, click OK to rotate the selected element(s), or click Copy to make a copy of the selected element(s) first and then rotate the copy.

If you want to repeat the rotation for other objects, select other elements and then select the option Elements :
Transform : Transform Again, or type Ctrl+D.

## 5. Resizing Elements With Scaling Percentages

To resize elements by scaling, select the option Elements : Transform : Scale or use the Scale tool.

Elements can be resized at a percentage from the Scale dialog.
There are a few ways to prompt the Scale dialog.

- Select the elements and then select the option Elements : Transform : Scale.
- Select the element(s). Type the key $s$ to switch the current tool to the Scale tool. Click on the document with the Scale tool.
- Select the elements and then right-click on one of the selected elements to prompt the Element Options menu, and select the option Transform : Scale.


Select either uniform or non-uniform scaling selecting the appropriate radio button. If the scaling is uniform, select the Uniform radio button. The horizontal and vertical scaling percentages are the same in this case. Enter the scaling percentages in the Scale box. If the scaling is non-uniform, select the Non-uniform radio button. Enter the horizontal and vertical scaling percentages in the Horizontal and Vertical boxes respectively.

Check the box Scale strokes if you want to scale the stroke at the same percentage. Uncheck this box if you do not want to scale the strokes.

If you want to repeat the rotation for other objects, select other elements and then select the option Elements :
Transform : Transform Again, or type Ctrl+D.

## 6. Resizing Elements to a Specific Size

To resize elements to a specific size, use the Transform panel.

Elements can be resized by selecting first the element and then enter the new width and height in the Transform panel in the $\mathbf{W}$ and H boxes.

## Example 1

In this example, the width of the rectangle is changed from 100 mm to 200 mm , and the height is changed from 75 mm to 175 mm . The reference point is set to the top-left corner of the rectangle.

As you can see in the illustration below, the top-left corner of the rectangle is not moved, but the right edge of the rectangle extends towards the right until the width of the rectangle is equal to the new width entered by the user, and the bottom edge of the rectangle is moved downward until the height of the rectangle is equal to the new height entered by the user. The red arrows indicates the movement of the right and bottom edges of the rectangle.


## Example 2

In this example, the width of the rectangle is changed from 100 mm to 200 mm , and the height is changed from 75 mm to 175 mm . The reference point is set to the bottom-middle point of the rectangle.

As you can see in the illustration below, the bottom-middle point of the rectangle is not moved, but the right edge of the rectangle extends towards the right and the left edge of the left edge of the rectangle extends towards the left, until the rectangle's width is equal to the new width entered by the user. The bottom edge of the rectangle is moved upward until the rectangle's height is equal to the new height entered by the user. The red arrows indicates the movement of the left, right and top edges of the rectangle.


## 7. Perform the Same Transformation Again

It is possible to repeat the previous transformation (movement, rotation, or scaling) for other objects. There are a couple of ways to achieve this.

- select other elements and then select the option Elements : Transform : Transform Again, or type Ctrl+D.
- select other elements, right-click to prompt the Element Options menu and then select the option Transform : Transform Again.
- select other elements and then type Ctrl+D to run the Transform Again function


## D. Setting Fill and Stroke Properties for Elements

Use the Color tool and Color panel to set fill and stroke colors. Use the Stroke panel to set stroke weight and style.

To set the stroke color, select the element, go to the Color property panel, click on the Stroke Color box (the hollow square), then set the stroke color using the slider accordingly. You can also go to the Swatch panel, and select a swatch to use as the stroke color.


To set the stroke weight, select the element, go to the Stroke panel, select or enter the weight you need in the Weight menu.


To set the fill color, select the element, go to the Color panel, click on the Fill Color box (the solid square), then set the fill color using the slider accordingly. You can also go to the Swatch panel, and select a swatch to use as the fill color.


## E. Managing Multiple Elements

## 1. Selecting Multiple Elements

There are a few ways to select more than one element at a time -

## Shitt-Click on Elements

Click on an element to select it. Press the Shift key and click on other elements to select the first element and all subsequent elements you clicked on with the Shift key pressed.

## Mouse Drag to Include Elements

Use the mouse the drag over the elements you want to select. This is useful only when the elements you want to select are in the same area.

## Select Same Properties

If you want to select similar elements, for example, elements with the same fill and stroke, you can select an element with the fill and stroke you need, then select the option Edit : Select Same: Fill and Stroke. You can use the option in the Select Same menu to select elements with the same element type, stroke color, stroke weight, fill color, or fill and stroke.

The illustration below shows a document with 9 elements -3 of them filled with orange colors.


To select all 3 square elements with orange fill, select one of them (in the example, the top-left one), and then select the option

```
Edit : Select Same : Fill and Stroke.
```



All 3 square elements with orange fill color are now selected.

## Select Others

If you want to select most elements in the document, except for a few, then you can select the few elements that you don't want to select, then select the option Edit : Select Inversion, the elements you have selected will become deselected, but the elements that were deselected become selected.

## 2. Grouping and Ungrouping Elements

> To group elements, select the elements then select the option Elements : Group, or type Ctrl+G.

Elements can be grouped together as a group. The group will be manipulated like a single element.
To group elements, select the elements using one of the methods listed in the above section, then select the option
Elements : Group. Or you can right-click on one of the selected elements, right-click for the Element Options menu, then select the option Group.

The following list shows the functions that can be performed on a group.

- When a group is transformed, all elements in the group are transformed together.
- When the fill color or stroke color or stroke weight of a group is being changed, all elements in the group are set to the same fill color or stroke color or stroke weight.
- When the character or paragraph styles of a group is being changed, all text box elements in the group are set to the same character or paragraph styles.
- When a group is being aligned with other elements or groups, the bounding box of the group is used to calculate the result for the align or distribute functions.
- When a group is being resized, all elements within the group are resized and re-positioned according to the scaling percentages for the group.
- When a group contains 2 or more barcode boxes, and when you change the barcode type, or any barcode properties, the changes will be applied to all barcode boxes within the group.

To ungroup one or more groups, select those groups, then select the option Elements : Ungroup, or right-click on one of the groups for the Element Options menu, then select the option Ungroup.

To ungroup, select the group(s) then select the option Elements : Ungroup, or type Ctrl+Shift+G.

## 3. Align \& Distribute

## Use the Align panel to align or distribute elements.

The align and distribute functions are to align elements to specific edges, or distribute them so either their centers are spaced equally, and there are equal space between elements.
a. Alignment

## 

Select the elements and use one of the align options to align a specific edge. In the example below, the top edges of the 5 selected elements are aligned.

b. Distribute


Select the elements and use one of the distribute options to so the centers of selected elements are spaced equally. In the example below, the horizontal centers of the 5 selected elements are distributed. This means that the distances between horizontal centers if the 1st and 2nd elements, between the 2nd and 3rd elements, between the 3rd and 4 th elements, and between the 4 th and 5 th elements are the same.


## c. Distribute Space



Select the elements and use one of the distribute space options so the selected elements are spaced equally. In the example below, the distances between the 1st and 2nd elements, between the 2 nd and 3rd elements, between the 3rd and 4 th elements, and between the 4 th and 5 th elements are the same.


## 4. Rearranging Order of Elements

To re-arrange the order of elements, select the options in the sub-menu Elements : Arrange.

There is a top to bottom order of elements. An element that is drawn later than another element will be above the element that was drawn earlier. An element that is on top of another element will cover the elements that is below it. It is possible to rearrange this order using the Arrange menu.

There are a few ways to access the Arrange menu.

- Select the elements. Click on the Elements menu and you will see the Arrange menu.
- Select the elements and then right-click on one of the selected elements to prompt the Element Options menu. You will see the Arrange menu.

The four options in the Arrange menu are -

| Bring to Front | Bring the selected elements to the top. Type Ctrl+Shift+] for the same function. |
| :--- | :--- |
| Bring Forward | Bring the selected elements forward by one level. Type Ctrl+] for the same function. |
| Send Backward | Send the selected elements backward by one level. Type Ctrl+ [ for the same function. |
| Send to Back | Send the selected elements to the back. Type Ctrl+Shift+ [ for the same function. |

## Example

In the example to the right, the red square is at the back, and the blue square is in front ie the blue square is above the green square, which in turn is above the red square.


The user can select the red square and then select the option Bring Forward or type Ctrl+] to bring it forward by one level. The red square is now above the green square but below the blue square.


The user can also select the red square and select the option Bring to Front or type Ctrl+Shift+]. The red square is now in the front and is above the green and blue squares.


If the user wants to move the red square to the back again, simply select the red square and then select the option Send to back or type Ctrl+Shift+[, the red square will be at the back again, under the green and blue squares.


## F. REPLACE

## G. Configuring Variegator Defaults

There are four types of Variegator defaults that need to be configured, including application preferences, color settings for more accurate display of colors, default page sizes, as well as document presets management.

## 1. Preferences

To configure application preferences, select the option Advanced : Preferences. The Preferences dialog will be prompted.


## Unit

| General | Select the unit for general measurement. |
| :--- | :--- |
| Stroke | Select the unit for setting stroke weight. |

## Grid

| Color | Set the color of the grid lines. |
| :--- | :--- |
| Style | Set the style of the grid lines. This can either be Lines or Dots. |
| Enter the distance between major grid lines. |  |
| Subdivision | Enter the number of subdivision between 2 major grid lines. |

## Languages

User Interface Select the language for the user interface. Select [System] to use the system default language. Other choices include US English and Japanese.

## Defaults

Key-click Distance This is the distance that an element will be moved per click of the arrow keys.

## 2. Color Settings

Select the Color Settings option to prompt the Color Settings dialog for selecting the ICC Color Profiles for CMYK or RGB colorspace. These profiles are used to convert the color values for more accurate display on the monitor.

| Color Settings |  | RGB Profile: sRGB_Color_Space_Profile_Copy.icc <br> CMYK Profile: ISOcoated_v2_eci.icc <br>   |
| :--- | :--- | ---: |

## 3. Page Size Management

Select the Page Size Management option to prompt the Page Size Management dialogs. Please see the section
Configuring Variegator Defaults in the chapter Basic Operations for more information on the Page Size Management dialog. Users can add or remove page sizes that user can select in the Page Size menu in the Document Setup dialog.


Click the Add button to add a new page size. The Page Size Setup dialog will be prompted.

| Page Size Setup |  |  |
| :---: | :---: | :---: |
| Name: | A4 (210x297mm) |  |
| Width: | 210 mm |  |
| Height: | 297 mm |  |
|  | Save | Cancel |

Enter a name for the new page size. Enter the Width and Height for the page. Click Save to save the new page size, or Cancel to abort without saving changes.

## Duplicate

Select a page size and click Duplicate to create a page size based on the selected page size. The Page Size Setup dialog will be prompted.

Edit
Select a page size and click Edit to edit the selected page size. The Page Size Setup dialog will be prompted.

## Delete

Select a page size and click Delete to delete the selected page size. The user will be prompted to confirm the deletion.

## 4. Document Presets

Document Presets are created when user click the Save button in the Document Setup dialog, or the Save button in the Pages panel. Select the option Advanced : Delete Document Presets to prompt the Delete Document Preset dialog for user to delete saved document presets.


All existing document presets are listed in this dialog. Select the ones you want to delete. You can select multiple document presets by pressing the Control key and click on the document presets you want to select. You can also click on a document preset, press the Shift key, then click on a second document preset to select both document presets clicked on and all document presets in-between. After selecting the document presets, click the Delete button to delete them. You will be prompted to confirm the deletion.

## Reference Section

In this chapter, you will find detailed explanation of the Main Menu, Control Bar, Tools Bar, Property Panels, Status Bar, and Work
Area.

## A. Main Menu

File Edit Elements Type Database View Advanced

Explanations for the 7 menus in the main menu will be explained in the sub-sections below.

1. File Menu

| $\square$ | New | $\mathrm{CtrI}+\mathrm{N}$ |
| :---: | :---: | :---: |
| (5) | Open | CtrI+0 |
| 5 | Close | Ctri+W |
| 目 | Save | Ctri+S |
| 有 | Save As | Ctrl+Shift+S |
| -1 | Document Properties |  |
| 5 | Generate | Ctri+P |
| (A) | Preview by | Reader |

## File Menu Options

| New | Select the New option to create a new Variegator document. Or type Ctrl+N to perform <br> the same action. The Document Setup window will be prompted. Configure the <br> measurements for the new document and click the OK button to create a new Variegator <br> document. |
| :--- | :--- |
| Open | Select the Open option to open a previously saved Variegator document. Or type Ctrl+O <br> to perform the same action. The user will be prompted to select the path and the <br> Variegator document to open. |
| Close | Select the Close option to close the current Variegator document. Or type Ctrl+W to <br> perform the same action. |


| Save | Select the Save option to save the current Variegator document. Or type Ctrl+S to <br> perform the same action. If the document has not been saved previously, the user will be <br> prompted to enter the name of the document and select the path to save the document. |
| :--- | :--- |
| Save As | Select the Save As option to save the current Variegator document under a new name. <br> Or type Ctrl+Shift+S to perform the same action. The user will be prompted to enter <br> the name of the document and select the path to save the document. |
| Document Properties | Select the Document Properties option to view and change the current document |
| Renerate | Preview the current record in Acrobat Reader. |
| Preview by Reader |  |

2. 

## Edit Menu



## Edit Menu Options

| Undo \Redo | Select the Undo option or type Ctrl+Z to undo the last action. A total of 32 undos can be <br> done. Select Redo or type Ctrl+Shift+Z to redo the previous action |
| :--- | :--- |
| Cut | Select the Cut option to save the currently selected element(s) to the clip board and then <br> remove them from the document. Or type Ctrl+X to perform the same action. |
| Select the Copy option to copy the currently selected element(s) and save them to the clip |  |
| board. Or type Ctrl+C to perform the same action. |  |$\quad$| Paste $\backslash$ Paste In Front $\backslash$ | Select one of the three Paste options to paste the element(s) in the clipboard to the <br> current document. Or type Ctrl $V$ to perform the same action. When the user selects <br> Paste In Front, the element(s) are pasted to the top. When the user selects Paste <br> In Back, the element(s) are pasted to the bottom. |
| :--- | :--- |
| Select the Delete option to delete the currently selected element(s) from the document.. |  |

Select All \Deselect All Select the Select All option or type Ctrl+A to select all elements, or the Deselect
All options to deselect all elements.
Select Inverse Select the Select Inverse option to select all elements that are currently not selected, and deselect all elements that are currently selected.

Select Same
Select the Select Same option to select elements with the same properties as the currently selected element. The option will expand into a submenu, as shown below.

| Element Type |
| :--- |
| Stroke Color |
| Stroke Weight |
| Fill Color |
| Fill and Stroke |

The user can choose the select elements with the same element type, stroke color, stroke weight, fill color and fill and stroke.

## Select Next Element

Select the Select Next Element option to select the element which is above or below the currently selected element. The option will expand into a submenu, as shown below.

| Above |
| :--- |
| Below |

## 3. Elements Menu

| Elements |  |  |
| :--- | :--- | :--- |
|  | Transform |  |
|  | Arrange |  |
|  | Group | Ctrl+G |
|  |  |  |
|  | Hide |  |
| Show |  |  |

## Elements Menu Options

## Transform

Select the Transform option to move, rotate or scale, or repeat the previous transform on the currently selected element(s). The option expands into a sub-menu.

| TransformAgain | Ctrl +D |
| :--- | :--- | :--- |
| Move | Ctrl + Shift +M |
| Rotate |  |
| Scale |  |

Please see the section Moving, Rotating and Scaling Elements in the chapter Basic Operations for more information.

Elements drawn at different time are not located in the same surface. Elements that are drawn later are closer to the top, while elements that are drawn earlier are closer to the bottom.

Elements that are on top of other elements will cover those elements. Select the Arrange option to move an element to the top, or bring it forward, send it backward, or send it to the bottom. The option expands into a sub-menu.

|  | Bring to Front | Ctrl+Shift+] |
| :--- | :--- | ---: |
|  | Bring Forward | Ctrl + ] |
| -7 | Send Backward | Ctrl $+[$ |
|  | Send to Back | Ctrl + Shift $+[$ |

Please see the section Rearranging Order of Elements in the chapter Basic Operations for more information.

| Group | Select the Group option to group the selected element(s) as a group so that they can be selected and transformed as one element. <br> Please see the section Group and Ungrouping Elements in the chapter Basic Operations for more information. |
| :---: | :---: |
| Ungroup | Select the Ungroup option to ungroup the currently selected group(s) back into individual elements. <br> Please see the section Group and Ungrouping Elements in the chapter Basic Operations for more information. |
| Hide | Select the Hide option to hide the selected element(s), or all elements, or only variable elements, or only static elements. The option expands into a sub-menu - <br> Element(s) <br> CtrI +3 <br> All <br> Only Variable Elements <br> $\mathrm{CtrI}+\mathrm{Alt}+\mathrm{V}$ <br> Only Static Elements <br> $\mathrm{Ctrl}+\mathrm{Alt}+\mathrm{S}$ |
| Show | Select the Show option to show all elements, or only variable elements, or only static elements. <br> The option expands into a sub-menu - <br> All <br> Ctrl+Alt +3 <br> Only Variable Elements <br> $\mathrm{CtrI}+\mathrm{Alt}+\mathrm{V}$ <br> Only Static Elements $\mathrm{Ctrl}+\mathrm{Alt}+\mathrm{S}$ |

## 4. Type Menu

| Type |  |  |
| :--- | :--- | :--- |
| Aa | Font |  |
| Ai | Document Font |  |
|  | Character Styles | Ctrl+T |
|  | Paragraph Styles |  |

Type Menu Options

| Font | Select the Font option to to assign a selected font to the selected text boxes. Because of the large number of fonts, the font names are sorted alphabetically and arranged in sub-menus. <br> P-T <br> U-Z <br> Others |
| :---: | :---: |
| Document Font | Select the Document Font option to show the fonts that are being used in the current document. The option will expand into a sub-menu with the fonts that are being used listed. Select one of those fonts to assign the font to the selected text boxes. <br> Arial <br> Bodoni MT <br> Century |


| Size | Select the Size option to assign the font size to the selected text boxes. The menu expands into a sub-menu with various font sizes. Select Other if you want to enter a custom size. |
| :---: | :---: |
| Character Styles | Select the Character Styles option or type Ctrl $+T$ to configure the character styles. The Character property panel will be expanded. |
| Paragraph Styles | Select the Paragraph Styles option to configure the paragraph styles. The Paragraph property panel will be expanded. |

## 5. Database Menu



## Database Menu Options

| Connect to Database | Select the Connect to Database option to connect the current document to a <br> database. The user will be prompted to select a supported database file. |
| :--- | :--- |
| Disconnect from Select the Disconnect from Database option to disconnect the database from the <br> Database current document. |  |

## 6. View Menu

| View |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Master |  |  |
|  | Links |  |  |
|  | Zoom In | Ctri++ |  |
|  | Zoom Out | Ctri+- |  |
|  | Fit Artwork in Window | Ctri+0 |  |
| $\Gamma$ | Ruler | $\mathrm{Ctr}+\mathrm{R}$ |  |
| 囲 | Grid | Ctrl ${ }^{+\prime}$ |  |
|  | Snap to Grid |  |  |
|  | Toolbars |  | - |

## View Menu Options

| Links | Select the Links option to view the paths and names of image files that are used as static <br> images. |
| :--- | :--- |
| Zoom In $\backslash$ Zoom Out | Select the Zoom In (Ctrl++) or Zoom Out (Ctrl+-) option to zoom in or out of the current <br> view. |
| Fit Artwork in Window | Select the Fit Artwork In Window option to fit the current document in the Work <br> Area of the Variegator window. |
| Select the Ruler option to toggle the ruler display on or off. |  |
| Srid | Select the Grid option to toggle the grid display on or off. |
| Snap to Grid |  |

Toolbars
Select the Toolbars option to configure which tool bar to display or hide.. The option expands into a sub-menu. Selecting one of the 4 toolbars will toggle its display on or off.

| $\checkmark$ | Tool Bar |
| :---: | :--- |
| $\checkmark$ | Control Bar |
| $\checkmark$ | Property Bar |
| $\checkmark$ | Status Bar |

## 7. Advanced Menu

| Advanced |  |
| :--- | :--- |
|  | Preferences |
|  | Color Settings |
| Page Size Management |  |
|  | Delete Document Preset |

## Advanced Menu Options

| Preferences | Select the Preferences option to prompt the Preferences dialog for entering <br> default settings for Variegator. Please see the section Configuring Variegator Defaults <br> in the chapter Basic Operations for more information on the Preferences dialog. |
| :--- | :--- |
| Color Settings | Select the Color Settings option to prompt the Color Settings dialog for <br> selecting the ICC Color Profiles for CMYK or RGB colorspace. Please see the section <br> Configuring Variegator Defaults in the chapter Basic Operations for more information <br> on the Color Settings dialog. |
| Page Size Management | Select the Page Size Management option to prompt the Page Size <br> Management dialogs. Please see the section Configuring Variegator Defaults in the <br> chapter Basic Operations for more information on the Page Size Management dialog. |
| Delete Document Preset | Prompt the Delete Document Preset dialog for user to delete saved document <br> presets. Please see the section Configuring Variegator Defaults in the chapter Basic <br> Operations for more information on the Delete Document Presets dialog. |

## B. Control Bar

Please see the following table for explanation of the Control Bar buttons.
Create a new Variegator document.

## C. Tool Bar

The buttons in the tool bar are for drawing elements on the document, or for manipulating the elements already on the document.

When any tool is being used, other than the Selection tool, if you press the Control key, the current tool will change to the Selection tool until you release the Control key.

When the current tool is the Selection tool, if you press the Control key, the current tool will change to the Direct Selection tool until you release the Control key.

## 1. Selection Tool

Use the Selection tool to click and select an element or a group.

Press the Shift key while clicking to select more than one element(s) or group(s).

When the current text box is not in text entry mode, typing the key $\mathbf{v}$ will switch the current tool to the Selection tool.
0.
2. Direct Selection Tool

Use the Direct Selection tool to select an element within a group.

When the current text box is not in text entry mode, typing the key a will switch the current tool to the Direct Selection tool.

## 3. Text Tool T

Use the Text tool to draw a text box on the document. When the current tool is the Text tool, the cursor changes to the crosshair. There are 2 methods to draw a text box-
a. press the mouse button on the document and drag to draw a rectangle. The rectangle will become a new text box once you release the mouse button.
b. Click on the document. The Text Box Setup dialog will be prompted for user to enter the width and height of the text box.


After drawing a text box, the text box enters text entry mode immediately and the text insertion point appears and you can start entering text immediately if it is a static text field. After entering text, press the Control key to temporarily convert the text tool to the Selection tool and click outside the text box to exit the text entry mode. Release the Control key to draw another text box.

When the current text box is not in text entry mode, typing the key $t$ will switch the current tool to the Text tool.

## 4. Line Tool \}

Use the Line tool to draw a straight line on the document. When the current tool is the Line tool, the cursor changes to the crosshair. There are 2 methods to draw a line -
a. press the mouse button on the document and drag to draw a rectangle. The rectangle will turn into a line along the diagonal of the rectangle when you release the mouse button.
b. Click on the document. The Line Setup dialog will be prompted for user to enter the $\mathbf{X}$ and $\mathbf{Y}$ starting point of the line, the Line Length and the Line Angle.


## 5. Rectangle Tool

Use the Rectangle tool to draw a rectangle on the document. When the current tool is the Rectangle tool, the cursor changes to the crosshair. There are 2 methods to draw a rectangle -
a. press the mouse button on the document and drag to draw a rectangle.
b. Click on the document. The Rectangle Setup dialog will be prompted for user to enter the width and height of the rectangle.


When the current text box is not in text entry mode, typing the key $m$ will switch the current tool to the Rectangle tool.
6. Rounded Rectangle Tool

Use the Rounded Rectangle tool to draw a rounded rectangle on the document. When the current tool is the Rounded
Rectangle tool, the cursor changes to the crosshair. There are 2 methods to draw a rounded rectangle -
a. press the mouse button on the document and drag to draw a rectangle. After releasing the mouse button, the rectangle will turn into a rounded rectangle within the bounding rectangle.
b. Click on the document. The Rounded Rectangle Setup dialog will be prompted for user to enter the width and height and corner radius of the rounded rectangle.


## 7. Ellipse Tool

Use the Ellipse tool to draw an ellipse on the document. When the current tool is the Ellipse tool, the cursor changes to the crosshair. There are 2 methods to draw an ellipse -
a. press the mouse button on the document and drag to draw a rectangle. After releasing the mouse button, the rectangle will turn into an ellipse within the bounding rectangle.
b. Click on the document. The Ellipse Setup dialog will be prompted for user to enter the width and height of the ellipse.


When the current text box is not in text entry mode, typing the key / will switch the current tool to the Ellipse tool.
8. Polygon Tool

Use the Polygon tool to draw a polygon. When the current tool is the Ellipse tool, the cursor changes to the crosshair.

To draw a polygon, click on the document to start drawing the first point of the polygon. Move the cursor and click again to draw the second point of the polygon. Move cursor and click as many times as needed to draw all the points on the polygon. When you are done, click on the starting point of the polygon to close it.

## 9. Image Box Tool

Use the Image Box tool to draw an image box. An image box may contain a static image, or linked to the database to have variable images. The Image Box supports these file formats as images -

- TIFF
- JPG
- PNG
- PDF

There are 2 methods to draw an image box -
a. press the mouse button on the document and drag to draw a rectangle. After releasing the mouse button, the rectangle will turn into an image box within the bounding rectangle.
b. Click on the document. The Image Box dialog will be prompted for user to configure the image box.


## Image Source

This box is used ONLY if the image box contains a static image, such as in the case when a static image is used as the background for the document. Select an image file in Image Source if the image box contains a static image. If the image box contains variable image, leave this box blank.

## Width, Height

Enter the width and height of the image box in the Width and Height boxes.

Use Image Size
Check the box Use Image Size if the original image size will be used.

Fitting
Select the appropriate Fitting method.

| None | No fitting is done. The image is not scaled if it is smaller than the image box. If the <br> image is larger than the image box, the image will be cropped to the size of the image <br> box. |
| :--- | :--- |
| Fit content Proportionally $\quad$Images can be fit proportionally within the image box so that the entire image is within <br> the image box. |  |
| Fit content width in frame $\quad$ Fit the width of the image within the image box width |  |
| Fit content height in frame $\quad$Fit the height of the image within the image box height |  |
| Fill frame $\quad$ The image is scaled in both horizontal and vertical direction so it fills up the image box. |  |

If the image box contains variable images, go to the Frame property panel and configure the frame source and data source.


Frame Source should be set to the database column which provides the name of the image to use for each record. Each record must contain a complete file name of an image file.

Data Source should be set to the path where the image files will be found. Variegator will look for image files with names written in the records for the column specified in the Frame Source.

For example, if Frame Source specifies a column with these records -
Imageo1.TIF
Imageor.TIF
Imageoz.TIF
then the Data Source should specify a path that contains these files -

Imageo1.TIF
Imageo.2.TIF
Imageo3.TIF

## 10. Barcode Tool III

Use the Barcode tool to draw a barcode box. A barcode box may contain a static barcode, or linked to the database to have variable barcodes. To draw a barcode box, press the mouse button on the document and drag to draw a rectangle. After releasing the mouse button, the rectangle will turn into a barcode box within the bounding rectangle.

If the barcode box contains a static barcode, after drawing the barcode box, double-click on the barcode box using the Selection tool to prompt the Barcode dialog.


Enter the static barcode data in the Barcode Data field and click OK to draw the barcode.
If the barcode box contains a variable barcode, with the barcode box selected, go to the Frame panel and select the column to use for the barcode box. Configure the barcode in the Barcode panel.

For more information on the configuration of barcode, please see the section Barcode Panel in the Property Panels section in the chapter Reference.

## 11. Rotate Tool $\curvearrowright$

The Rotate tool is for rotating elements on the document. Select the element(s) to rotate, then select the Rotate tool and click on the document, the Rotate dialog will be prompted.


Select the rotation angle from the Angle menu. A positive angle is a counter-clockwise rotation. A negative angle is a clockwise rotation. After selecting the rotation angle, click OK to rotate the selected element(s), or click Copy to make a copy of the selected element(s) first and then rotate the copy.

```
If you want to repeat the rotation for other objects, select other elements and then select the option Elements :
Transform : Transform Again, or type Ctrl+D.
```

When the current text box is not in text entry mode, typing the key $\mathbf{r}$ will switch the current tool to the Rotate tool.

## 12. Scale Tool

The Scale tool is for scaling elements on the document. Select the element(s) to scale, then select the Scale tool and click on the document, the Scale dialog will be prompted.


Select either uniform or non-uniform scaling selecting the appropriate radio button. If the scaling is uniform, select the Uniform radio button. The horizontal and vertical scaling percentages are the same in this case. Enter the scaling percentages in the Scale box. If the scaling is non-uniform, select the Non-uniform radio button. Enter the horizontal and vertical scaling percentages in the Horizontal and Vertical boxes respectively.

Check the box Scale strokes if you want to scale the stroke at the same percentage. Uncheck this box if you do not want to scale the strokes.

If you want to repeat the scaling for other objects, select other elements and then select the option Elements :
Transform : Transform Again, ortype Ctrl+D.

When the current text box is not in text entry mode, typing the key $s$ will switch the current tool to the Scale tool.

## 13. Eyedropper Tool

Use the Eyedropper tool to copy the fill and stroke, or character styles, from an element onto another element. First select the element to copy to, then use the Eyedropper tool to click on the other element which you want to copy the fill and stroke or character styles from.

## STEP 1

Select the element(s) for which you want to copy the fill and stroke properties from another element. In the diagram below, the square with fill color red and stroke color blue is the element which you want to copy the fill and stroke properties from. The square with no fill color and black stroke, now selected, is the element for which you want to copy the fill and stroke properties to.


## STEP 2

Select the Eyedropper tool, and place the Eyedropper tool on top of the element from which you want to copy the fill and stroke property from.


## STEP 3

Click on the element from which you want to copy the fill and stroke property from using the Eyedropper tool. The element on the right will then inherit the fill and stroke properties from the element the Eyedropper tool clicked on, the one on the left..


The above example is for copying the fill and stroke properties. The operation is the same if you have two text boxes, and you want to copy the character styles from one text box to the other.

When the current text box is not in text entry mode, typing the key $\mathbf{i}$ will switch the current tool to the Eyedropper tool.

## 14. Hand Tool \&in

When the view is too small to display the entire document, select the Hand tool and drag the document within the Work Area to view different area of the document.

When the current text box is not in text entry mode, typing the key h will switch the current tool to the Hand tool.

## 15. Zoom Tool ${ }^{\oplus}$

Use the Zoom In tool to zoom in to the current view of the document. To zoom out, press the ALT key to change the Zoom In tool to the Zoom Out tool and click to zoom out.

[^1]
## 16. Color Tool



Use the Color tool to set the fill and stroke color for the selected element(s).
$\qquad$

## Switching between Fill and Stroke Colors



The solid square represents the fill color. The hollow square represents the stroke color. At any one time, only one color type can be set. The example above has the solid square on top of the hollow square, hence the current active color type is Fill color. To switch the active color type to Stroke, click once on the hollow square.


The hollow square is now on top of the solid square, which means the active color type is Stroke color.

## Swapping Colors

Now click the curved line with arrows on both sides. This button is for swapping the fill and stroke colors.


## Setting Fill or Stroke Color to None

The square at the bottom left corner with the red line across it is the None button. It is for setting either the fill or stroke color to None. A color of none means no color is used at all and the bottom will show through. Now click the None button.


The stroke color has been set to None. As a result, the stroke color square has no color and there is a red line going through it.

## Setting Color



If you need to set the fill color, click on the Fill Color square to set it to the active color type to Fill color. You can then set the colors in one of 3 methods -

- Drag the sliders for each color component to change the color value of the component
- Enter the color value for each component in the boxes to the right
- Click on the Swatch tab to expand the Swatch panel, the click on a swatch to set the color to the swatch color.


## D. Property Panels

The Property Panels provide the functions to configure elements placed in the document. There are a total of 10 property panels.

To expand a property panel, click on its tab once. To expand a property panel for fill the entire property panel bar, double-click on the tab of the property panel.

To set properties using one of the property panels, first select the element(s), then switch to the appropriate property panel and make changes.


## Pages Properties

The Pages property panel allows the user to set the various properties for the document.

## Frame Properties

Frame property panel is for setting various properties relating the variable data element, including the column of the database the element is associated to, the source of data in case this is a variable image box element.

## Barcode Properties

Barcode property panel is for setting all properties for a barcode element.

## Align Properties

Align properties is for aligning elements to a certain edge, or distributing elements along a selected edge, or simply to distribute the space between elements.

## Transform Properties

The Transform property panel is for setting the $X$ and $Y$ coordinates of a specific reference point of the bounding box of the selected element. The width and height of the bounding box can also be changed. This panel provides an accurate method to set the position and size of elements.

## Color Properties

The Color property panel is for setting the fill and stroke color of elements.

## Swatch Properties

A swatch is a color specification, either in CMYK or RGB. It can be a process color specification, or a spot color specification. Swatches can be assigned to fill or stroke color of elements.

## Stroke Properties

Stroke property panel is for assigning stroke properties to elements. In addition to the weight, the stroke can also be set to be a dashed line, and the dash and gap lengths can be set.

## Character Properties

Character property panel is for setting character styles.

## Paragraph Properties

Paragraph property panel is for setting paragraph styles.

## 1. Page Property Panel

The Page panel provides the settings to change the document properties.


## Preset

Page properties can be saved as preset so you can re-use the preset to create a document you will do a lot. Selecting a preset from this menu will set all page properties according to the preset. To save the current page properties as a preset, press the Save button to the right of the menu. You will be prompted to enter a name for the preset.

## Page Size

Select the page size for your document from the Page Size menu. If the size you need is not in the menu, click the Setup (...) button to the right of the menu to prompt the Page Size Setup menu to create a new page size.


## Width, Height

The width and height of the selected page size are displayed in the Width and Height boxes.

## Orientation

Select whether the document is in landscape or portrait orientation.

## Pages, Facing Pages

Select the number of pages in the document. This can be either 1 or 2 . If number of pages is 2 , then the Facing pages option will be enabled. Check this box to mirror to left and right margins for page 1 and 2 .

## Top, Bottom, Left, Right Margins

These are the top, bottom, left, and right margins for the document. Clicking the button on the right side to set all margins to the Top margin.

## Top, Bottom, Left, Right Bleeds

These are the top, bottom, left, and right bleeds for the document. Clicking the button on the right side to set all bleeds to the Top bleed.

## 2. Frame Property Panel

The Frame panel is for configuring variable data elements. You can configure the database column from which the variable data will be from. For variable image box elements, you ca also configure where the image files can be found at, as well as how the images will fit inside the variable image box.

When the current text box is not in text entry mode, typing the key $\mathbf{f}$ will switch focus to the Frame panel.


## Frame Type

The Frame Type box shows the type of element for the currently selected element.

## Frame Source

Select the database column to which the current variable element is linked to. Note you must have previously connected to a database for the database columns to be listed in this menu.

## Data Source

This box is only used if the currently selected element is an image box. You should click the Setup (...) button to the right to set this to the path where the variable images can be located.

## Reference Point

This field is only available if the currently selected element is an image box. This field allows the user to define the position of images within the image box. Select the anchor point on the image box from which the images are placed, and then enter the offset the images should be placed from the anchor point.

## Frame Fitting

This field is only available if the currently selected element is an image box. This menu specifies how the images are fitted in the image box. Select None if no fitting is necessary and the original size of the images are used. Select Fit content

Proportionally to fit the images within the image box.
Select Fit content width in frame to fit the width of the images to the image box. Select Fit content height
in frame to fit the height of the images to the image box.
Select Fill Frame to fill the images inside the image box note that this option will scale the images non-proportionally.

## 3. Barcode Property Panel

Barcode boxes are drawn with the Barcode tool in the Tool Bar. The Barcode panel is for configuring the barcode in the barcode box.

When the current text box is not in text entry mode, typing the key $\mathbf{b}$ will switch focus to the Barcode panel.


## Type

Select the type of barcode for the currently selected barcode box. The alias of the selected barcode type is shown below the Type menu. in the illustration to the left, the selected barcode type is Codabar, and it is also known as USD-4, NW-7 or Code 2 of 7. Please see Appendix $\mathbf{1}$ for the complete list of supported barcode types.

Additional setups can be made by clicking the setup button to the right of the menu - the Advanced Barcode Setup dialog will then be prompted. Please see the next section for details on the Advanced Barcode Setup dialog.

The ID button 1 D to the right is for setting the application ID for the barcode. Note that not all barcodes support the application ID property.

## Scale

The size of barcode can be set in 2 different methods.

Select the Fit in Barcode Box option to scale the barcode so it fits inside the barcode box. You can also optionally check the box proportionally so that the scaling is done proportionally.

Select the $\mathbf{H}$ and $\mathbf{V}$ option to enter the horizontal and vertically scaling percentages. You can also click the Lock icon to change it into an Unlock icon so that scaling can be done non-proportionally. Click the Unlock icon to change it back to the Lock icon, so that the scaling must be done proportionally.

Most barcodes should be scaled proportionally from between 80 to $200 \%$.

## Barcode text

Check this box to draw barcode text together with the barcode.

## Justify

Check this box to justify the barcode text to the left and right edges of the barcode. Please see the next section for more information on barcode text justification.

## Type, Style, Size

If the Barcode text checkbox is checked, the Type, Style and Size options are enabled. You can set the font, font style and font size respectively for the barcode text.

## Location

Select the location of the barcode text. This can either be Below, Below Embedded, Above, and Above Embedded.
Please see the next section for details for barcode text location.

## Include Supplement

Check this box to draw barcode supplement together with the barcode. Note not all barcode types support supplement. Please see Appendix 1 to see which barcode type supports barcode supplement.


## Data Source

Barcode supplement data must be from the database. Select the database column where the barcode supplement is located.

## Location

Select the location of the barcode text. This can either be Below, Below Embedded, Above, and Above Embedded.
Please see the next section for details for barcode text location.
a. Setting Barcode Size

The following table shows the different settings of the Scale configuration in the Barcode panel.


The barcode is drawn at the actual $100 \%$ size.


The barcode is scaled up by $200 \%$ proportionally.
Scale



The barcode is scaled up by $200 \%$ horizontal and $140 \%$ vertically.
The scaling is non-proportional.
b. Advanced Barcode Setup

Additional setups can be made by clicking the setup button $\quad$ to the right of the Type menu in the Barcode
Property Panel. The Advanced Barcode Setup dialog will be prompted.

| Advanced Barcode Setup |  |  |
| :---: | :---: | :---: |
| V StartiStop Character |  |  |
| $\square$ Include Checksum |  |  |
| Bar width reduction: | 0 |  |
| Bar reduction factor: | 0 |  |
| Wide to narrow ratio: | 0 |  |
| Bar spacing: | 0 |  |
| Quiet zones |  |  |
| Top: | 2 |  |
| Bottom: | 2 |  |
| Left: | 2 |  |
| Right: | 2 |  |
|  |  | Cancel |


| Start\Stop Character | Start and Stop characters mark the beginning and end of the barcode. These <br> characters are not returned by the barcode reader when the barcode is scanned. <br> Check this option to insert the barcode characters into the barcode. |
| :--- | :--- |
| Include Checksum | Check this option to insert the checksum characters into the barcode. Note that not <br> all barcodes support checksum and some requires checksums. |
| Bar width reduction | This is a value used for reducing the bar width (not the space width) in order to <br> compensate for ink bleeding when printing the barcode on various surfaces. |
| This is a factor applied to bar width for reducinglenlarging the bars for special |  |
| characters 1, 2, 7, 8. The standard recommended value is 1/13 of bar width. |  |


| Bar spacing | The distance between the bars. The unit is $1 / 50$ inch. |
| :--- | :--- |
| Quiet zones - Top, | The quiet zone is a blank area around the barcode that clearly delimitates the <br> bottom, Left, Right <br> barcode symbol, so the barcode reader does not consider external elements as part <br> of the barcode. The quiet zone is measured in multiples of XDimension, which is the <br> width of a narrow bar. |

## c. Bar Width Reduction

This is a value used for reducing the bar width (not the space width) in order to compensate for ink bleeding when printing the barcode on various surfaces. The unit is point. 1 point equals $1 / 72$ inch, or 0.3528 mm .

The following shows the effect of bar reduction factor o (default), 0.2 and 0.4 , which is equivalent to reduction of $0.07056 \mathrm{~mm}(0.2)$ and 0.1411 mm ( 0.4 ).


Bar width Reduction $=0$ (default)

Bar width Reduction =0.2

Bar width Reduction $=0.4$
d. Bar Reduction Factor

This is a factor applied to bar width for reducinglenlarging the bars for special characters $1,2,7,8$. The standard recommended value is $1 / 13$ of bar width.
e. Wide to Narrow Ratio

This is a ratio between the wide bars and narrow bars. The recommended ratio varies between 2:1 and 3:1. Depending on the barcode printer resolution and quality of barcode scanner, this ratio can be increased or decreased to make sure the barcode is scanned correctly. A lower ratio results in a higher barcode density and less occupied space, but it requires high resolution printers (laser printer quality) and precise scanners in order to read the barcodes.

## 



## f. Bar Spacing

The distance between the bars. The unit is $1 / 50$ inch. This means that entering 1 in this field will set the bar spacing to 0.508 mm . The recommended value for Pharmacode (the only barcode that supports bar spacing) is $1 \mathrm{~mm}+/-0.1 \mathrm{~mm}$. The following illustration shows a Pharmacode barcode with bar spacing setting to 1.9685 , equivalent to 1 mm , as required for Pharmacode.

g. Quiet Zones

The quiet zone is a blank area around the barcode that clearly delimitates the barcode symbol, so the barcode reader does not consider external elements as part of the barcode. The quiet zone is measured in multiples of XDimension, which is the width of a narrow bar.

Top, Bottom, Left, Right = 2 (default)


Top $=20$, Bottom, Left, Right $=2$


Top, Bottom = 5, Left, Right = 10

h. Barcode Text Justification

Check this option to justify the barcode text with the left and right edges of the barcode.
||I|||||||||||||1||1||| -


## Barcode Text Location

Select the location to insert the barcode text. This can either be Above, Above Embedded, Below, or Below Embedded.


## 4．Align Property Panel

The Align panel allows users to align edges of elements，and to distribute elements at equal spaces．

When the current text box is not in text entry mode，typing the key $\mathbf{n}$ will switch focus to the Align panel．

| ALIGN |  |
| :---: | :---: |
| Align Objects | A |
|  |  |
| Distribute Objects |  |
| ㅍㅡㅡㅡ㠸吅 |  |
| Distribute Spacing |  |
| 叫 $\square$ |  |
|  | － |


| Align Objects | Align Left |
| :--- | :--- |
| $\square$ | Align Horizontal Center |
| $\square \square$ | Align Top Right |
| $\square \square$ | Align Vertical Center Bottom |
| $\square \square$ | Al |

Distribute


Distribute Spacing


Distribute horizontal spacing


Distribute vertical spacing

## 5. Transform Property Panel

The Transform panel is for setting the $X$ and $Y$ coordinates of reference points of the elements. You can also set the width and height of the bounding box of the elements.

When the current text box is not in text entry mode, typing the key $\mathbf{d}$ will switch focus to the Transform panel.


Select the reference corner on the element for which the $X$ and $Y$ coordinates are read from or set to.
X, Y
These are the $X$ and $Y$ coordinates of the reference corner on the element from the top-left corner of the document.

W, H
Set the width and height of the element.

## Example 1

In this example we need to position the top-left corner of a rectangle at $X=50 \mathrm{~mm}$ and $Y=100 \mathrm{~mm}$. This means the top-left corner of the rectangle is 50 mm to the right from the left edge and 100 mm down from the top edge. To do so -

- we first select the rectangle by clicking on it
- go to the Transform panel and click on the top-left reference point, so that the $X$ and $Y$ measurements we entered will be for the top-left corner of the rectangle
- enter $X=50 \mathrm{~mm}$, and $Y=100 \mathrm{~mm}$

Please see the illustration below for the correct settings and the effect of making these settings.


## Example 2

In this example we need to position the bottom-middle point of a rectangle at $X=100 \mathrm{~mm}$ and $\mathrm{Y}=175 \mathrm{~mm}$. This means the bottom-middle point of the rectangle is 100 mm to the right from the left edge and 175 mm down from the top edge. To do so -

- we first select the rectangle by clicking on it
- go to the Transform panel and click on the bottom-middle reference point, so that the $X$ and $Y$ measurements we entered will be for the top-left corner of the rectangle
- enter $X=100 \mathrm{~mm}$, and $\mathrm{Y}=175 \mathrm{~mm}$

Please see the illustration below for the correct settings and the effect of making these settings.


## 6. Color Property Panel

The Color panel is for setting the fill and stroke color of elements.

When the current text box is not in text entry mode, typing the key $\mathbf{c}$ will switch focus to the Color panel.


C, M, Y, K
Set the $\mathbf{C}, \mathbf{M}, \mathbf{Y}, \mathbf{K}$ values. These options are available if the document color mode is set to CMYK.

R, G, B
Set the R, G, B values. These options are available if the document color mode is set to RGB.

## Color Tool

The Color tool in the Color panel provides several functions for setting fill and stroke colors. The basic functions are listed below.

## Switching between Fill and Stroke Colors



The solid square represents the fill color. The hollow square represents the stroke color. At any one time, only one color type can be set. The example above has the solid square on top of the hollow square, hence the current active color type is Fill color. To switch the active color type to Stroke, click once on the hollow square.


The hollow square is now on top of the solid square, which means the active color type is Stroke color.

## Swapping Colors

Now click the curved line with arrows on both sides. This button is for swapping the fill and stroke colors.


## Setting Fill or Stroke Color to None

The square at the bottom left corner with the red line across it is the None button. It is for setting either the fill or stroke color to None. A color of none means no color is used at all and the bottom will show through. Now click the None button.


The stroke color has been set to None. As a result, the stroke color square has no color and there is a red line going through it.

## Setting Color



If you need to set the fill color, click on the Fill Color square to set it to the active color type to Fill color. You can then set the colors in one of 3 methods -

- Drag the sliders for each color component to change the color value of the component
- Enter the color value for each component in the boxes to the right
- Click on the Swatch tab to expand the Swatch panel, the click on a swatch to set the color to the swatch color.


## 7. Swatch Property Panel

Swatches are colors that are defined by the user. Colors can be process colors or spot colors. Process colors can be defined in CMYK or RGB colorspace. If the document color mode is CMYK, then process colors can only be defined in CMYK colorspace. If the document color mode is RGB, then process colors can only be defined in RGB colorspace. Substitution colors can also be defined for spot colors, which can also be CMYK or RGB colors. Again If the document color mode is CMYK, then spot colors can only have substitution colors defined in CMYK colorspace. If the document color mode is RGB, then spot colors can only have substitution colors defined in RGB colorspace.

To set a swatch as the fill color, first go to the Color panel or the Color tool in the Tool Bar to set the active color type to fill, then go to the Swatch panel to select the swatch you want to use. The selected swatch color will then be used as the current fill color. To set a swatch as the stroke color, first go to the Color panel or Color tool to set the current color type to stroke, then go to the Swatch panel to select the swatch you want to use. The selected swatch color will then be used as the active stroke color.

When the current text box is not in text entry mode, typing the key w will switch focus to the Swatch panel.

|  | COLOR SWATCH | $\rightarrow$ |  |
| :---: | :---: | :---: | :---: |
|  | [None] |  | * |
|  | [Registration] | CMYK |  |
|  | White | CMYK |  |
|  | Black | CMYK |  |
|  | CMYK Red | CMYK |  |
|  | CMYK Yellow | CMYK |  |
|  | CMYK Green | CMYK |  |
|  | CMYK Cyan | CMYK |  |
|  | CMYK Blue | CMYK |  |
|  | CMYK Magenta | CMYK |  |
|  | $\mathrm{C}=15 \mathrm{M}=100 \mathrm{Y}=90 \mathrm{~K}=10$ | CMYK |  |
|  | $\mathrm{C}=0 \mathrm{M}=90 \mathrm{Y}=85 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=0 \mathrm{M}=80 \mathrm{Y}=95 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=0 \mathrm{M}=50 \mathrm{Y}=100 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=0 \mathrm{M}=35 \mathrm{Y}=85 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=5 \mathrm{M}=0 \mathrm{Y}=90 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=20 \mathrm{M}=0 \mathrm{Y}=100 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=50 \mathrm{M}=0 \mathrm{Y}=100 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=75 \mathrm{M}=0 \mathrm{Y}=100 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=85 \mathrm{M}=10 \mathrm{Y}=100 \mathrm{~K}=10$ | CMYK |  |
|  | $\mathrm{C}=90 \mathrm{M}=30 \mathrm{Y}=100 \mathrm{~K}=30$ | CMYK |  |
|  | $\mathrm{C}=75 \mathrm{M}=0 \mathrm{Y}=75 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=80 \mathrm{M}=10 \mathrm{Y}=45$ | CMYK |  |
|  | $\mathrm{C}=70 \mathrm{M}=15 \mathrm{Y}=0 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=85 \mathrm{M}=50 \mathrm{Y}=0 \mathrm{~K}=0$ | CMYK |  |
|  | $\mathrm{C}=100 \mathrm{M}=95 \mathrm{Y}=5 \mathrm{~K}=0$ | CMYK | - |

## Swatch

All existing swatches are listed in the Swatch panel. For document with color mode set to CMYK, only swatches created from CMYK color are listed. For document with color mode set to RGB, only swatches created from RGB color are listed.

To create, edit, duplicate or delete swatches, click the Blue arrow to the right of the Swatch panel, the Swatch Options menu will be shown.

| Create New Swatch |
| :--- |
| Edit Swatch |
| Duplicate Swatch |
| Remove Swatch |
| Remove All Swatches |

## Create New Swatch

Select this option to create a new swatch. The Swatch Setup dialog will be prompted. Please see the next section for more information on the Swatch Setup dialog.

## Edit Swatch

Select a swatch by clicking on it and the select this option to edit the selected swatch in the Swatch Setup dialog.

## Duplicate Swatch

Select a swatch by clicking on it and the select this option to create a new swatch based on the selected swatch in the

## Swatch Setup dialog.

## Remove Swatch

Select a swatch by clicking on it and the select this option to remove the selected swatch. You will be prompted to confirm the removal.

## Remove All Swatches

Select this option to remove all swatches. You will be prompted to confirm the removal.

## Swatch Setup

The Swatch Setup dialog is for configuring new swatches. You will arrive at this dialog when you create, duplicate or edit a swatch.


| Swatch Name | Enter the name for the swatch. |
| :--- | :--- |
| Color Type | Select the color type of the swatch. This can either be Spot Color or <br> Process Color. |
| Tone Value | This menu is shown only if Color Type is Spot Color. Set the tonal <br> percentage of the color values entered below for the spot color. |
| Color | If document color mode is CMYK, the color will be defined in CMYK color. If <br> document color mode is RGB, the color will be defined in RGB color. |

## 8. Stroke Property Panel

The Stroke panel is for setting the stroke weight and stroke style for the elements.

When the current text box is not in text entry mode, typing the key $\mathbf{k}$ will switch focus to the Stroke panel.


## Weight

Select or enter the stroke weight in point.
Dashed line

Check this box if the stroke is to be rendered as a dashed line.
dash

Enter the length of the dash in point.
gap
Enter the length of the gap between dashes in point.

## 9. Character Property Panel

The Character panel is for setting the character styles for the text in the currently selected text boxes. Note that the character styles are always applied to all text in the text box.

> Type Ctrl+T to switch focus to the Paragraph panel.


Font
Select the font for the text in the text box.
Style
Select the font style for the text in the text box.
Font Size
TT
Select or enter the font size for the text in the text box.

## Leading

$\ddagger{ }_{\ddagger}^{T}$
Select or enter the leading for the text in the text box.

## Kerning

## AV

Select or enter the kerning or character spacing for the text in the text box.

## 10. Paragraph Property Panel

The Paragraph panel is for setting the paragraph styles for the text in the currently selected text boxes. Note that the paragraph styles are always applied to all text in the text box.

When the current text box is not in text entry mode, typing the key $\mathbf{p}$ will switch focus to the Paragraph panel.


## Justification

Select the justification for the text in the text box.


## First Line Left Indent

Enter the left indent for the first line in the paragraph.

## Space before paragraph

Enter the space before the paragraph.

## Space after paragraph

Enter the space after the paragraph

## E. Status Bar

The Status Bar is located at the bottom of the Variegator window. It shows various information such as the current view zoom ratio, the page number, record number, and name of connected database. Controls are also provided to scroll to the next or previous page, and to scroll to the first, previous, next, and last records, assuming if the document is connected to a database.


For the connected database name, if no database is connected, the text is displayed in red, and the name of the connected base is None.

## F. Work Area

## 1. Document View

Variegator documents are displayed in the Work Area. To zoom in or out, use the Zoom In or Zoom Out tool in the Tool Bar, or the Zoom In and Zoom out tools in the Control Bar. You can also fit the view within the Work Area using the Fit Artwork in Window tool in the Control Bar.

When the document is too large for the entire document to be viewed in the Work Area, you can use the Hand tool in the Tool Bar to scroll to different areas of the document.

## 2. Keyboard \& Mouse Actions

a. Drag and Drop

Elements can be dragged around the document by drag and drop using the mouse.
b. Restricting Movement

If the Shift key is pressed when element(s) are being dragged, the movement is restricted to horizontal, vertical, or 45 degrees only.


No key is pressed. Movement is unrestricted.


Shift key is pressed.
Movement is restricted to $0,45,90$ degrees.
c. Duplicate while Move

When an element is being dragged, if the ALT key is pressed, the element is duplicated at the new location where the mouse button is released.

Please see illustration below for the effects of pressing of ALT key when dragging and dropping an element.


No key pressed.
Element is moved.


ALT key pressed. Element is copied.
d. Deleting Elements

```
To delete the selected element(s), select the element and the select the optionEdit : Delete, ortype the Delete key.
```


## 3. Element Options Menu

There are two methods to show the Element Options menu -

- right-click on an element, or
- select a number of elements and then right-click on one of them.

| 3 | Undo |  |
| :---: | :---: | :---: |
| श | Redo |  |
|  | Duplicate |  |
| \% | Delete |  |
| 或 | Group |  |
|  | Transform | - |
|  | Arrange | * |


| Undo \Redo | Undo or Redo the last actions. A total of 32 undo levels are provided. |
| :--- | :--- |
| Duplicate | Duplicate the element right-clicked on. |
| Delete | Delete the element right-clicked on. <br> Group <br> If more than one elements are selected when the user right-clicks on the document, the Group <br> option is enabled. Select the Group option to group those elements together as a group. If the <br> user right-clicks on a group, the Group option will be replaced by the Ungroup option. Select <br> Ungroup to ungroup the selected group back to individual elements. <br> Select the Transform option to move, rotate or scale, or repeat the previous transform on the <br> currently selected element(s). The option expands into a sub-menu. <br> Transform Again <br> Move <br> Rotate <br> Scale. |

Please see the section Moving, Rotating and Scaling Elements in the chapter Basic Operations for more information.

Arrange
Provides the four Arrange options - Bring to Front, Bring Forward, Send Backward, Send to Back.

| $\square$ | Bring to Front |
| :--- | :--- |
|  | Bring Forward |
|  | Send Backward |
|  | Send to Back |

Please see the section Rearranging Order of Elements in the chapter Basic Operations for more information.

## 11. Scripting

To create a script, go to the FRAME panel and click the button labelled xy to the right of the Frame Source field. The Script Manager dialog will be prompted.


A list of all existing script will be shown.
A. Create a script

Click on the Add button to create a script.
You can also select an existing script and click the Duplicate button to create a script based on the selected script.
B. Edit a script

Select an existing script and click the Edit button to edit the selected script.
C. Delete a script

Select an existing script and click the Delete button to delete the selected script.

When creating or editing a script, the Script Editor dialog will be prompted


| Field | Descriptions |
| :--- | :--- |
| Script Name | Enter the name of the of the script. |
| Script | Enter the script in this box. Please note that a function must be enclosed with a pair of double angle brackets e.g. <br> <<Function ()>> and a column name must be enclosed with a pair of angle brackets, e.g. <column>. |
| Database | The Database section lists all existing database columns. Click once to select a column and click the move button (<) to <br> add the column name to the script at the insertion point. You can also double-click a column to move it to the script. |
| Functions | The Functions section lists all existing functions. Click once to select a function and click the move button (<) to add <br> the function to the script at the insertion point. You can also double-click a function to move it to the script. |

## D. Script Functions

## Auto-Number

The Auto-Number function generates a number automatically. The format of the function is -
<<Auto-Number (start, end, increment, step, num_digits).

| Field | Descriptions |
| :--- | :--- |
| start | This is the value for the first record. This must be an integer. |
| end | The is the value for the last record. If end is reached before all records are generated, the Auto-Number will reset to <br> the start value and incremented again. This must be an integer. The end value can be omitted in which case there is no <br> end value and the Auto-Number will continue to be incremented until the last record. |
| increment | This is the increment value. The Auto-Number will be incremented by this value for every new record. This must be a <br> positive or negative integer and cannot be 0. |
| step | The is the number of records for each increment. For example, the Auto-Number may be incremented once for every <br> 10 records. The step value can be omitted in which case step is set to 1. |
| num_digits | Specifies the number of digits in the Auto-Number. The function will pad the returned value with preceding zeros if <br> necessary. The num_digits value can be omitted in which case the Auto-Number will not be padded. |

## Examples

$\ll$ Auto-Number $(1,20,1,1,2) \gg$
The sequence of Auto-Number generated will be $01,02,03,04,05,06,07,08,09,10,11,12,13,14, \ldots$
<<Auto-Number (1, 10, 2, 2, 2) >>
The sequence of Auto-Number generated will be $01,01,03,03,05,05,07,07,09,09,01,01,03,03, \ldots$

## ExtractValue

The ExtractValue function extract one or more characters from a value. The format of the function is -

```
<<ExtractValue (<column name>, "separator", index)>>
```

| Field | Descriptions |
| :--- | :--- |
| column name | Enter the name of the column in the database from which to read the value to extract from. |
| separator | This is the separator character which separates the source values into multiple values. For example, a value may be <br> separated by a comma, e.g. the column value may be " $23.99 "$ |
| index | Specifies the position to retrieve the return value. For example, if you want to return the 2nd value, enter 2. |

## Example

If the value of the column Price is "23.99" -
<<ExtractValue (<Price>, ".", 1)>> will return 23.

```
<<ExtractValue (<Price>, ".", 2)>> will return 99
```

If the value of the column Size is "XL\XL1|X-LARGE"
<<ExtractValue (<Size>, "\", 1)>> will return XL.
<<ExtractValue (<Size>, "\", 2)>> will return XL1.
<<ExtractValue (<Size>, "\", 3) >> will return X-LARGE.

## 12. Variable Swatch

With a variable swatch, the user can set a specific color according to the values found in a field. A variable swatch can be applied to fill or stroke color. The color can be a CMYK, RGB or a spot color In addition, the user can specific whether to overprint or knockout.

Please note that you can only use RGB color if the Color Mode (specified in Document Properties when you create a new document) is set to RGB. If you set Color Mode to CMYK, you can only create variable swatch in CMYK or Spot color.

## A. Create a variable swatch

To create a variable swatch, go to the SWATCH panel and click the option button to the right and select the option Create New Variable Swatch.

## B. Edit a variable swatch

To edit an existing variable swatch, select the variable swatch and in the option menu select the option Edit Swatch.

## C. Delete a variable swatch

To delete an existing variable swatch, select the variable swatch and in the option menu select the option Remove Swatch.
When creating or editing a variable swatch, the Variable Swatch Setup dialog will be prompted.


Enter the name of the swatch in the Swatch Name field. This name will appear in the SWATCH panel.
Next select the Swatch Color by clicking on the square patch to the right of the Swatch Color label. This color will only be used if the variable swatch field is not equal to any entered values. This color will also appear to the left of the variable swatch color name in the SWATCH panel.

Finally click the button labelled xy in the top right of the dialog. The Color Script Editor dialog will be prompted.


The script should be entered in the Script box. The script may contain one or more statement. After entering one statement, please press the enter key to create a new line before you enter the next statement.

The format of each statement is in the following format -

## SetColor( <column name>="value", color, OverPrint="overprint mode")

| Field | Descriptions |
| :---: | :---: |
| column name | Enter the name of the column in the database which will determine the color. The column name must be enclosed in angle brackets. For example, if the name of the column is Size, the column name should be written as <Size>. |
| value | Enter the value to match with the value found in the column specified in column name. The value must be enclosed in quotation marks. For example, if the value is Large, the value must be written as "Large". |
| color | Enter the color. 3 types of color are supported - CMYK, RGB and Spot. <br> To specify a CMYK color, enter - <br> CMYK (C, M, Y, K) where $C, M, Y, K$ are the value in percentages for the cyan, magenta, yellow and black colorants. For example, if you want to specify a color with $C=90 \%, M=80 \%, Y=70 \%$ and $K=60 \%$, you should enter <br> CMYK (90, 80, 70, 60) <br> Note that there is no need to enter the percentage symbol. <br> To specify an RGB color, enter - <br> $R G B(R, G, B)$ whereR, $G, B$ are the value for the red, green, and blue colorants. The value is an integer from o to 255 . <br> For example, if you want to specify a color with $R=200, G=190, B=180$, you should enter <br> RGB (200, 190, 180) <br> To specify a spot color, enter - <br> SPOT (name, tone, $C, M, Y, K$ ) where name is the name of the Pantone color, enclosed in quotation marks. tone is the tonal value for the spot color. For example, if the color is $80 \%$ of the spot color, enter a value of $80 . C, M, Y, K$ are the value in percentages for the cyan, magenta, yellow and black colorants. For example, if you want to specify a spot color named "PANTONE $123 \mathrm{C}^{\prime}$, used at $75 \%$, with a CMYK equivalent color of $\mathrm{C}=90 \%, \mathrm{M}=80 \%, \mathrm{Y}=70 \%$ and $\mathrm{K}=60 \%$, you should enter - |


| Field | Descriptions |
| :--- | :--- |
|  | SPOT ("PANTONE $123 \mathrm{C}^{\prime}, 75,90,80,70,60$ ) |

A sample script is shown below.

```
SetColor(<EUROPE>="S", CMYK(0,100,0,o), OverPrint="Knockout")
SetColor(<EUROPE>="M", SPOT ("PANTONE 123 C", 100, 0, 0, 15, 85), OverPrint="OverPrint")
SetColor(<EUROPE>="L", SPOT ("PANTONE 234C", 70, 15, 0, 0, 15), OverPrint="OverPrint")
```

For the following script, if the value from the column Europe is S , the returned color is a CMYK color with $\mathrm{M}=100 \%$.
If the value from the column Europe is " M ", the returned color is a spot color with the name PANTONE 123 C , at $100 \%$, with a CMYK equivalent color of $\mathrm{Y}=15 \%$ and $\mathrm{K}=85 \%$.

If the value from the column Europe is " $L$ ", the returned color is a spot color with the name PANTONE 234 C , at $70 \%$, with a CMYK equivalent color of $\mathrm{C}=15 \%$ and $\mathrm{K}=15 \%$.

## Appendices

## I. 1D Barcode Symbologies

The following table shows all supported 1D barcode symbologies, their data lengths, type of characters, as well as whether it supports barcode supplements. Please note that the information provided below may be subjected to change.

| Barcode | Also Known As | Data Length | Characters | Supplement |
| :---: | :---: | :---: | :---: | :---: |
| Codabar | USD-4/NW-7 / Code 2 of 7 | Variable | 0...9-\$:/. + | N |
| Code 11 | USD-8 | Variable | 0...9 - | N |
| Code 128 | Code 128 | Variable | alphanumeric | N |
| Code 128A | Code 128 Code Set A | Variable | alphanumeric | N |
| Code 128B | Code 128 Code Set B | Variable | alphanumeric | N |
| Code 128C | Code 128 Code Set C | Variable | alphanumeric | N |
| Code 2 of 5 | Standard 2 of 5 / Industrial 2 of 5 | Variable | 0... 9 | N |
| Code 2 of 5 Interleaved | Interleaved 2 of 5 | Variable | 0... 9 | N |
| Code 32 | Italian pharmacy code | 8 digits | 0... 9 | N |
| Code 39 | USD-3 / Code 3 of 9 / LOGMARS | Variable | 0...9 A...Z-. \$/ + \% SPACE | N |
| Code 39 Extended | USD-3/ Code 3 of $9 /$ LOGMARS | Variable | All 128 ASCII characters | N |
| Code 93 | USS-93 | Variable | 0...9 A...Z-. \$ / + \% SPACE | N |


| Barcode | Also Known As | Data Length | Characters | Supplement |
| :---: | :---: | :---: | :---: | :---: |
| Code 93 Extended | USS-93 | Variable | All 128 ASCII characters | N |
| COOP 2 of 5 | COOP 25 | Variable | 0...9 | N |
| EAN-128 | European Article Numbers 128 |  |  | N |
| EAN-13 | European Article Numbers 13 | 12 digits | 0... 9 | Y, 2 or 5 digits |
| EAN-8 | European Article Numbers 8 | 7 digits | 0... 9 | Y, 2 or 5 digits |
| FedEx Ground 96 | FedEx Ground 96 | 21 digits | 0...9 | N |
| IATA 2 of 15 | International Air Transport Association | 16 digits | 0... 9 | N |
| Identcode | Deutsche Post Identcode | 11 digits | - | N |
| ISBN | International Book Number | 9 digits | 0... 9 | Y, 2 or 5 digits |
| ISMN | International Music Number | 9 digits | 0... 9 | Y, 2 or 5 digits |
| ISSN | International Serial Number | 9 digits | 0... 9 | Y, 2 or 5 digits |
| JAN-13 | Japanese Article Number 13 | 10 digits | 0...9 | Y, 2 or 5 digits |
| Kix | Klant index | - | 0...9 A...Z | N |
| Leitcode | Deutsche Post Leitcode | 13 digits | 0...9 | N |
| Matrix 2 of 5 | Matrix 2 of 5 | Variable | 0... 9 | N |
| MSI/Plessey | Modified Plessey | Variable | 0... 9 | N |
| Pharmacode | Pharmaceutical Binary Code | - | 0...9 | N |
| Planet | Postal Alpha Numeric Encoding Technique | 12 digits | 0... 9 | N |
| Postnet | Postal Numeric Encoding Technique | 5,9 or 11 digits | 0... 9 | N |
| PZN | Pharma-Zentral-Nummer | 6 digits | 0... 9 | N |
| RM4 ${ }^{\text {SCC }}$ | Royal Mail 4-state Customer Code | Variable | 0...9 A...Z | N |
| SCC-14 | Shipping Container Code 14 | 13 digits | 0...9 | N |
| Singapore Post | Singapore Post | - | 0...9 A...Z | N |
| SSCC-18 | Serial Shipping Container Codes | 17 digits | 0... 9 | N |
| UPC-A | Universal Product Code A | 11digits | 0... 9 | Y, 2 or 5 digits |
| UPC-E | Universal Product Code E | 7 digits | 0... 9 | Y, 2 or 5 digits |
| USPS FIM | USPS Facing Identification Mark | - | - | N |
| USPS Horizontal | USPS Horizontal Bars | - | - | N |
| USPS PIC | USPS Package Identification Code | 21 or 29 digits | 0... 9 | N |

## II. 1D Barcode Supported Features

The following table shows all supported features for 1D barcode symbologies. Please note that the information provided below may be subjected to change.

| Barcode | Checksum | Wide to narrow ratio | Bar reduction factor | Bar spacing | Application Identifier |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Codabar | Not supported | N | N | N | N |
| Code 11 | Optional | N | N | N | N |
| Code 128 | Always Required | N | N | N | Y |
| Code 128A | Always Required | N | N | N | N |
| Code 128B | Always Required | N | N | N | N |
| Code 128C | Always Required | N | N | N | N |
| Code 2 of 5 | Optional | Y | N | N | N |
| Code 2 of 5 Interleaved | Optional | Y | N | N | N |
| Code 32 | - | Y | N | N | N |
| Code 39 | Optional | Y | N | N | N |
| Code 39 Extended | Optional | Y | N | N | N |
| Code 93 | Always Required | N | N | N | N |
| Code 93 Extended | Always Required | N | N | N | N |
| COOP 2 of 5 | Optional | Y | N | N | N |
| EAN-128 | - | N | N | N | Y |


| Barcode | Checksum | Wide to narrow ratio | Bar reduction factor | Bar spacing | Application Identifier |
| :---: | :---: | :---: | :---: | :---: | :---: |
| EAN-13 | Always Required | N | Y | N | N |
| EAN-8 | Always Required | N | Y | N | N |
| FedEx Ground 96 | - | N | N | N | N |
| IATA 2 of 15 | Optional | Y | N | N | N |
| Identcode | - | Y | N | N | N |
| ISBN | Optional | N | Y | N | N |
| ISMN | Optional | N | Y | N | N |
| ISSN | Optional | N | Y | N | N |
| JAN-13 | Optional | N | Y | N | N |
| Kix | - | N | N | N | N |
| Leitcode | - | Y | N | N | N |
| Matrix 2 of 5 | Optional | Y | N | N | N |
| MSI/Plessey | Optional | N | N | N | N |
| Pharmacode | - | Y | N | Y | N |
| Planet | Always Required | N | N | N | N |
| Postnet | Always Required | N | N | N | N |


| Barcode | Checksum | Wide to narrow ratio | Bar reduction factor | Bar spacing | Application Identifier |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PZN | - | Y | N | N | N |
| RM4SCC | - | N | N | N | N |
| SCC-14 | Always Required | N | N | N | N |
| Singapore Post | - | N | N | N | N |
| SSCC-18 | Always Required | N | N | N | N |
| UPC-A | Always Required | N | Y | N | N |
| UPC-E | Always Required | N | Y | N | N |
| USPS FIM | - | N | N | N | N |
| USPS Horizontal | - | N | N | N | N |
| USPS PIC | - | N | N | N | N |

## III. 2D Barcodes Symbologies

The following 2D Barcodes are supported -

- CODABLOCK F
- Code 16K
- DataMatrix
- MicroPDF417
- PDF417
- $\quad$ R


## IV. Hot Keys for Menu Options

The following hot keys are functional at all times.

| Hot Keys | Functions |
| :---: | :---: |
| Bring to Front | Shift+Ctrl+] |
| Bring Forward | Ctrl+] |
| Send Backward | Ctrl+[ |
| Send to Back | Shift+Ctrl+[ |
| Ctrl-" | Show or Hide Grid |
| Ctrl-o | Fit-in-screen Preview |
| Ctrl-1 | 1:1 Preview |
| Ctrl-3 | Hide Element(s) |
| Alt-Ctrl-3 | Show All |
| Ctrl+A | Select All |
| Ctrl+B | Paste in Back |
| Ctrl+C | Copy |
| Ctrl+D | Transform Again |
| Ctrl-F | Paste in Front |
| Ctrl-G | Group |
| Shift-Ctrl-G | Ungroup |
| Ctrl+N | New |
| Ctrl+O | Open |
| Ctrl +P | Print |
| Ctrl+Q | Quit |
| Ctrl-R | Show or Hide Ruler |
| Ctrl+S | Save |
| Shift+Ctrl+S | Save As |
| Alt+Ctrl + S | Show or Hide Static Elements |
| Ctrl-T | Character Styles |
| Ctrl+V | Paste |
| Alt-Ctrl-V | Show or Hide Variable Elements |
| Ctrl+W | Close |
| Ctrl +X | Cut |
| Ctrl+Z | Undo |
| Shift+Ctrl+Z | Redo |

## V. Hot Keys for Tools

The following hot keys are functional when the current text box is not in text entry mode.

| Hot Keys | Descriptions |
| :--- | :--- |
| a | switch to Direct Selection tool |
| b | expand the BARCODE property panel. |
| c | expand the COLOR property panel. |
| d | expand the TRANSFORM property panel. |
| f | expand the FRAME property panel. |
| h | switch to Hand tool |
| i | switch to eyedropper tool |
| k | expand the STROKE property panel. |
| l | switch to Ellipse tool (note this is a small L) |
| m | switch to Rectangle tool |
| n | expand the ALIGN property panel. |
| o | switch to Reflect tool |
| p | expand the PARAGRAPH property panel. |
| r | switch to Rotate tool |
| s | switch to Scale tool |
| t | switch to Text tool |
| v | switch to Selection tool |
| w | switch the stroke and fill color |
| z | switch to Zoom tool |


[^0]:    Enter the Horizontal or Vertical distances to move the selected element(s). Or enter the Distance and the Angle to move them. After enter the correct values, click OK to move the element(s), or click Copy to make a copy of the selected element(s) first and then move the copy.

[^1]:    When the current text box is not in text entry mode, typing the key $\mathbf{z}$ will switch the current tool to the Zoom In tool.

